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State Government Bail outs in Brazil

by

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Abstract*

As a result of the consolidation of democracy after the end of the military regime in the mid-1980s, Brazil has gone through a period of remarkable decentralization both in fiscal and political terms. The move towards decentralized management and control of public finances has been followed by a series of bailouts of state governments by the federal government. The lack of effective control on borrowing, coupled with reputational effects originating from these repeated bailout operations, reduced fiscal discipline and created an explosive accumulation of debts in Brazilian states during the last decade. The main purpose of this paper is to assess the determinants of state debt bailouts in Brazil and their relationship with states' fiscal discipline during the 1990s. After providing a brief overview of intergovernmental fiscal relationships in the Brazilian economy, the paper describes state debt developments from the mid-1980s on, with special emphasis on the 1989, 1993 and 1997 state debt bailouts. The paper subsequently discusses the determinants of state debt bailouts in Brazil along the lines of a conceptual framework that recognizes that the essence of the bailout question is the issue of moral hazard, then presents empirical evidence that the occurrence of bailouts is associated with lower fiscal discipline in Brazilian states during the 1990s.

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1. Introduction

As a result of the consolidation of the democracy after the end of the military regime in the mid-1980s, Brazil has gone through a period of remarkable decentralization in both fiscal and political terms. The proportion of public consumption by state and local governments has increased from 42 to 54 percent between 1989 and 1996. During the same period, the share of state and local governments in total public investment increased from 60 to 62 percent.¹ Political decentralization has been even more intense. From 1990 to 1996 the number of municipalities has increased from 4,491 to 5,509, and the Brazilian federation increased its membership from 24 to 27 states. During the last fifteen years state and local governments have thus become responsible for the execution of a larger portion of the budget, with correspondingly greater autonomy with respect to fiscal decisions.

The move towards decentralized management and control of public finances has been followed by a series of bailouts of state governments by the federal government. Counting only major rescue operations, Brazilian states were bailed out by the federal government in 1989, 1993 and 1997. Debt bailouts are a mechanism for states to transfer their fiscal deficits to the federal government; consequently, if states know that the federal government will recurrently bail them out, they will consistently overspend. The Brazilian experience during the last decade offers a clear example of this association between debt bailouts by the federal government and fiscal discipline (or lack thereof) in the states. During the period when the bailouts took place there was a considerable deterioration in the states fiscal performance, and in fact the states became a major factor in the observed decline in the public sector primary balance after the introduction of the Real Plan in mid-1994.²

This study presents a systematic evaluation of the determinants of state debt bailouts in Brazil and examines their relationship with states' fiscal discipline during the 1990s. It is structured as follows. Section 2 provides a brief overview of intergovernmental fiscal relationships in the Brazilian economy. Section 3 describes state debt developments from 1985 to 1994, with special emphasis on the 1989 and 1993 comprehensive state debt bailouts. Section 4 describes state debt developments during the period of the Real Plan. It presents a detailed analysis of the fiscal crisis in the Brazilian states in the post-stabilization period and examines

¹ See Bevilaqua and Werneck (1998), Appendix 1.

² See Bevilaqua and Werneck (1998).

the developments that led to the 1997 bailout. Section 5 assesses the determinants of state debt bailouts in Brazil along the lines of a framework that recognizes that the essence of the bailout question is the issue of moral hazard. In addition, it presents the results of an econometric analysis of the relationship of bailouts and fiscal discipline in Brazilian states. Section 6 concludes and discusses policy implications.

2. Intergovernmental Fiscal Relations in Brazil³

The Brazilian federation encompasses three levels of government: the federal government, 27 states (including the Federal District) and 5,509 municipalities. The states are divided into five geographical regions. The South is formed by the states of Paraná, Santa Catarina and Rio Grande do Sul. Espírito Santo, Minas Gerais, Rio de Janeiro and São Paulo are the states in the Southeast region. The sparsely populated Midwest region comprises the states of Goiás, Mato Grosso, Mato Grosso do Sul and the Federal District. The North consists of Acre, Amapá, Amazonas, Pará, Rondônia, Roraima and Tocantins. Finally, the Northeast includes the states of Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte e Sergipe.

Major disparities exist among the five regions. The states in the South and Southeast regions accounted in 1997 for about 58 percent of the country's population and some 76 percent of the national GDP. Per capita income ranged from about R\$1,400-1,600 a year in Maranhão and Piauí, in the poorest Northeast region, to almost R\$9,000 in São Paulo and more than R\$10,000 a year in the Distrito Federal. At the regional level, per capita income in the Southeast region is about three times the per capita income of the Northeast (Table 1).

Social indicators also show considerable variation. Infant mortality in 1998 ranged from 17 per thousand in the South to 48 per thousand in the Northeast. Life expectancy at birth went from 60 years in the Northeast to more than 70 years in the South. The illiteracy rate varied from almost 30 percent in the Northeast to less than 10 percent in the South and Southeast. The average number of school years in 1996 ranged from 3.8 in the Northeast to 6.5 in the Southeast.⁴

In order to provide a background for the discussion of the bailout problem and its relationship with current fiscal difficulties in Brazil, this section briefly examines some key characteristics of the Brazilian federation: the assignment of revenue sources and expenditure

³ Most of the discussion in this section follows Bevilaqua and Blanco (1999).

⁴ See IPEA (1998).

responsibilities to the federal, state and municipal governments, and the regulation of subnational government borrowing.

2.1 Tax Assignment

During the last decades, intergovernmental fiscal relations in Brazil have been regulated by the 1967 and 1988 Tax Reforms, which differ fundamentally with respect to the degree of decentralization promoted. The 1967 Reform, enacted under the military regime, concentrated the assignment of revenue sources at the federal level and introduced a system of revenue transfers to states and municipalities that was designed to correct major disparities among the regions. Conversely, the 1988 Reform extended the assignment of revenue sources to states and municipalities, at the expense of the federal government, and strengthened the system of intergovernmental transfers.

Table 1. Brazilian States, 1997

States	GDP* (in millions of Reais)	Population (thousand of inhabitants)	Per Capita GDP (in Reais)
Acre	1,303	500	2,605
Alagoas	5,711	2,663	2,145
Amapá	1,514	402	3,767
Amazonas	14,311	2,461	5,816
Bahia	36,735	12,710	2,890
Ceará	17,454	6,920	2,522
Distrito Federal	19,723	1,877	10,508
Espírito Santo	16,088	2,853	5,639
Goiás	15,906	4,640	3,428
Maranhão	7,353	5,295	1,389
Mato Grosso	9,086	2,288	3,972
Mato Grosso do Sul	9,219	1,965	4,693
Minas Gerais	86,527	16,905	5,118
Pará	14,600	5,651	2,584
Paraíba	6,936	3,332	2,082
Paraná	52,438	9,142	5,736
Pernambuco	23,261	7,467	3,115
Piauí	4,193	2,696	1,555
Rio de Janeiro	96,947	13,556	7,152
Rio Grande do Norte	6,618	2,594	2,551
Rio Grande do Sul	68,689	9,762	7,036
Rondônia	4,165	1,255	3,317
Roraima	617	255	2,423
Santa Catarina	31,634	4,958	6,380
São Paulo	306,569	34,752	8,822
Sergipe	4,805	1,657	2,900
Tocantins	1,707	1,081	1,580
TOTAL	864,112	159,636	5,413
Memorandum items:			
Mid-West Region	53,935	10,769	5,008
North Region	38,217	11,604	3,293
Northeast Region	113,067	45,334	2,494
South Region	152,761	23,863	6,402
Southeast Region	506,131	68,066	7,436

Source: IBGE, *Contas Regionais do Brasil* (1985-1997).

* At current prices.

Under the current system, the federal government is assigned federal and corporate income taxes (IR), a value-added type of tax on industrial products (IPI), a tax on rural property (ITR), social contributions levied on payroll or turnover of enterprises, taxes on foreign trade and taxes on financial transactions. Both the IR and the IPI are shared with states and municipalities through the State Participation Fund (FPE) and Municipal Participation Fund (FPM). The ITR is shared only with the municipalities. The remaining taxes are not shared with either states or municipalities. The states are assigned a broad-based value added tax (ICMS), a motor vehicle registration tax (IPVA) and inheritance and gift taxes. The ICMS and the IPVA are shared with the municipalities. Finally, the municipalities are assigned a tax on services (ISS), an urban property tax (IPTU) and a tax on property transfers. Revenue-sharing agreements have been established by the 1988 Constitution, with coefficients that are primarily based on redistributive criteria. A major result of the 1988 reform was the increase in the revenues at the disposal of all government levels. The relative importance of this increase was higher for subnational governments than for the federal government. As is shown in the Appendix, the higher disposable revenues of subnational governments were based both on higher own revenues and higher transfers from the federal government.

2.2 Expenditure Assignment

The 1988 Constitution identifies three separate levels of government in the Brazilian federation (federal, state and municipal) and describes their responsibilities. The federal government is exclusively responsible for only a few conventional functions such as defense, foreign affairs, immigration issues, and regulation of international trade and financial matters (Table 2). For most functions, however, the responsibility is assigned to more than one level of government, leading to problems in service delivery. In education, for example, the federal government has the responsibility for setting national guidelines, while state governments are responsible for the delivery of the services. Pre-school and elementary education, however, are the responsibility of municipal governments. In practice, the federal government still follows a pre-1988 Constitution tradition and continues to have direct involvement in the delivery of education services at different levels.⁵

⁵ Public education at the university level, for example, is a service delivered mainly by the federal government.

2.3 Debt Regulation

Starting with the 1967 Constitution, the Senate has the authority to regulate all public-sector borrowing in Brazil. It sets guidelines for subnational borrowing based on the amounts of existing debt, revenues and debt service. However, it has the power to grant exceptions to these guidelines, and it usually does so.⁶ The Central Bank imposes a number of regulations on the access of states to different credit sources. External borrowing by the states is subject to regulation only when it requires a federal guarantee. Under the 1988 Constitution, any legislation on debt renegotiation or financial rescue of subnational governments can only be initiated by the president. After the initiative is taken, however, a financial rescue operation such as a debt bailout can only be implemented if it has been authorized by the Senate.⁷

Table 2. Brazil: Expenditure Assignment

<i>Expenditure Function</i>	<i>Responsibility for Policy and Control</i>	<i>Responsibility for Provision</i>
Defense	Federal	Federal
Foreign affairs	Federal	Federal
Foreign trade	Federal	Federal
Monetary and financial policies	Federal	Federal
Social security	Federal	Federal, State
Sectoral policies	Federal, State	Federal, State
Immigration	Federal	Federal
Railroads and airports	Federal	Federal, State
Natural resources	Federal	Federal, State
Environmental protection	Federal, State	Federal, State
Education	Federal, State, Municipal	Federal, State, Municipal
Health	Federal, State	Federal, State, Municipal
Social assistance	Federal, State	Federal, State, Municipal
Police	Federal, State	Federal, State, Municipal
Water and sewerage	Federal	State, Municipal
Fire protection	Federal, State	State
Parks and recreation	Municipal	Municipal
Roads		
National	Federal	Federal
State	State	State
Interstate	Federal	Federal, State
Local	State	Municipal

Source: Afonso and Ramundo (1996), quoted in Ter-Minassian (1997).

⁶ The typical career path in Brazilian politics is one in which the majority of the Senators are either former or future state governors. This creates a clear conflict of interest on state debt regulation issues.

3. State Government Debt during the High-Inflation Years⁸

Before the mid-1960s, states' financing needs were usually met by loans from federal government agencies or foreign sources.⁹ With the implementation of the financial reforms of 1964/65,¹⁰ when the monetary correction of contracts was formally introduced in the Brazilian financial system, an important market was created for public bonds, including those of state governments. However, the opening of international capital markets to developing countries in the late 1960s made foreign financing a preferred option for the financing of the Brazilian public sector. States' recourse to external funds was actually encouraged by the federal government during the early 1980s due to the need to finance a soaring external current account deficit. Easy access to external credit, combined with loose controls on domestic borrowing, made the 1970s a decade of rapid growth in state governments' debt.

The crisis generated by the interruption in external credit after the Mexican moratorium in 1982 forced the federal government to restrain states' access to financing sources. Reduced access to formal sources, however, did not produce the required improvement in states' fiscal performance, and their financing needs were ultimately met with exceptional financing from the federal government. This section examines the evolution of states' debt from the end of the military regime in early 1985 to the launching of the Real Plan in 1994. This period was characterized by fiscal decentralization and political autonomy for subnational governments. It was also characterized by recurrent crises in states' debt. The section starts by examining the developments before the promulgation of the 1988 Constitution, and then describes the comprehensive debt restructuring episodes that took place in 1989 and 1993.

3.1 *The Period before the 1988 Constitution*

As a result of the developments in international capital markets in the wake of the Mexican crisis, the Brazilian government resorted to the assistance of the International Monetary Fund. In the context of the reduction in net domestic credit required by the IMF supported program,

⁷ In practice, however, the senate can induce the federal government to initiate legislation in areas in which it has the exclusive right by creating impediments to the approval of other legislation on issues of greater interest to the federal government

⁸ This section is based on Bevilaqua and Rangel (1999).

⁹ From its creation in 1952 to 1964, the National Bank of Economic Development (BNDES) was a major source of funds for the Brazilian states. Foreign financing became important again by the end of the 1960s. See Jayme, Jr. (1994) and Rezende (1982).

Central Bank Resolution 831 (see Box 1) introduced formal limits to the amount of credit extended by the domestic financial system to state governments. The limits, however, referred only to new debt. The rollover of existing debt, in many cases covering interest payments, was routine, especially with state-owned banks. In any event, the combination of credit limits, higher tax revenues produced by the economic recovery after 1984, and the effect of the accelerating inflation rate on the real value of government expenditures, reduced the growth of subnational government debt.¹¹ By 1985, the net debt of states and municipalities corresponded to 6.9 percent of GDP, or about 13.4 percent of the net debt of the consolidated public sector.¹² More than two-thirds of this amount referred to net domestic debt (Table 3).

The remarkable reduction in the inflation rate produced under the Cruzado Plan in 1986 coincided with the first general elections in the country after the end of the military regime.¹³ Without being able to rely on the high inflation rates to restrain real expenditure growth, as in the past, the states became subject to important budgetary pressures.¹⁴ After the 1986 elections, political attention was mainly focussed on the preparation of the new federal constitution, which was the primary task of the recently elected Congress. At the federal level, however, the main focus was on President Sarney's crusade to extend his presidential term by one year. The 1986 elections provided a single political party (PMDB) with the majority of the seats in the Senate (78 percent), in the Chamber of Deputies (53 percent) and in state governments (22 of the 23 states). The same party had also secured the majority of the state capitals (76 percent) in the 1985 municipal elections. These results favored a strong coalition of subnational interests in the preparation of the new constitution, at a time when the federal government's attention was directed to a different objective. Not surprisingly, the new constitution was characterized by a significant degree of fiscal decentralization and political autonomy for subnational governments. In the fiscal area, the states demanded greater budgetary autonomy and the revision of their debt contracts. Even before the new constitution was promulgated, they requested financial aid from

¹⁰ See Sochaczewski (1980) for details of the 1964/65 Financial Reform.

¹¹ See Furuguem, Pessôa and Abe (1996).

¹² Central Bank net debt statistics present only consolidated information for both state and municipal governments.

¹³ See Modiano (1988) for a description of the Cruzado Plan.

¹⁴ In an effort to prevent a further increase in spending, which could compromise the stabilization program, Central Bank Resolution 1135 prohibited state governments from borrowing from their own banks. The resolution also prohibited so-called "triangular operations" through which state suppliers and contractors borrowed from state banks with state government guarantees. Later on, and in agreement with state governments, they defaulted on these loans, leaving the state banks with bad loans, which the state government ended up assuming. As with other borrowing controls, those restrictions were often evaded. See Afonso and Rezende (1988).

the federal government, which was extended through a series of measures implemented in 1987 (see Box 1).¹⁵

The 1988 Constitution created a budgetary regime in which states' spending responsibilities were increased and revenues were kept relatively constant. That structure was only manageable in a context of high inflation rates and strong control of state borrowing. While inflation remained high for many years, borrowing restrictions were frequently evaded. As a result, the net debt of subnational governments, which had remained fairly stable as a share of GDP during the second half of the 1980s, would increase significantly during the early 1990s.

3.2 *The 1989 Bailout and the Increase in Bond Financing*

After the promulgation of the 1988 Constitution, in October 1988, the federal government tried to address the state debt problem through a combination of restrictions on new borrowing and relief on the existing debt burden.¹⁶ Comprehensive debt relief was finally extended through Law 7976 of December 1989. The federal government formally assumed the states' external debts with maturities longer than one year and contracted up to December 1988. The debt was then refinanced with an equal liability in domestic currency with 20-year maturity and a five-year grace period. In addition, the refinancing involved states' debt with the federal government arising from the rollover of the original external debt contracts. The interest rate on the refinanced debt was the same rate paid by the federal government on its external debt, plus monetary correction. The total amount refinanced was about R\$10.5 billion, at December 1998 prices, or some 20 percent of states' revenues in 1989. Article 4 of Law 7976 established that all improvements in debt service terms obtained by the Federal Government would be extended to subnational governments.

As Table 4 indicates, the 1989 bailout was more concentrated in the Southeastern states, which accounted for a little less than half of the refinanced debt. As a share of states' GDP,

¹⁵ The most important measure was Law 7614, which granted states and municipalities direct credit from the Federal Treasury, through Banco do Brasil. Those credits, which, under the discretion of the Ministry of Finance, could be replaced by the issuing of state bonds, were directed towards financing current account deficits and the service of debts incurred before April 1987. The credit lines had a maturity of four years for the direct administration and 15 years for financial institutions, and in both cases an 18-month grace period was given.

¹⁶ Senate Resolution 94/89 altered substantially the criteria for borrowing restraint, introducing limits on borrowing capacity and debt service instead of the usual restrictions on the amount of debt outstanding. Central Bank Resolution 1469, in turn, froze the amount of credit from financial institutions to the nonfinancial public sector, in real terms, at 1987 levels. It also implemented the rollover of subnational governments' external debt through bridge loans from the federal government or through direct relending from external creditors.

however, the bailout was more important for the states in the Northeast region. In the case of Ceará, for example, the bailout was equivalent to more than 6 percent of local GDP.

Box 1. Subnational Government Borrowing and Debt Regulation, 1975 - 1994

Date	Law	Description
October 1975	Senate Resolution # 62	Limits debt to 70% of previous year's Revenue;
October 1976	Senate Resolution # 93	Limits debt service;
May 1979	Central Bank Resolution # 539	Limits bonds to 50% of total debt; limits debt service to 15% of previous year's Fiscal Surplus; limits debt growth to 20% of previous year's Revenue;
June 1983	Central Bank Resolution # 831	Limits credit supply from private financial institutions;
June 1985	Senate Resolution # 64	Changes the previous year's revenue indexation criteria;
May 1986	Central Bank Resolution # 1135	Forbids credit operations from financial institutions to its owners;
April 1987	Central Bank Resolution # 1309	Special credit line to banks that would refinance Sub-National Governments;
June 1987	Senate Resolution # 87	Temporary indebtedness limit extension (Senate Resolution 62/1975).
August 1987	Law 7614	Credit operations from National Treasury to subnational governments.
October 1988	Federal Constitution	
December 1988	Central Bank Resolution # 1469	Extends limit on external debt roll over;
December 1989	Senate Resolution # 94	Limits credit operations to 10% of net revenue; limits Revenue Anticipation Loans to 25% of net revenue;
December 1989	Law 7976	Federal Government External Debt Bailout
December 1990	Senate Resolution # 58	Limits credit operations to 20% of net revenue; limits Revenue Anticipation Loans to 15% of net revenue;
February 1991	Central Bank Resolution # 1789	Bond Exchange procedure;
October 1991	Central Bank Vote # 2062	Creation of mutual funds based on subnational treasury bonds;
December 1991	Law 8388	Federal Government Debt Bailout (not implemented)
June 1992	Senate Resolution # 36	Limits debt service to 15% of real net revenues;
March 1993	Constitutional Amendment	Forbids bonds issues until Dec-1999 (except <i>precatórios</i>)
July 1993	Central Bank Resolution # 2008	Limits commercial banks' credit and debt roll over;
November 1993	Senate Resolution # 96	Extends external credit conditions (obtained by Federal Government) for subnational governments external debt.
November 1993	Law 8727	Federal Government Debt Bailout
January 1994	Senate Resolution # 11	Bond Exchange procedure;
June 1994	Central Bank Resolution # 2081	Forbids Budgetary Revenue Anticipation Loans during election years

Table 3. Subnational Net Debt (in percent of GDP)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1. Total Net Debt ⁽¹⁾	6.90	6.30	6.82	5.57	6.15	8.87	7.50	9.50	9.30	9.50
1.1. Domestic Debt	4.90	4.60	5.23	4.18	5.18	7.67	6.40	8.40	8.30	9.20
1.1.1. Bonded Domestic Net Debt ⁽²⁾	-	-	1.81	1.53	2.49	2.46	2.30	3.10	3.60	4.60
a) Issued Bonds	-	-	0.00	1.53	2.49	2.49	2.50	3.40	3.70	4.70
a.1) Bonds outside Central Bank	-	-	1.81	0.00	0.00	1.65	1.90	3.40	3.70	2.00
a.2) Bonds in Central Bank	-	-	-	-	-	0.83	0.60	0.00	0.00	2.70
b) Securities in treasury	-	-	-	-	-	0.03	0.20	0.30	0.10	0.10
1.1.2. Banks	-	-	3.41	2.65	2.69	4.45	3.20	4.30	3.90	3.30
1.1.3. Revenue to be collected	-	-	-	-	-	-0.03	0.00	0.00	0.00	0.00
1.1.4. Demand Deposits	-	-	-	-	-	-0.36	-0.30	-0.20	-0.20	-0.30
1.1.5. Aviso MF-30 and others	-	-	-	-	-	1.16	1.20	1.10	0.90	0.60
1.1.6. Federal Gov. Renegotiation	-	-	-	-	-	-	-	-	-	1.10
1.2. External Debt	2.00	1.70	1.60	1.40	0.97	1.20	1.20	1.10	1.00	0.30

Sources: Debt Data: Brasil Programa Econômico (from 85 to 89); Relatório do Banco Central do Brasil (90) and Boletim do Banco Central do Brasil (from 91 to 94).

GDP Data: IBGE (from 85 to 90) and Boletim do Banco Central do Brasil (from 91 to 94).

⁽¹⁾ Excludes subnational public enterprises.

⁽²⁾ Bond issued minus securities in treasury.

Note: "-" means N/A.

Table 4. The 1989 Debt Bailout*

States	Amount Renegotiated	In Percent of 1989 State GDP	In Per Capita Terms (1989 Population)	Share in Total Amount Renegotiated
Acre	10.98	0.87%	27.52	0.1%
Alagoas	112.57	2.26%	46.36	1.1%
Amapá	-	-	-	-
Amazonas	27.65	0.28%	13.87	0.3%
Bahia	564.46	1.65%	49.18	5.4%
Ceará	786.08	6.42%	126.95	7.5%
Distrito Federal	-	-	-	-
Espírito Santo	95.99	0.85%	38.29	0.9%
Goiás	619.60	4.37%	159.96	5.9%
Maranhão	335.65	4.09%	70.23	3.2%
Mato Grosso	363.77	4.93%	193.15	3.5%
Mato Grosso do Sul	323.73	4.23%	188.90	3.1%
Minas Gerais	226.31	0.34%	14.73	2.2%
Pará	37.01	0.25%	7.87	0.4%
Paraíba	177.04	3.68%	56.54	1.7%
Paraná	66.58	0.17%	8.01	0.6%
Pernambuco	239.48	1.28%	34.37	2.3%
Piauí	107.62	3.60%	42.87	1.0%
Rio de Janeiro	947.90	0.86%	75.46	9.0%
Rio Grande do Norte	95.13	1.33%	40.80	0.9%
Rio Grande do Sul	721.73	1.39%	80.93	6.9%
Rondônia	3.54	0.11%	3.44	0.0%
Roraima	-	-	-	-
Santa Catarina	649.24	2.87%	147.76	6.2%
São Paulo	3,970.97	1.45%	130.07	37.8%
Sergipe	26.33	0.54%	18.35	0.3%
Tocantins	-	-	-	-
TOTAL	10,509.83	1.38%	73.85	100.0%
Memorandum items:				
Mid-West Region	1,307.10	2.30%	145.18	12.4%
North Region	79.18	0.25%	8.37	0.8%
Northeast Region	2,444.84	2.49%	59.26	23.3%
South Region	1,437.54	1.26%	66.47	13.7%
Southeast Region	5,241.17	1.14%	85.98	49.9%

Sources: Gazeta Mercantil and Central Bank of Brazil..

Note: Bailout Amounts inflated by Centered IGP-DI end of year; while GDP inflated by IGP-DI year average.

* Renegotiated Amounts in Constant December 1998 Prices

Between the final months of 1989 and the beginning of 1990 the Brazilian economy went through a period of intense macroeconomic instability. In February 1990, a month before the inauguration of the Collor administration, the monthly inflation rate reached 80 percent. The new administration implemented a stabilization program that resulted in a sharp contraction in economic activity. Without the help of high inflation rates to reduce real expenditures, and faced with lower revenues because of the virtual stagnation in real GDP, the states demanded a new round of debt renegotiation with the federal government. Law 8388 of December 1991 established the conditions for refinancing debts with the federal government, contracted during the 1980s after access to foreign credit was interrupted, and state bonds. The federal government would assume those debts and refinance them in 20 years, with quarterly payments. A three-month grace period would be given to the states and the yearly interest rate on the refinanced debt would be 6 percent plus monetary correction.

This new round of debt renegotiation, however, was not implemented. The acceleration of the inflation rate following the breakdown of the second Collor Plan in mid-1991 contributed to a weaker demand for renegotiation from states. In addition, two policy measures during the year provided states with some financial relief. Central Bank Resolution 1789, of February 1991, allowed the exchange of Central Bank Bonds for state bonds, facilitating the rollover of state debts in the domestic financial markets. Finally, in October 1991, the Central Bank authorized the operation of mutual funds with state and municipal bonds in their portfolios, substantially increasing the demand for states' debt. As a result, bonds became the main source of financing for Brazilian states and the main source of increase of subnational government net debt during the first half of the 1990s.

3.3 The 1993 Bailout and the 1994 Bond Exchange

Between 1991 and 1993, the net debt of state and municipal governments increased from 7.5 percent to 9.3 percent of GDP. More than 70 percent of this increase is explained by growth in the net bonded debt (Table 3). During this period, the real rate of growth of states' bonded debt was 40 percent (Table 5 and Figure 1). Given these high rates of growth, this form of debt became an important source of concern¹⁷ and ended up motivating Constitutional Amendment No. 3, introduced during the revision of the 1988 Constitution in 1993. This legislation forbids

¹⁷ See World Bank (1995).

the issuance of new bonds by the states until December 1999, except for the payment of judicial claims existing at the time of the 1988 Constitution.¹⁸

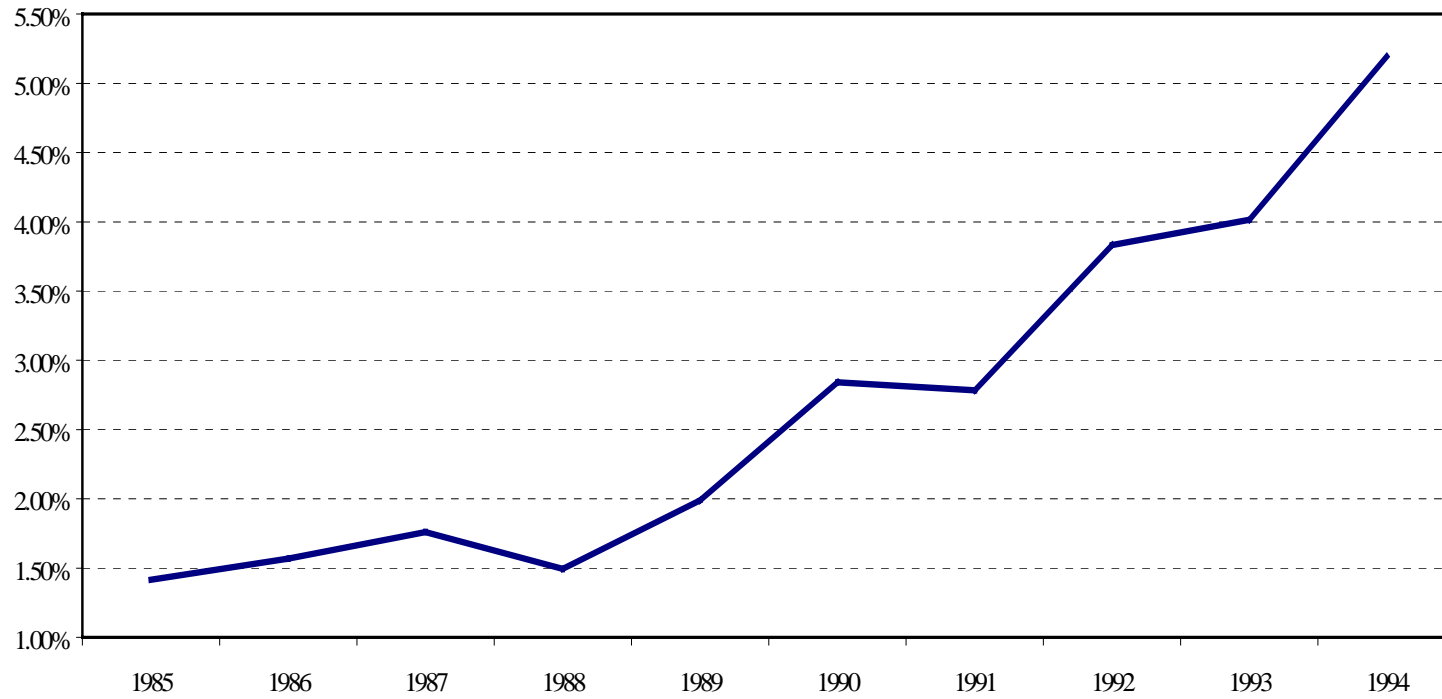
¹⁸ The Constitutional Amendment, however, did not prohibit rollover operations of existing bonds, which are determined by the Senate on a case-by-case basis and are normally interpreted as comprising both the amount of principal and the capitalization of interest on existing bonds.

Table 5. Bonded Debt, 1986-1994

	1986	1987	1988	1989	1990	1991	1992	1993	1994	Average Growth Rate 1985 - 1990	Average Growth Rate 1991- 1994	Average Growth Rate 1985- 1994
Alagoas	-	-	-	-	-	-	-	-	-			
Bahia	388.90	350.14	291.61	365.09	319.24	314.33	375.45	383.75	519.38	-6.2%	12.9%	1.0%
Ceará	22.11	51.87	39.02	43.72	42.24	45.07	51.64	55.03	68.52	-7.2%	12.9%	0.4%
Espírito Santo	43.29	41.78	44.55	59.60	52.98	54.87	65.02	66.99	86.33	-0.5%	13.0%	4.7%
Goiás	13.19	5.38	4.33	0.27	250.16	266.02	345.53	358.70	491.97		18.4%	35.2%
Mato Grosso	-	-	-	-	67.06	71.55	90.11	91.94	126.08		17.1%	
Mato Grosso do Sul	-	-	-	-	-	-	131.15	139.76	191.85			
Minas Gerais	2,072.69	2,525.01	2,355.73	3,472.60	3,065.07	3,289.55	4,400.32	4,571.12	6,174.95	14.6%	19.1%	16.4%
Paraíba	47.75	69.79	52.90	71.82	46.78	20.08	26.14	93.11	38.37	-10.2%	-4.8%	-8.1%
Paraná	19.70	18.27	13.74	0.81	142.67	152.22	198.16	208.00	275.45		17.9%	
Pernambuco	-	-	-	-	-	-	-	-	-			
Piauí	12.45	12.19	16.49	0.54	1.49	-	-	-	-			
Rio de Janeiro	1,762.76	2,416.90	1,804.79	2,733.87	2,618.85	2,606.65	3,141.50	3,158.36	4,209.82	11.9%	12.6%	12.2%
Rio Grande do Norte	58.72	55.26	41.98	57.43	75.01	59.44	63.11	97.20	-	6.9%		
Rio Grande do Sul	1,617.64	2,080.17	1,572.30	2,343.80	2,533.72	2,595.10	3,243.08	3,369.91	4,571.60	8.6%	15.9%	11.5%
Santa Catarina	348.95	356.46	272.39	371.20	328.95	327.27	398.83	425.02	579.67	-5.5%	15.2%	2.3%
São Paulo	4,341.77	4,873.06	3,692.56	5,613.29	5,787.20	5,843.81	8,611.37	8,845.90	13,087.16	12.0%	22.6%	16.2%
Sergipe	-	-	-	-	-	-	-	-	138.41			
TOTAL	10,749.92	12,856.27	10,202.39	15,134.05	15,331.44	15,645.96	21,141.41	21,864.80	30,559.54	10.6%	18.8%	13.8%

Sources: Central Bank of Brazil and ANDIMA.

Figure 1
State Bonds
(in % of GDP)



Faced with new credit difficulties, the states again open a discussion about debt renegotiation with the federal government.¹⁹ The conditions for the new renegotiation were established by Law 8727 of November 1993. Except for states' bonds, which were not included in the renegotiation this time, the conditions were very similar to the renegotiation proposed in 1991. It involved all the debt contracted with the federal government, through federal financial institutions, by state governments and their enterprises. The debts, which the states had stopped servicing, were refinanced in 20 years, without any grace period, with an interest rate equivalent to the weighted average of the original contracts, estimated at 6.5 percent, plus monetary correction. The total amount refinanced was about R\$39.4 billion, at December 1998 prices.

As Table 6 shows, the 1993 bailout was more concentrated in the states of the Southeast region, which were responsible for about 35 percent of the total amount refinanced. For the states of the Northeast, however, the bailout was again more significant as a proportion of local GDP. That was a reflection of the fact that the states in those regions were those where bonds, which were not included in the renegotiation, were not an important form of deficit finance during this period.²⁰

Beginning in 1992 the states were facing increasing difficulties in placing their bonds with private financial institutions. As a result, the state-owned banks, which normally were the underwriters of the debt, ended up with unmarketable bonds in their portfolios. The states' practice of forcing their banks to roll over the entire amount of debt service by capitalizing interest payments additionally caused some of the largest state banks to face increasing liquidity problems. In order to prevent a widespread financial crisis, the federal government authorized the temporary swapping of unmarketable state banks for central bank bonds.

Central Bank Resolution 2081 of June 1994 established the basis for the bond exchange, which converted the central bank into the main holder of the state bonds. While at the end of 1993 the central bank was not holding any state bonds, one year later it was the main holder of the R\$30.6 billions²¹ of state bonds in circulation. The original bond exchange proposal determined that the savings from the difference in the spread between the state bonds and the central bank bonds would be used for the redemption of the former. However, the federal

¹⁹ The composition of the Senate at the time was conducive to the renegotiation: many of the Senators during the 1990-1994 legislature were former state governors or became state governors in 1995. A consensus rapidly emerged on the need for debt renegotiation and for the revision of the existing criteria for states borrowing control.

²⁰ See also Almeida (1996).

government ended up allowing the states to use the resources for debt service and for the capitalization of their banks. In addition, in early 1995 the Senate authorized the rollover of the entire amount of maturing bonds as well as the capitalization of all interest payments.

The bond exchange, however, was not enough to prevent the default of the two largest states, São Paulo and Rio de Janeiro, on loans to their state banks, BANESPA and BANERJ. In both cases, loans to the state governments were the main “assets” of the banks. With those non-performing loans, the state banks resorted increasingly during the second half of 1994 to short-term liquidity assistance from the Central Bank, which decided to place BANESPA and BANERJ under intervention on December 31, 1994.

²¹ At December 1998 prices.

Table 6. The 1993 Debt Bailout*

States	Amount Renegotiated	In Percent of 1993 State GDP	In Per Capita Terms (1993 Population)	Share in Total Amount Renegotiated
Acre	430.34	32.35%	983.65	1.09%
Alagoas	817.14	23.59%	313.75	2.07%
Amapá	-	-	-	-
Amazonas	1,312.07	17.43%	591.66	3.33%
Bahia	3,585.88	13.82%	292.06	9.09%
Ceará	942.23	9.81%	143.86	2.39%
Distrito Federal	-	-	-	-
Espírito Santo	599.42	6.47%	222.11	1.52%
Goiás	3,194.12	27.30%	765.70	8.10%
Maranhão	1,750.17	32.36%	343.92	4.44%
Mato Grosso	1,725.58	31.75%	792.20	4.37%
Mato Grosso do Sul	1,096.73	16.54%	592.77	2.78%
Minas Gerais	2,387.96	4.69%	147.91	6.05%
Pará	650.77	5.56%	124.84	1.65%
Paraíba	1,180.42	28.01%	360.51	2.99%
Paraná	1,445.32	4.37%	168.30	3.66%
Pernambuco	1,628.90	12.49%	223.29	4.13%
Piauí	985.00	38.67%	370.66	2.50%
Rio de Janeiro	1,903.49	3.17%	145.69	4.83%
Rio Grande do Norte	714.23	14.45%	285.29	1.81%
Rio Grande do Sul	2,507.47	6.21%	267.59	6.36%
Rondônia	228.09	6.93%	183.70	0.58%
Roraima	58.77	9.65%	243.75	0.15%
Santa Catarina	635.85	3.57%	135.36	1.61%
São Paulo	8,936.77	4.55%	273.28	22.66%
Sergipe	632.83	15.64%	407.86	1.60%
Tocantins	93.02	11.14%	95.87	0.24%
TOTAL	39,442.57	7.24%	260.22	100.00%
<u>Memorandum items:</u>				
Mid-West Region	6,016.43	16.29%	609.38	15.25%
North Region	2,773.07	10.54%	260.88	7.03%
Northeast Region	12,236.80	16.71%	279.36	31.02%
South Region	4,588.63	5.03%	202.54	11.63%
Southeast Region	13,827.64	4.37%	214.02	35.06%

Sources: Gazeta Mercantil and Central Bank of Brazil.

Note: Bailouts amounts are inflated by Centered IGP-DI end of year; while GDP is inflated by IGP-DI year average.

* Renegotiated Amounts in Constant December 1998 Prices

The 1994 bond exchange and the measures that followed it launched the process of federalization of state bonded debt, which was concluded with the 1997 renegotiation. They also eliminated the fiscal discipline that financial markets were imposing on the states by refusing to hold their bonds. As the next section will demonstrate, the elimination of fiscal discipline was also an important determinant of the deterioration in states' financial performance after the introduction of the Real Plan.

4. State Government Debt during the Real Plan

Most Brazilian states began to experience serious fiscal difficulties in 1995. Those difficulties can be traced back to the states' sluggishness in adjusting to the new low-inflation environment and to the fact that their finances were severely hit by the very high real interest rates maintained during most of 1995. In response to the states' fiscal crisis, in 1996 the federal government undertook debt restructuring plans, in conjunction with fiscal adjustment programs which were eventually consolidated by Law 9496 of September 1997. Those plans involved a comprehensive restructuring of the state debt, with both up-front debt forgiveness and an interest rate subsidy on the restructured debt. In most cases, the debt has been restructured for 30 years with an annual interest rate of 6 percent, plus monetary correction.

This section examines the evolution of state government debt from 1994 to 1998. It starts with an analysis of the fiscal crisis in the states in the period immediately after the introduction of the Real Plan. The section then describes the developments that led to the 1997 comprehensive debt bailout.

4.1 The Post-Real Plan Fiscal Crisis in the States

With the stabilization of the economy after July 1994, the Brazilian public sector had to face a substantially different budgetary regime. It was no longer possible to rely on the inflation rate to reduce the real value of public expenditures and, at the inflation rates prevailing after 1994, the primary budget surpluses observed in the years before the introduction of the Real Plan virtually disappeared. The sudden end of the high inflation regime laid open the inconsistency between expenditures and revenues generated by the 1988 constitutional reform. The major source of this inconsistency was the rigidity on the spending side associated with payroll and social security

expenditures under the new constitution. Even in a context of rapidly growing revenues, as the 1990s were, such rigidity implied an adverse structural trend for the primary balances.²²

The stabilization's adverse effects on the states' fiscal accounts were intensified by two other factors. The first was the nominal wage increases granted to public employees in the last semester of the Itamar Franco administration (an 8 percent increase in the minimum wage in September 1994) and first semester of Fernando Henrique Cardoso's term (a 43 percent increase in the minimum wage in May 1995). Those increases followed a common practice in public administration of granting employees nominal wage increases in line with past inflation levels. As the inflation rate accelerated, the real value of those payments was eroded and the nominal wage increase ended up fitting in the budget. With the stabilization, those nominal wage increases represented a large expansion in real payroll expenditures. As Table 7 indicates, state payroll expenditures increased from an average of 52.1 percent of net revenues during 1989-1994 to an average of 69.8 percent in 1995-1997. For the states of the South region, payroll expenditures reached an average of almost 80 percent of net revenues during 1995-1997.

Table 7. State Payroll Expenditures, 1984-1997*
(in percent of net revenues)

Region	1984/1988	1989/1994	1995/1997
Mid-West	43.4	46.6	71.2
North	61.5	55.1	57.8
Northeast	52.2	49.5	69.5
South	61.2	56.9	77.1
Southeast	52.0	52.4	73.6
BRAZIL	54.1	52.1	69.8

*Wages and pensions; average values for the different sub-periods

Source: Boletim Estatístico de Pessoal - MOG/SEAP.

The second factor was the monetary policy adopted in the period following the implementation of the Real Plan. Given the sharp deterioration of the consolidated public sector accounts in 1995,²³ the demand boom that followed the launching of the stabilization plan in mid-1994 could only be halted with very high interest rates. As Figure 2 shows, real interest

²² The effect of the inflation rate on the budget is described in Bacha (1994). See Bevilaqua and Werneck (1998) for empirical evidence of this effect and for an analysis of the fiscal consequences of the 1988 Constitution.

²³ See Bevilaqua and Werneck (1998).

rates were consistently above 30 percent a year during 1995. The effect of the rise in scheduled interest payments resulting from the high interest rates was compounded by the end of the five-year grace period for the 1989 debt renegotiation in December 1994. Given that a large proportion of the nonrenegotiated state debts was contracted at variable rates, the standard practice of capitalization of interest due implied an explosive debt path (Dillinger, 1997). As Table 8 shows, from 1994 to 1996 the net debt of the state and municipal governments increased from 9.5 to 11.9 percent of GDP. A large portion of this increase is associated with state bonds, which grew from 5.2 percent of GDP to 6.6 percent of GDP during the same period (Table 9 and Figure 3).

As a result of those factors, many states started to have cash flow problems and had to rely more heavily on short-term revenue anticipation loans (AROs) at market interest rates. Throughout 1995, arrears were incurred to suppliers and public employees and on loans to state-owned banks. At the end of the year, as the AROs were falling due and as bonus and salary payments had to be disbursed, a severe fiscal crisis emerged in the states.

Table 8. Subnational Net Debt (in percent of GDP)

	1994	1995	1996	1997	1998
1. Total Net Debt ⁽¹⁾	9.50	10.40	11.90	13.00	14.30
1.1. Domestic Debt	9.20	10.10	11.50	12.50	13.70
1.1.1. Bonded Domestic Net Debt ⁽²⁾	4.60	5.40	6.40	4.30	2.40
a) Bonds Issued	4.70	5.70	6.60	-	-
a.1) Bonds outside Central Bank	2.00	2.00	2.40	-	-
a.2) Bonds in Central Bank	2.70	3.70	4.20	-	-
b) Securities in treasury	0.10	0.30	0.20	-	-
1.1.2. Banks	3.30	3.60	4.10	2.60	1.80
1.1.3. Revenue to be collected	0.00	0.00	0.00	0.00	0.00
1.1.4. Demand Deposits	-0.30	-0.40	-0.30	-0.30	-0.40
1.1.5. Aviso MF-30 and others	0.60	0.40	0.40	0.30	0.30
1.1.6. Federal Gov. Renegotiation	1.10	1.10	1.10	5.50	9.50
1.2. External Debt	0.30	0.30	0.40	0.50	0.70

Sources: Boletim do Banco Central do Brasil.

⁽¹⁾ Excludes subnational public enterprises.

⁽²⁾ Issued Bonded Debt minus securities in treasury.

Note: "-" means N/A.

Table 9. State Bonds
(in million of reais at constant December 1998 Prices)

	1994	1995	1996	1997	1998	Average Growth Rate 1994 – 1996	Average Growth Rate 1997- 1998	Average Growth Rate 1994- 1998
Alagoas	-	377.69	440.74	513.32	649.00		21.3%	
Bahia	519.38	689.86	805.12	937.02	-	28.0%		
Ceará	68.52	91.74	106.91	124.26	157.00	24.8%	21.2%	23.3%
Espírito Santo	86.33	114.38	133.10	154.81	-	25.7%		
Goiás	491.97	655.30	764.75	890.17	284.00	28.7%	-39.1%	-4.6%
Mato Grosso	126.08	168.00	196.37	228.14	6.00	28.8%	-82.5%	-42.1%
Mato Grosso do Sul	191.85	254.97	296.74	345.27	-	28.5%		
Minas Gerais	6,174.95	8,199.64	9,570.87	11,113.86	-	27.9%		
Paraíba	38.37	51.23	58.91	69.26	87.00		21.5%	
Paraná	275.45	364.59	425.47	49.99	62.00	26.9%	20.8%	24.5%
Pernambuco	-	-	620.75	736.51	686.00		5.1%	
Piauí	-	-	-	-	-			
Rio de Janeiro	4,209.82	5,547.45	6,474.77	7,519.58	9,474.00	27.0%	21.0%	24.6%
Rio Grande do Norte	-	-	-	-	-			
Rio Grande do Sul	4,571.60	6,115.77	7,138.06	8,293.64	32.00	28.4%	-93.3%	-60.6%
Santa Catarina	579.67	768.49	1,582.96	1,833.30	1,600.00	55.0%	0.5%	30.4%
São Paulo	13,087.16	17,398.92	20,425.79	286.20	283.00	32.2%	-88.2%	-49.8%
Sergipe	138.41	183.49	213.83	247.50	-			
TOTAL	30,559.54	40,981.52	49,255.13	33,787.82	13,879.00	31.1%	-46.9%	-8.7%

Sources: Central Bank of Brazil and ANDIMA.

Figure 3. State Bonds (as % of GDP)



In order to preserve the stabilization plan, the federal government implemented in November 1995 a comprehensive rescue operation through Vote 162/95 of the National Monetary Council. It authorized the federal financial institution Caixa Econômica Federal (CEF) to provide emergency credit lines to the states in exchange for fiscal adjustment programs consistent with zero operational balances during 1996. Credit lines were provided for three different purposes: payment of wage and other outstanding arrears, financing of voluntary retirement programs to be implemented by the states and refinancing of outstanding AROs. The states signed agreements with the federal government, with adjustment measures including reduction of payroll expenditures to 60 percent of net revenues by 1998, privatization of state assets, improvement and modernization of tax administration systems, and no contracting of new AROs.²⁴

The rescue operation did not have the expected results. The short-run implementation of some objectives of the programs, such as reduction in payroll expenditures to 60 percent of net revenues, was not realistic. But the fact that the resources were disbursed up-front, solving the immediate financial crisis of the states, reduced their incentive to carry out the proposed reforms. By mid-1996 the underlying fiscal situation of the states remained basically the same. As arrears began to accumulate again, it became clear that the existing fiscal adjustment programs had to be changed. It also became evident that the states' debts were headed for a new round of renegotiation.

4.2 *The 1997 Debt Bailout*

The first explicit signs that a comprehensive debt bailout was forthcoming appeared in late 1995 and early 1996. The state bank of São Paulo, BANESPA, had been under federal intervention since December 1994 because of recurrent liquidity problems caused by loans extended to the state government. In December 1995, the federal government announced that it was willing to help the state government to settle its R\$15 billion debt to BANESPA by issuing R\$7.5 billion in federal bonds, which would be given to São Paulo to be transferred to the bank. Those bonds would carry 30 years maturity and an interest rate of 6 percent, with exchange rate indexation.

²⁴ The loans carried interest rates equivalent to CEF's cost of funds rate and maturities up to December 1998. Except for the credit line for the voluntary retirement programs, no grace period was granted. Some R\$2 billion was disbursed under this program and the majority of the resources were associated with the credit line provided for the clearance of arrears.

The remaining R\$7.5 billion would come from the sale to the federal government of state assets such as airports and the state railway system.

The rescue operation was submitted to the approval of the Senate's Economic Affairs Committee (CAE). By early April 1996, a group of senators from the North, Northeast and Midwest regions stated that they would only approve the federal loan to São Paulo if they could be assured that their states would receive the same treatment. According to the president of CAE, a senator from the northern state of Amazonas, the committee had "to take into consideration that São Paulo would get 30 years to pay its debt with an interest rate of 6 percent, while the other Brazilian states had to pay interest rates that were at least five times higher than that."²⁵

At about the same time, the governors of São Paulo, Rio de Janeiro, Minas Gerais and Rio Grande do Sul, members of the coalition supporting Fernando Henrique Cardoso and leaders of the largest states of the federation, declared that the time had come for the federal government to find a "final" solution for their bonded debt problem. More specifically, the governor of Rio Grande do Sul announced that he demanded for his state the exact terms of the operation under negotiation with the state of São Paulo.

In order to cope with the political demands, the president called a meeting with all state governors in Brasília in late April 1996. At the meeting, he declared for the first time that the federal government was prepared to address the debt problems of all the states on similar terms.²⁶ From the beginning, the federal government opposed a general rescue operation and made clear that the discussions would be conducted on a case-by-case basis with the negotiation of specific fiscal adjustment programs for each state demanding debt relief. The negotiations developed for a few months without any concrete results. The main impediment in most cases was the states' resistance to commit to fiscal adjustment programs and to agree with the privatization of their assets.

After the launching of the Real Plan, the state banks started to have serious financial difficulties and many of them were put under federal intervention. While the debt negotiations

²⁵ Faced with the accusation of purposely trying to hold the approval of the operation in order to put pressure on the federal government, given the precarious financial situation of BANESPA, the president of CAE replied that the Senate needed "enough time to analyze the situation in depth." See "Bancadas ameaçam aprovação do acordo", *O Estado de São Paulo*, April 1, 1996.

were taking place, the federal government decided to create the Program to Reduce State Involvement with Banking Activities (PROES).²⁷ Under this program, the federal government provided financing to the states to clean up their banks and prepare them for privatization, or to transform them into nonfinancial development agencies. The financing was restricted to 50 percent of the required resources. In the few cases in which the states decided to keep their banks as public financial institutions, the federal government required the clean-up to be made exclusively with state funds.

By mid-September 1996, and a few days before the municipal elections, the state of Minas Gerais reached an agreement in principle with the federal government for a comprehensive restructuring of its debt. In the same week, a similar agreement was reached between the state of Rio Grande do Sul and the federal government. With these two agreements the federal government reduced the debt burden of two of the four states with large amounts of bonds and increased the pressure on the remaining states, which at that time were threatening to default on their debts.

The day after the agreement with Minas Gerais was announced, the leader of PFL²⁸ in the Senate, a representative of the northeastern state of Piauí, issued a formal statement requesting “identical treatment for all states concerning the renegotiation of debts with the federal government.” This statement was followed by similar declarations by political leaders of other northeastern states. The government response was that all the states willing to undertake adjustment programs, including the privatization of state banks under PROES, as had been the case for Minas Gerais and Rio Grande do Sul, would be eligible in principle for debt renegotiation. Strengthening the federal government’s bargaining position, in late September 1996 the National Monetary Council authorized a 90-day rollover of interest payments on loans with federal financial institutions for states engaged in debt and fiscal adjustment negotiations with the federal government.

Senators from Maranhão and Paraíba, two other northeastern states, complained that the federal approach for debt relief represented “unfair treatment of poor states.” A major complaint was that a renegotiation emphasizing state bonds, such as that already underway, would benefit

²⁶ In Fernando Henrique Cardoso’s words: “I am ready to give you more rope to hang yourselves, because this is what we are talking about.” See “Vou lhes dar corda para maior enforcamento,” *O Estado de São Paulo*, April 1, 1996.

²⁷ Medida Provisória 1514 of August 7, 1996.

the four richest states (São Paulo, Rio de Janeiro, Minas Gerais and Rio Grande do Sul), which were responsible for about 90 percent of the stock of state bonds (Table 9).

On October 1996, the governors of 19 states met in São Paulo and announced that they were abandoning negotiations with the Ministry of Finance's team and would discuss their debt problems directly with the Senate. The states asked for a renegotiation of the 1993 bailout, which established 20-year maturity for the restructured debt, in the hope of extending it to 30 years, in line with the maturities negotiated with Minas Gerais and Rio Grande do Sul. Finally, they demanded a reduction of the ceiling for debt service expressed in Senate Resolution 11.

The presence of São Paulo in this group increased the credibility of the states' threat, since the state was the largest bond debtor and was governed by one of the main leaders of Fernando Henrique Cardoso's party (PSDB). The major obstacle for the renegotiation with São Paulo was BANESPA. While the federal government only agreed to assume the debts of the state with the bank if it were liquidated or federalized for privatization latter on, the governor insisted on keeping the bank in state hands.

Fernando Henrique Cardoso declared that he was not going to give up to pressures and that the previous debt renegotiations would not be reopened. He insisted that states wanting to renegotiate their debts should be willing to implement the fiscal adjustment programs negotiated directly with the Ministry of Finance's team.

Finally, in mid-November 1996 the governor of São Paulo announced that he was giving up BANESPA. An agreement in principle was concluded with the federal government for the renegotiation of the state debts. With the agreement, and the transfer of the state debts with the bank to the federal government, the main obstacle for the privatization of BANESPA disappeared, since 51 percent of the bank's shares were transferred to the federal government. The agreement with São Paulo was followed by similar agreements with smaller states.

The outcome of the prolonged political negotiations between federal and states' governments was Law 9496 of September 11, 1997, which established a standard framework for the debt restructuring contracts. Those contracts, to be signed between the federal government and each state government, involved the replacement of securitized debts and state debts to

²⁸ One of the three major parties in the coalition supporting Fernando Henrique Cardoso.

banks with debt to the federal treasury.²⁹ The restructured debt was divided into two portions. The first was the so called “conta-gráfica,” which in most cases was equivalent to 20 percent of the refinanced debt and had to be amortized before December 1998 with the proceeds from the privatization of state assets. Those assets had to be identified in advance in the contracts to be submitted to the approval of the state assemblies. The remaining 80 percent of the debt has maturities of up to 30 years and an annual interest rate of 6 percent, plus monetary correction. A cap of 13 to 15 percent of net revenues was established for the annual debt-service ratio and all debt service exceeding this cap is automatically capitalized under the contracts. As a guarantee to the federal government for the service of the restructured debt, the state governments pledged their ICMS and FPE revenues.

Since the 6 percent real interest rate is substantially lower than the real interest rates at which the federal government will likely finance its debt during the contract period, the contracts involve a subsidy to the restructured debt.³⁰ They also included up-front debt forgiveness for securitized debt. It resulted from the difference between the overnight rate and the 6 percent real interest rate applied to the stock of restructured debt during the period going from the cut-off date to the actual signing of the contracts.

In exchange for the restructuring of the debt, the states made commitments to undertake adjustment programs designed to reduce the debt to net revenue ratio to less than 100 percent within a specified period, which ranged from 6 to 19 years, depending on the state. Those programs involved specific targets for primary balances and payroll and investment expenditures, as well as for the privatization of state assets. Deviations from the agreed targets are punishable under the contracts with an increase of 4 percentage points in the debt service caps and the utilization of market interest rates in place of the 6 percent real interest rate.³¹

With the approval of the constitutional amendment authorizing the reelection for president and governors in early 1997, the federal government tried to accelerate the completion of the contracts so that they could be ready well ahead of the 1998 elections. However, many state governors postponed the completion of formal contracts in an attempt to extract even more

²⁹ Also in September 1997 the federal government received Senate’s authorization to issue R\$103 billion in federal bonds to finance the restructuring of state debts and to finance the restructuring of the state banking system through PROES.

³⁰ See Bevilaqua, Carneiro, Garcia and Werneck (1998) for an estimate of this subsidy.

favorable terms from the federal government. The first contract containing both fiscal adjustment and debt restructuring agreements was signed by São Paulo only in December 1997. The last contract was signed in June 1998.

In the end, some R\$87 billion was restructured under Law 9496.³² As Table 10 shows, the majority of the states restructured their debts with 30-year maturities and 6 percent real interest rates. In some cases, such as Minas Gerais, Pará and Rio de Janeiro, the real interest rate increased to 7.5 percent because the states were not able to finance the 20 percent of the restructured debt with resources from the privatization of state assets. In some other cases, such as Ceará, Piauí and Rio Grande do Norte, the states voluntarily opted for shorter maturities. The majority of the restructured debt refers to the states of the Southeast region, which were the states with larger amounts of bonds. Contrary to the 1989 and 1993 bailouts, when it represented a significant proportion of the total amount restructured, the Northeast region received only 2.7 percent of the total bailout.

³¹ As of December 1999 the government has not yet released any information on states' compliance with the targets of the adjustment programs. Some preliminary evidence released in the press, however, indicates that the targets have been largely missed.

³² In current *reais*. This amount does not include the resources used to reform the state banks through the PROES.

Table 10.a The 1997 Debt Bailout, Amount Renegotiated*

States	Values	In Percent of 1997 State GDP	In Per Capita Terms (1997 Population)	Share in Total Amount Renegotiated
Acre	-	-	-	-
Alagoas	-	-	-	-
Amapá	-	-	-	-
Amazonas	120.18	1.17%	49.56	0.1%
Bahia	962.43	2.77%	73.93	1.1%
Ceará	114.81	0.84%	16.69	0.1%
Distrito Federal	-	-	-	-
Espírito Santo	433.10	3.28%	150.60	0.5%
Goiás	1,350.39	7.57%	303.67	1.5%
Maranhão	244.55	2.89%	45.50	0.3%
Mato Grosso	812.85	9.65%	331.34	0.9%
Mato Grosso do Sul	910.42	9.78%	460.71	1.0%
Minas Gerais	11,941.06	15.95%	707.96	13.4%
Pará	276.55	1.56%	48.61	0.3%
Paraíba	268.31	4.43%	78.78	0.3%
Paraná	523.83	1.19%	59.27	0.6%
Pernambuco	164.11	0.92%	21.61	0.2%
Piauí	250.90	6.23%	89.83	0.3%
Rio de Janeiro	8,559.33	9.81%	632.73	9.6%
Rio Grande do Norte	57.36	0.73%	21.55	0.1%
Rio Grande do Sul	9,524.70	17.77%	973.16	10.7%
Rondônia	148.36	2.48%	102.91	0.2%
Roraima	7.30	0.63%	25.68	0.0%
Santa Catarina	1,564.02	6.54%	314.24	1.8%
São Paulo	50,730.40	18.75%	1,461.67	56.8%
Sergipe	389.64	6.22%	234.78	0.4%
Tocantins	-	-	-	-
TOTAL	89,354.60	11.65%	558.08	100.0%
Memorandum items:				
Mid-West Region	3,073.65	5.49%	287.81	3.4%
North Region	552.39	1.38%	47.22	0.6%
Northeast Region	2,452.11	2.36%	53.13	2.7%
South Region	11,612.55	9.56%	492.01	13.0%
Southeast Region	71,663.90	16.07%	1,054.23	80.2%

Sources: Ministry of Finance and *O Estado de São Paulo*.

Note: Bailout amounts are inflated by IGP-DI (month of contract); while GDP is inflated by IGP-DI year average.

* Renegotiated amounts in constant December 1998 prices.

Table 10.b The 1997 Debt Bailout, Amount Forgiven*

States	Values	In Percent of 1997 State GDP	In Per Capita Terms (1997 Population)	Share in Total Amount Forgiven
Acre	-	-	-	-
Alagoas	-	-	-	-
Amapá	-	-	-	-
Amazonas	-	-	-	-
Bahia	52.99	0.15%	4.07	0.7%
Ceará	11.24	0.08%	1.63	0.1%
Distrito Federal	-	-	-	-
Espírito Santo	42.90	0.33%	14.92	0.5%
Goiás	178.63	1.00%	40.17	2.3%
Maranhão	7.82	0.09%	1.45	0.1%
Mato Grosso	25.97	0.31%	10.59	0.3%
Mato Grosso do Sul	98.25	1.06%	49.72	1.2%
Minas Gerais	1,658.24	2.21%	98.31	20.9%
Pará	13.43	0.08%	2.36	0.2%
Paraíba	22.22	0.37%	6.53	0.3%
Paraná	58.04	0.13%	6.57	0.7%
Pernambuco	6.09	0.03%	0.80	0.1%
Piauí	10.14	0.25%	3.63	0.1%
Rio de Janeiro	-	-	-	-
Rio Grande do Norte	0.79	0.01%	0.30	0.0%
Rio Grande do Sul	1,658.23	3.09%	169.43	20.9%
Rondônia	3.30	0.06%	2.29	0.0%
Roraima	0.65	0.06%	2.29	0.0%
Santa Catarina	162.84	0.68%	32.72	2.1%
São Paulo	3,829.42	1.41%	110.34	48.4%
Sergipe	75.24	1.20%	45.34	1.0%
Tocantins	-	-	-	-
TOTAL	7,916.43	1.03%	49.44	100.0%
Memorandum items:				
Mid-West Region	302.84	0.54%	28.36	3.8%
North Region	17.39	0.04%	1.49	0.2%
Northeast Region	186.53	0.18%	4.04	2.4%
South Region	1,879.11	1.55%	79.62	23.7%
Southeast Region	5,530.56	1.24%	81.36	69.9%

Sources: Ministry of Finance and *O Estado de São Paulo*.

Note: Bailout amounts are inflated by IGP-DI (month of contract); while GDP is inflated by IGP-DI year average.

* Forgiven amounts in constant December 1998 Prices.

Table 10.c The 1997 Debt Bailout - Amount Refinanced*

States	Values	In Percent of 1997 State GDP	In Per Capita Terms (1997 Population)	Share in Total Amount Refinanced
Acre	-	-	-	-
Alagoas	-	-	-	-
Amapá	-	-	-	-
Amazonas	120.18	1.17%	49.56	0.1%
Bahia	909.44	2.62%	69.86	1.1%
Ceará	103.57	0.76%	15.06	0.1%
Distrito Federal	-	-	-	-
Espírito Santo	390.21	2.96%	135.69	0.5%
Goiás	1,171.76	6.57%	263.50	1.5%
Maranhão	236.74	2.79%	44.05	0.3%
Mato Grosso	786.88	9.34%	320.75	1.0%
Mato Grosso do Sul	812.18	8.73%	410.99	1.0%
Minas Gerais	10,282.82	13.73%	609.64	12.8%
Pará	263.11	1.48%	46.25	0.3%
Paraíba	246.08	4.06%	72.25	0.3%
Paraná	465.80	1.06%	52.71	0.6%
Pernambuco	158.02	0.88%	20.80	0.2%
Piauí	240.76	5.98%	86.20	0.3%
Rio de Janeiro	7,703.40	8.83%	569.46	9.6%
Rio Grande do Norte	56.56	0.72%	21.25	0.1%
Rio Grande do Sul	7,866.47	14.67%	803.74	9.8%
Rondônia	145.06	2.43%	100.62	0.2%
Roraima	6.65	0.57%	23.39	0.0%
Santa Catarina	1,401.17	5.86%	281.52	1.7%
São Paulo	46,900.97	17.33%	1,351.33	58.2%
Sergipe	314.40	5.02%	189.44	0.4%
Tocantins	-	-	-	-
TOTAL	80,582.24	10.50%	503.29	100.0%
Memorandum items:				
Mid-West Region	2,770.81	4.95%	259.45	3.4%
North Region	535.00	1.34%	45.74	0.7%
Northeast Region	2,265.58	2.18%	49.09	2.8%
South Region	9,733.44	8.01%	412.40	12.1%
Southeast Region	65,277.40	14.64%	960.28	81.0%

Sources: Ministry of Finance (Home-Page) and *O Estado de São Paulo*.

Note: Bailout amounts are inflated by IGP-DI (month of contract), while GDP is inflated by IGP-DI year average.

* Refinanced Amounts in Constant December 1998 Prices.

Table 10.d The 1997 Debt Bailout - Contract Terms

States	Amortization ("Conta Gráfica")	Maturity	Interest Rate
Acre	-	-	-
Alagoas	-	-	-
Amapá	-	-	-
Amazonas	20%	30	6.0
Bahia	20%	30	6.0
Ceará	20%	15	6.0
Distrito Federal	-	-	-
Espírito Santo	7%	30	6.0
Goiás	20%	30	6.0
Maranhão	20%	30	6.0
Mato Grosso	20%	30	6.0
Mato Grosso do Sul	10%	30	6.0
Minas Gerais	10%	30	7.5
Pará	10%	30	7.5
Paraíba	5%	30	6.0
Paraná	20%	30	6.0
Pernambuco	20%	30	6.0
Piauí	20%	15	6.0
Rio de Janeiro	11%	30	7.5
Rio Grande do Norte	20%	15	6.0
Rio Grande do Sul	15%	30	6.0
Rondônia	20%	30	6.0
Roraima	20%	30	6.0
Santa Catarina	19%	30	6.0
São Paulo	13%	30	6.0
Sergipe	13%	30	6.0
Tocantins	-	-	-
WEIGHTED AVERAGE	13%	29.9	6.3

Sources: Ministry of Finance and *O Estado de São Paulo*.

5. An Assessment of the Bailout Problem in Brazilian States

With the preceding section as background, this section assesses the state debt bailout problem in Brazil. It starts with an analysis of the determinants of state debt bailouts and concludes with an evaluation of the empirical relationship between bailouts and fiscal discipline in the Brazilian states.

5.1 The Determinants of State Debt Bailouts

This section discusses the determinants of state debt bailouts in Brazil along the lines of a conceptual framework that recognizes that the essence of the bailout question is the issue of moral hazard. A distinct characteristic of the state debt bailout problem is the fact that under some specific conditions, even if the federal government knows that the states' precarious financial situation can be attributed to their own reckless behavior, it may choose to bail them out. A bailout may be extended because the federal government cares about the welfare of states' citizens, because there are political benefits associated with the decision to rescue the states, or because of the scope for negative externalities on the rest of the country in the absence of a bailout. In what follows, the relevant factors for explaining state debt bailouts in Brazil according to this framework are grouped into ex-post, ex-ante and reputational determinants of bailouts.

5.1.1 Ex-Post Determinants

Ex-post factors can provide a central contribution to the understanding of the state debt bailout problem in Brazil. Brazilian states have a high degree of political autonomy but do not have a corresponding degree of fiscal autonomy. As shown in the Appendix,³³ federal transfers comprise a significant part of the revenues at the disposal of the majority of Brazilian states. In addition, the assignment of tax bases to different government levels is regulated by the constitution and states cannot create new taxes at their discretion. Their main source of state's tax revenue, the general value-added tax on goods and services (ICMS), is administered by the Committee of the Secretaries of Finance of the States (CONFAZ), chaired by the Deputy Finance Minister. Though states have some limited ability to modify tax rates, changes in tax rates or on the tax base must be submitted by individual states for the approval of the Committee.

Brazilian states, therefore, have little flexibility regarding their revenues, making it harder for the federal government to ask them to bear the cost of adjustment in the event of a debt crisis.

Expenditure rigidities also constrain the states' ability to react to a fiscal crisis. State payroll expenditures reached an average of about 70 percent of their net revenues during 1995/1997.³⁴ Under the 1988 Constitution, redundant public employees at all three levels of government cannot be fired. Their salaries cannot be reduced in nominal terms and they have the right to retire after 35 years in service with a benefit corresponding to their last salary in office. In addition, they are entitled to increases in their retirement benefits whenever the government grants salary increases to active personnel.

A second ex-post determinant which is highly relevant for the correct understanding of the state debt bailout problem in Brazil is the scope for negative externalities associated with the decision of not extending a bailout. As the discussion in previous sections indicated, Brazilian states relied on their own banks as a major source of finance for an extended period of time. With the stabilization of the economy after mid-1994, the financial sector went through a period of substantial restructuring because of the effects of lower inflation on the balance sheets of the banking system.³⁵ The effects were particularly intense in the case of state-owned banks, which have traditionally been much less efficient than their private counterparts.

As discussed in Section 4, the 1997 bailout was largely due to the precarious financial situation of BANESPA, the state bank of São Paulo and one of the largest commercial banks in Brazil, in the wake of the stabilization. BANESPA was put under federal intervention in December 1994 because of serious liquidity problems raised by bad loans extended to the state government during many years. In order to help the state of São Paulo settle its debts to BANESPA, preventing a major financial crisis which could have had a serious impact on the financial system at a critical junction, the federal government was forced into a broad process of debt renegotiation with the remaining Brazilian states. As illustrated by the previous discussion of the developments that ended in the 1997 bailout, political representatives from other states grasped the importance of what was at stake in the case of BANESPA, and quickly used it to leverage their own financial demands.³⁶

³³ See Table A8.

³⁴ See Table 7 in Section 4.1.

³⁵ See Bevilaqua and Loyo (1998) for an analysis of recent developments in the Brazilian banking system.

³⁶ As put by Wildasin (1997), BANESPA was "too big to fail."

Finally, a third ex-post factor that helps to explain the bailout problem in Brazil refers to the political benefits for the federal government associated with the decision to extend a bailout to the states. The 1997 bailout was negotiated in two stages. In both stages, political attention was concentrated on major events. The first stage corresponded to the negotiation of the agreements in principle with the states and coincided with the 1996 municipal elections, and with the discussion in Congress of the constitutional amendment authorizing a second term in office for the president, state governors and city mayors. The second stage corresponded to the negotiation of the final contracts with the states. It occurred in parallel with the launching of President Fernando Henrique Cardoso's and many state governors' campaigns for a second term in office. Therefore, the political benefits associated with extending a bailout to the states were quite high.

In addition, the political cost for the federal government of not extending a bailout to the states was high because one of the fundamental reasons for the 1995-1996 fiscal crisis in the states, which ended up motivating the 1997 bailout, can be traced to the federal government actions. As a result of the monetary policy adopted in the period after the launching of the Real Plan, real interest rates were consistently over 30 percent a year during 1995. Given that most states' debts were contracted at variable real interest rates, and that the capitalization of scheduled interest payments was a standard practice, the increase in real interest rates put state debts into a potentially explosive situation.³⁷

As mentioned above, the comprehensive 1997 bailout took place immediately before an election year, increasing the political benefits for the federal government associated with extending a bailout to the states. Two hypotheses on factors affecting the political benefits for the federal government in extending a bailout are now tested with data for the 1997 bailout.³⁸

- i) states with larger populations, which can affect the electoral results at the federal level, will have larger bailouts;
- ii) states in which the government belongs to the coalition supporting the federal government will have larger bailouts;

³⁷ See the discussion on the role of the interest rate in the 1995-96 fiscal crisis in the states in Section 4.1. Though high real interest rates made debt service unbearable, the evolution of states' debt was probably not sustainable otherwise.

³⁸ The extension of the statistical analysis to the 1989 and 1993 bailouts did not produce meaningful results.

The analysis is based on a reduced form model and is implemented with cross-section data for the Brazilian states. Out of the potential 27 observations, a total of 5 observations were excluded from the estimations because the states did not receive a bailout in 1997.³⁹ The dependent variable is the 1997 per capita amount of debt renegotiated, expressed in constant prices of December 1998. The basic model includes the following control variables: states' 1997 per capita GDP and the lagged per capita bailout, which corresponds to the amount of the 1993 renegotiation. Both variables are also expressed in constant December 1998 prices. The variables of interest for the two hypotheses are the states' 1997 population, expressed in thousands of people, and a dummy variable taking the value of 1 whenever the state government belongs to the national coalition supporting Fernando Henrique Cardoso.

Table 11 presents the results of the empirical analysis of the determinants of the 1997 bailout. The first column shows the results for the basic model, which includes only the control variables. The coefficient on the per capita GDP variable is positive, indicating that richer states received larger per capita bailouts. The coefficient on the lagged bailout variable is also positive, but it is not significantly different from zero at standard confidence levels. The second and third columns in Table 11 test the two hypotheses on factors affecting the political benefits for the federal government from extending a bailout. Equation 2 adds the 1997 population to the basic model. Its estimated coefficient has the expected positive sign and is significantly different from zero at very high confidence levels. The result provides support for the hypothesis that more populous states, which can potentially affect the electoral results, obtained larger per capita bailouts in 1997. In addition, when the population is included in Equation 2, the coefficient on the lagged bailout variable increases and becomes significant at the 90 percent confidence level. The model explains 77 percent of the cross-section variation in the 1997 per capita bailout values.

Equation 3 adds the president's coalition dummy to the basic model to test the second hypothesis on factors affecting the political benefit for the federal government from extending a bailout. Its coefficient has the hypothesized positive sign, indicating that states where the governor is a member of the national coalition supporting Fernando Henrique Cardoso got larger per capita bailouts, but is not estimated with precision. Finally, the last column of Table 11

³⁹ One of these states, Alagoas, was under federal intervention for some time. The other four states, Acre, Amapá, Distrito Federal and Tocantins, were created recently and did not have significant amounts of debt at the time of the 1997 bailout.

(Equation 4) incorporates the two explanatory variables of interest to the basic model. When the four variables are included in the model at the same time, only two, states' per capita GDP and population, have statistical significance.

Table 11. Determinants of the 1997 Bailout

Variable	Equation 1	Equation 2	Equation 3	Equation 4
Constant	-422.77 (-2.68)	-418.91 (-5.14)	-577.72 (-2.72)	535.35 (0.26)
Per capita GDP	0.19 (3.75)	0.12 (3.45)	0.19 (4.03)	0.12 (3.82)
Lagged per capita bailout	0.02 (0.10)	0.31 (1.78)	0.03 (0.11)	0.30 (1.40)
Population	-	27.20 (5.87)	-	26.11 (5.89)
President's coalition dummy	-	-	184.60 (1.26)	138.53 (1.26)
Adjusted R²	0.58	0.77	0.60	0.79
Number of Observations	22	22	22	22
Standard Error	240.9	176.45	234.69	171.25

Note: t-statistics in parentheses, White-type standard errors.

5.1.2 *Ex-Ante Determinants*

The most important ex-ante determinant of bailouts in the Brazilian case refers to an institutional factor affecting the ability of state governments to misbehave: their high degree of borrowing autonomy. Brazilian states have always had a high degree of borrowing autonomy. Over the period studied in this paper, the states went from borrowing from external sources to borrowing from the domestic banking sector at market interest rates using federal transfers as guarantee. In the process, they also borrowed extensively from their own banks and from domestic capital markets through the issue of bonds. State borrowing has always been subject to the Senate's approval, which is based on central banks' creditworthiness evaluations. However, despite the

fact that the central bank repeatedly produced negative creditworthiness reports, the Senate always authorized state's credit operations claiming the "exceptional nature" of particular requests. In addition, in many occasions the Senate authorized the rollover of principal and interest payments, leaving the states subject to a very soft budget constraint.

Over the years, the effects of the Senate's lack of control were intensified by reputational effects. The anticipation of bailouts on the part of the federal government helped states to have access to private credit and removed market discipline on their budgets. From the point of view of private creditors, lending to the states was a very profitable activity. Because of the perception of increased risk, the states used to pay interest rates higher than the rates paid by federal government. Given the bailouts, however, those higher interest rates ended up reflecting higher returns in the context of a low risk investment.⁴⁰ A clear example of this situation was the 1994 bond exchange, described in Section 3, which eliminated the fiscal discipline that financial markets were trying to impose on the states through their refusal to hold their bonds.

5.1.3 Reputational Determinants

Given that three comprehensive state debt bailouts were extended during a period of only eight years, reputational factors ought to be very important determinants of bailouts in the Brazilian case. The 1989, 1993 and 1997 bailouts took place immediately before election years, reducing the gains for the federal government from establishing a reputation for denying bailouts. The 1997 bailout, however, was extended in a period of consolidation of the stabilization plan in the country. This has increased the gains from establishing a reputation for imposing harder budget constraints on state governments and the federal government conditioned the restructuring of the debt on the implementation of fiscal adjustment programs in the states.

5.2 Bailouts and Fiscal Discipline

Debt bailouts are a mechanism for states to transfer their fiscal deficits to the federal government. If they know that the federal government will recurrently bail them out, state governments will consistently overspend. Counting only major bailout operations, Brazilian states were rescued three times by the federal government in the last decade. During the same period, their fiscal performance worsened considerably and they became a major factor in the observed deterioration in the consolidated public sector fiscal stance after the Real Plan.

This section conducts an empirical analysis of the relationship between debt bailouts and fiscal discipline in the Brazilian states during the period 1991-1997. The main hypothesis to be tested is whether states that get larger bailouts tend to have higher spending. The analysis is based on a standard reduced-form model of the determinants of per capita state spending⁴¹ and is conducted with the use of pooled cross-section data for the 27 Brazilian states.⁴² Annual averages are used for the 1991-1994 and 1995-1998 governmental terms.⁴³ Out of the potential 54 observations, a total of 7 observations were excluded from the data because the corresponding states were not bailed out, leaving a final population of 47 state-legislature observations. The dependent variable in the analysis is average per capita spending in the states (excluding interest payments). The values are expressed in constant prices of December 1998. The basic model includes the following control variables, also expressed in constant values of December 1998: states' per capita GDP, per capita federal constitutional transfers from the federal government and per capita voluntary transfers from the federal government. An initial specification was employed in which constitutional and voluntary transfers were aggregated in a single variable. However, this specification was always outperformed by the specification with separated transfers. That could possibly be explained by the fact that during the period 1991-1997 the composition of the total transfers from the federal government changed because of the introduction of the Fiscal Stabilization Fund (FEF) in 1993. The FEF is an emergency mechanism introduced in the preparation of the Real Plan to reduce the earmarking of federal funds.⁴⁴

To test the hypothesis of main interest, lagged bailout values are included as additional explanatory variables in the basic reduced form equation. Average per capita spending in one governmental term is a function of per capita state GDP and per capita transfers during the same governmental term and per capita bailout in the previous term.⁴⁵ As with the other variables, per capita bailout values are expressed in constant prices of December 1998. Table 12 presents the

⁴⁰ The largest Brazilian banks used to be the main holders of the states' debt.

⁴¹ See Jones, Sanguinetti and Tommasi (1999).

⁴² The main source of the raw data is above-the-line fiscal information consolidated by Secretaria do Tesouro Nacional.

⁴³ Actually, due to data limitations the averages for the second governmental term were calculated only with value for 1995-1997.

⁴⁴ Initially, the FEF's denomination was "Fundo Social de Emergência (FSE)." See Afonso and Carvalho (1996) for a description of the FSE.

⁴⁵ Therefore, the 1989 debt bailout is used to explain spending during 1991-1994, and the 1993 debt bailout is used to explain spending during 1995-1997.

results of the empirical analysis of the determinants of per capita spending in Brazilian states in the period 1991-1997. The first two columns of the table present the results for the pooled cross-section data estimation. Equation 1 includes only the three control variables. All estimated coefficients in Equation 1 have their expected signs and are significantly different from zero at very high confidence levels. The coefficient on the voluntary transfers is larger than the coefficient on the constitutional transfers, indicating a state's higher propensity to spend out of exceptional funds. The second equation retains the control variables of the first equation and adds the lagged per capita bailout variable. The estimated coefficient on the bailout variable has the expected sign and is significantly different from zero at the 89 percent confidence level. The result provides support for the hypothesis of interest in this section: all else being equal, states that get larger bailouts tend to spend more. The presence of the lagged bailout variable does not significantly affect the coefficients of the other explanatory variables in Equation 2, and the overall explanatory power of the model increases marginally when the variable is included.

Equations 1 and 2 constrain the value of the coefficients to be the same during the entire 1991-1997 period. The response of spending to the control variables, however, might have changed during the period because of the effects of the introduction of the Fiscal Stabilization Fund (FEF). Also, since the 1989 and 1993 bailouts referred to different types of debt, the response of spending to bailouts might be different in the two sub-periods. The empirical model, therefore, might have better explanatory power if it estimated separately for the two sub-periods. In order to assess this possibility, the last four columns of Table 12 split the 1991-1997 period into the two relevant sub-periods. The results indicate that the coefficient on voluntary transfers is larger in the more recent period, while the coefficient on constitutional transfers is larger in the first period. Both results are consistent with the notion that the introduction of the FEF changed the composition of federal transfers to the states and the impact of those transfers on states' spending. The coefficient on the lagged bailout variable in the period 1991-1994 (Equation 4) is larger and is estimated with more precision than the coefficient on the same variable in the more recent period (Equation 6).

Table 12. Determinants of State Per Capita Noninterest Spending

Variable	1991-1997		1991-1994		1995-1997	
	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6
Constant	-9.77 (-0.58)	-11.55 (-0.66)	-60.22 (-2.07)	-79.10 (-2.90)	37.65 (1.46)	17.45 (0.66)
Per capita GDP	0.06 (7.97)	0.06 (7.01)	0.08 (7.53)	0.07 (7.29)	0.05 (1.59)	0.05 (3.66)
Per capita constitutional transfers	0.74 (9.66)	0.70 (7.16)	1.01 (5.61)	1.05 (7.36)	0.65 (13.78)	0.61 (19.05)
Per capita voluntary transfers	2.83 (2.93)	2.98 (3.10)	1.33 (1.45)	1.77 (1.88)	3.12 (2.08)	3.50 (2.34)
Lagged per capita bailout	-	0.09 (1.62)	-	0.37 (2.51)	-	0.10 (1.85)
Adjusted R²	0.88	0.89	0.92	0.94	0.86	0.87
Number of Observations	47	47	23	23	24	24
Standard Error	57.40	54.97	39.17	34.48	62.67	60.05

Note: t-statistics in parentheses, White-type standard errors.

6. Policy Conclusions

The lack of effective control on borrowing, coupled with reputational effects originating from the repeated bailout operations, reduced fiscal discipline and created an explosive accumulation of debts in Brazilian states during the last decade. Under the Brazilian Constitution, the control of public sector borrowing is assigned to the Senate, which has always shown a remarkable degree of tolerance with regard to increases in state indebtedness. The states have also been submitted to very little market discipline on their borrowing operations. In fact, the prospects of federal government bailouts have induced private institutions to overextend credit to state governments in anticipation of higher returns.

Given the accumulated debts, state bailouts by the federal government can be readily rationalized in the Brazilian case by a series of ex-post factors. The limited degree of fiscal autonomy of Brazilian states implies that their citizens would be submitted to intense hardships if the states had to bear the cost of adjustment themselves in the event of a debt crisis. In addition, comprehensive debt bailouts have normally occurred before election years, when the federal government can generally realize greater political benefits from granting a bailout. Finally, a major motivation for the 1997 debt bailout was the presence of important negative externalities on the Brazilian financial system associated with an eventual decision of not extending a bailout.

As the successive bailouts were extended without being followed by institutional changes that would reduce the states' incentives to misbehave, a perverse fiscal regime was introduced. Brazilian states could consistently overspend, knowing that their deficits would later on be transferred to the federal government through a bailout operation. In fact, state government bailouts in Brazil provide a clear example of how the bailout problem could be thought of as a repeated game. Counting only the most significant bailout operations, Brazilian states were rescued three times by the federal government in the last decade. During the same period, the states' fiscal performance worsened considerably. The study presented empirical evidence that the occurrence of bailouts is associated with lower fiscal discipline in Brazilian states during the 1990s.

The fiscal regime associated with the recurrent bailouts was sustainable only in an environment in which the federal government was able to relax its own budget constraint through the inflation rate. The stabilization of the economy after 1994 and the need to implement a fiscal regime consistent with price stability have led to a change in the federal government's approach

to state debt bailouts. Unlike previous episodes, the 1997 debt bailout was conditioned on the adoption of fiscal adjustment programs and states' pledges of own and shared revenues as guarantees to the federal government for the service of the restructured debts. As the discussion in previous sections indicated, states resisted committing to those programs, but in the end the federal government's approach was adopted.

The recent debt restructuring agreements therefore represent an important step in the right direction in addressing the problem of fiscal discipline in Brazilian states. Through the agreements, state banks and state enterprises have been privatized, suppressing two of the most important sources of finance for the Brazilian states in the recent past. The impact of the agreements on states' fiscal behavior will depend, of course, on the federal government's resolve in enforcing the terms of the contracts. States can only issue new debt after their debt-to-revenue ratio drops below 100 percent. Therefore, if the amount of debt service established in the contracts is assured, the states will in fact be generating primary surpluses on the same values. This will represent a significant departure with respect to states fiscal behavior in recent years.⁴⁶

The use of state revenues to guarantee the service of the restructured debts has been put to an important test in the recent episode in which the governor of Minas Gerais announced a 90-day moratorium on the state's debts and precipitated the external crisis that led to the devaluation of the Real in the second week of January 1999. The government response was to hold state revenues in the same amount of the scheduled debt service. In addition, the government declined to give a federal guarantee to loans to the state and formally announced to international organizations that Minas Gerais had defaulted on its debts to the federal government. The firmness of the federal government's reaction, which was the only available option to restore its credibility in the middle of a severe external crisis, helped to discourage similar behavior on the part of the remaining states.

A more permanent solution to the states' debt problem will require, however, that political will is complemented in the short run with measures to control states' borrowing in an environment in which the conditions for the effective introduction of market discipline are not yet present. Before markets can impose discipline on Brazilian states by refusing to hold their debts, the federal government must establish a credible reputation for not extending bailouts, a

⁴⁶ Preliminary data for 1999 in fact indicate that the Brazilian states will have a consolidated primary surplus for the first time since 1994.

task that could take many years to accomplish. In the meantime, given the ex-post reasons for extending a bailout once a significant amount of debt is accumulated and a debt crisis takes place, states' borrowing has to be kept under control.

In this respect, the study offers an important contribution to the current policy debate in the country. A Fiscal Responsibility Law is currently under discussion in the Congress. It defines principles, norms and rules to be observed by the three government branches and will regulate Article 163 of the Brazilian Constitution, which deals with public finance, public debt and the granting of public guarantees. The Fiscal Responsibility Law introduces restrictions on public indebtedness by placing limits on debt stocks and credit operations. It also prohibits the refinancing of state and municipal debts by the federal government and prohibits their credit operations in cases in which they are not complying with scheduled debt service payments. In order to assure compliance with the law, institutional penalties attribute personal responsibility to public administrators.

Until such legislation is approved, the federal government will have to reduce states' incentives for fiscal misbehavior by restricting their access to financing sources and by enforcing debt service under existing agreements. Therefore, despite the generous conditions with which the state debts have been restructured, entailing large subsidies from the federal government, state governments are likely to remain a weak link in the fiscal adjustment effort in Brazil.

Appendix: States' Revenues, 1985-1997

1. Distribution of Revenues across Government Levels

As Table A1 indicates, total tax revenues increased from an average of 24 percent of GDP during 1985-1990 to an average of more than 27 percent of GDP during the 1990s. This was a result of increased own revenue-raising powers of the three levels of government. After declining during the second half of the 1980s,⁴⁷ federal tax revenues increased during the 1990s to an average of about 19 percent of GDP. As a share of total tax revenues, federal revenues declined from an average of 72 percent before the 1988 Reform to 68 percent during the period of higher decentralization, increasing again to about 69 percent during the period 1992-1997 (Table A2). For the states, the expansion in the ICMS base made it possible to increase own revenues from an average of 5.8 percent of GDP before the 1988 reform to more than 7.2 percent of GDP after 1989. As a share of total revenues for the three levels of government, states own revenues increased from an average of 25 percent in 1985-1988 to 29 percent in the two years immediately after the reform, declining slightly to more than 26 percent during 1993-1997. Finally, in the case of the municipalities, the major effect of the 1988 Reform was an increase in own revenues from 0.6 percent of GDP during the second half of the 1980s to more than 1 percent of GDP during the 1990s. In relative terms, municipalities' own revenues increased from 2.4 percent to 4 percent of total revenues between 1985 and 1990.

The numbers in Table A2 also show that the decentralization of revenues was more intense during the period 1989-1991. After that, the decentralization process lost some of its impulse and federal revenues increased again as a share of total revenues. However, this increase was not a deliberate result of the 1988 reform. Rather, it was the response of the federal government to the loss of revenue, by relying increasingly on sources of revenue that are not subject to sharing with subnational governments. So-called social contributions increased from 7 percent of GDP in 1985 to an average of 12 percent of GDP between 1994 and 1997. Alternatively, federal revenues subject to sharing with subnational governments declined from an average of 9 percent of GDP during the late 1980s to an average of 7.7 percent of GDP during the 1990s.

Turning to revenues at the disposal of each level of government, the increase in social contributions more than compensated the effects of the 1988 reform on the federal government.

Revenues at the disposal of the federal government increased from an average of about 14 percent of GDP during the second half of the 1980s to an average of more than 15 percent of GDP during the 1990s (Table A3). During the same period, revenues at the disposal of state and municipal governments increased, respectively, from 5.6 percent to almost 7 percent of GDP, and from 3.2 percent to 4.5 percent of GDP. Therefore, the effects of the 1988 reform in terms of decentralization of revenues were more concentrated on subnational governments.

Table A1
Brazil: Total Revenues by Government Level, 1985-97
(In percent of GDP)

	Federal Government			States	Municipalities	Total
	Tax Revenue	Social Contributions	Total			
1985	9.3	7.0	16.3	5.4	0.5	22.3
1986	9.4	8.0	17.4	6.7	0.6	24.7
1987	9.4	7.2	16.6	5.7	0.5	22.8
1988	9.2	6.4	15.6	5.5	0.6	21.7
1989	7.5	7.3	14.9	6.7	0.6	22.1
1990	10.0	9.6	19.6	7.8	0.9	28.3
1991	7.5	9.4	16.9	7.0	1.2	25.1
1992	7.3	9.6	16.9	6.6	1.0	24.5
1993	7.6	10.2	17.8	6.2	0.8	24.8
1994	7.0	12.8	19.9	7.5	1.0	28.3
1995	7.6	11.7	19.3	7.7	1.3	28.4
1996	7.1	11.9	19.0	7.7	1.2	28.0
1997	7.4	12.0	19.4	7.5	1.3	28.1
Avg. 85-89	8.9	7.2	16.2	6.0	0.6	22.7
Avg. 90-97	7.7	10.9	18.6	7.3	1.1	27.0

Source: Ministry of Finance.

⁴⁷ With the exception of 1986, when they increased as result of the Cruzado Plan.

Table A2
Brazil: Share of Each Government Level in Total Revenues, 1985-97
(In percent)

	Federal Government			States	Municipalities	Total
	Tax Revenue	Social Contributions	Total			
1985	41.7	31.6	73.3	24.4	2.4	100.0
1986	38.0	32.6	70.5	27.2	2.3	100.0
1987	41.1	31.5	72.6	25.0	2.4	100.0
1988	42.4	29.7	72.0	25.4	2.6	100.0
1989	33.9	33.2	67.1	30.3	2.6	100.0
1990	35.3	33.9	69.3	27.6	3.2	100.0
1991	29.9	37.2	67.2	28.0	4.9	100.0
1992	29.7	39.3	69.0	27.0	4.0	100.0
1993	30.7	41.0	71.8	24.9	3.3	100.0
1994	24.9	45.3	70.2	26.4	3.4	100.0
1995	26.8	41.3	68.1	27.3	4.6	100.0
1996	25.4	42.6	68.0	27.6	4.4	100.0
1997	26.3	42.5	68.8	26.7	4.5	100.0
Avg. 85-89	39.4	31.7	71.1	26.4	2.4	100.0
Avg. 90-97	28.6	40.4	69.0	26.9	4.0	100.0

Source: Ministry of Finance.

In regard to each government level's share of total disposable revenues,⁴⁸ it is possible to observe that the 1988 reform did not have any major effects. The share of the federal government declined from 61 percent to about 57 percent of the total (Table A4). The states' share remained constant at around 25 percent of the total. Finally, the municipalities increased their share from about 14 percent to almost 17 percent of total disposable revenues during 1985-1997.

As with total revenues, the decentralization of disposable revenues was not uniformly distributed during the period. It was more intense during 1989-1992. During these years, the share of the federal government was always smaller than 60 percent, the states' share reached 25 percent and the municipalities' share reached almost 19 percent of total disposable revenues. However, during 1993-1994 the share of the federal government rose again as a result of the increase in the relative importance of social contributions (Tables A1 and A4).

⁴⁸ The share of tax revenues at the disposal of each level of government is defined as own tax revenues, plus revenue received from upper government levels minus revenue transferred to lower government levels.

It is possible to conclude, therefore, that the decentralization impulse of the 1988 reform was temporary, and in 1994 the distribution of disposable revenues was again very similar to the distribution observed before 1988.

Table A3
Brazil: Disposable Revenues by Government Level,
1985-97
(In percent of GDP)

	Federal Government	States	Municipalities	Total
1985	14.2	5.3	2.9	22.3
1986	15.0	6.3	3.3	24.7
1987	14.3	5.4	3.0	22.8
1988	13.5	5.2	3.0	21.7
1989	12.4	5.9	3.8	22.1
1990	16.1	7.4	4.9	28.3
1991	13.9	6.6	4.7	25.1
1992	14.1	6.3	4.2	24.5
1993	14.7	6.2	3.9	24.8
1994	16.8	7.2	4.3	28.3
1995	16.0	7.5	4.9	28.4
1996	15.8	7.4	4.7	28.0
1997	16.2	7.3	4.6	28.1
Avg. 85-89	13.9	5.6	3.2	22.7
Avg. 90-97	15.5	7.0	4.5	27.0

Source: Ministry of Finance.

Table A4

**Brazil: Share of Each Government Level in Disposable Revenues,
1985-97
(In percent)**

	Federal Government	States	Municipalities	Total
1985	63.5	23.6	12.9	100.0
1986	60.8	25.7	13.4	100.0
1987	62.9	23.9	13.3	100.0
1988	62.2	23.9	13.9	100.0
1989	56.1	26.6	17.3	100.0
1990	56.7	26.1	17.3	100.0
1991	55.2	26.2	18.6	100.0
1992	57.5	25.5	17.0	100.0
1993	59.2	24.9	15.9	100.0
1994	59.4	25.5	15.1	100.0
1995	56.5	26.4	17.1	100.0
1996	56.5	26.5	16.9	100.0
1997	57.6	25.9	16.5	100.0
Avg. 85-89	61.1	24.7	14.2	100.0
Avg. 90-97	57.3	25.9	16.8	100.0

Source: Ministry of Finance.

2. Revenue Sharing between Government Levels

The increase in the federal government's disposable revenues between the second half of the 1980s and the 1990s was motivated by an increase in federal government's own revenues, which went from 16.2 percent to almost 19 percent of GDP during the same period. That increase more than compensated for the increase in constitutional transfers to the states, which almost doubled in the same years, and the increase in transfers to municipalities (Table A5).

Similarly, states' disposable revenues increased during the 1990s as a result of own revenues, which rose from 6 to 7.2 percent of GDP. As Table A6 indicates, the increase in federal transfers to the states was matched by an equivalent increase in states' transfers to the municipalities. Finally, the increase in total revenues at the disposal of municipalities was motivated by a combination of higher transfers from the states, higher own revenues and higher transfers from the federal government (Table A7).

The relative importance of federal transfers in states' disposable revenues varies considerably across Brazilian states. In 1997 it ranged from less than 9 percent in São Paulo to

almost 90 percent in the Northern states of Acre, Amapá and Roraima (Table A8). The relative importance of federal transfers has increased significantly over time, going from less than 20 percent of states' disposable income in 1985 to 25 percent in 1997. The increase was more concentrated in the states in the South region, where federal transfers increased from 13 percent to more than 22 percent of disposable revenues between 1985 and 1997.

In conclusion, all government levels increased their disposable incomes between the second half of the 1980s and the 1990s. In the case of the states, the increase in disposable income was accompanied by a significant increase in the relative importance of federal transfers.

Table A5
Brazil: Federal Government Disposable Revenues, 1985-97
(In percent of GDP)

	Own Revenue	Transfers to States			Transfers to Municipalities	Disposable Revenue
		Constitutional	Others	Total		
1985	16.3	0.6	0.5	1.1	1.1	14.2
1986	17.4	0.7	0.5	1.2	1.2	15.0
1987	16.6	0.6	0.5	1.1	1.2	14.3
1988	15.6	0.6	0.4	1.0	1.2	13.5
1989	14.9	0.7	0.3	1.0	1.4	12.4
1990	19.6	1.1	0.7	1.7	1.8	16.1
1991	16.9	1.0	0.6	1.6	1.4	13.9
1992	16.9	1.0	0.4	1.4	1.4	14.1
1993	17.8	1.1	0.5	1.7	1.5	14.7
1994	19.9	1.1	0.7	1.7	1.3	16.8
1995	19.3	1.2	0.7	1.8	1.4	16.0
1996	19.0	1.1	0.7	1.8	1.4	15.8
1997	19.4	1.1	0.7	1.8	1.4	16.2
Avg. 85-89	16.2	0.6	0.4	1.1	1.2	13.9
Avg. 90-97	18.6	1.1	0.6	1.7	1.5	15.5

Source: Ministry of Finance.

Table A6
Brazil: State Government Disposable Revenues, 1985-97
(In percent of GDP)

	Own Revenue	Transfers from Federal Government			Transfers to Municipalities	Disposable Revenue
		Constitutional	Others	Total		
1985	5.4	0.6	0.5	1.1	1.2	5.3
1986	6.7	0.7	0.5	1.2	1.5	6.3
1987	5.7	0.6	0.5	1.1	1.3	5.4
1988	5.5	0.6	0.4	1.0	1.3	5.2
1989	6.7	0.7	0.3	1.0	1.8	5.9
1990	7.8	1.1	0.7	1.7	2.2	7.4
1991	7.0	1.0	0.6	1.6	2.0	6.6
1992	6.6	1.0	0.4	1.4	1.8	6.3
1993	6.2	1.1	0.5	1.7	1.7	6.2
1994	7.5	1.1	0.7	1.7	2.0	7.2
1995	7.7	1.2	0.7	1.8	2.1	7.5
1996	7.7	1.1	0.7	1.8	2.1	7.4
1997	7.3	1.1	0.7	1.8	2.0	7.1
Avg. 85-89	6.0	0.6	0.4	1.1	1.4	5.6
Avg. 90-97	7.2	1.1	0.6	1.7	2.0	6.9

Source: Ministry of Finance.

Table A7
Brazil: Municipalities' Disposable Revenues, 1985-97
(In percent of GDP)

	Own Revenue	Transfers from Federal Government	Transfers from States	Disposable Revenue
1985	0.5	1.1	1.2	2.9
1986	0.6	1.2	1.5	3.3
1987	0.5	1.2	1.3	3.0
1988	0.6	1.2	1.3	3.0
1989	0.6	1.4	1.8	3.8
1990	0.9	1.8	2.2	4.9
1991	1.2	1.4	2.0	4.7
1992	1.0	1.4	1.8	4.2
1993	0.8	1.5	1.7	3.9
1994	1.0	1.3	2.0	4.3
1995	1.3	1.4	2.1	4.9
1996	1.2	1.4	2.1	4.7
1997	1.3	1.4	2.0	4.6
Avg. 85-89	0.6	1.2	1.4	3.2
Avg. 90-97	1.1	1.5	2.0	4.5

Source: Ministry of Finance.

Table A8**Brazil: Federal Transfers as a Share of States' Disposable Revenues**

States	1985			1991			1997		
	Constitutional	Others	Total	Constitutional	Others	Total	Constitutional	Others	Total
Acre	79.1	9.2	88.3	88.4	0.1	88.5	86.1	3.3	89.4
Alagoas	32.3	13.2	45.5	53.4	7.1	60.5	54.4	5.9	60.3
Amapá	-	-	-	78.9	3.2	82.1	86.3	3.0	89.3
Amazonas	25.9	23.4	49.3	23.7	5.2	28.9	22.0	5.6	27.6
Bahia	19.3	4.4	23.7	28.0	7.1	35.1	28.9	7.3	36.2
Ceará	40.8	7.0	47.8	42.0	4.5	46.5	40.9	4.8	45.7
Distrito Federal	1.8	7.3	9.1	5.1	19.4	24.5	6.0	12.7	18.7
Espírito Santo	12.1	3.8	15.9	11.1	13.6	24.7	10.6	9.7	20.3
Goias	12.7	3.2	16.0	12.1	5.1	17.1	18.4	5.9	24.3
Maranhão	50.6	18.9	69.5	63.6	7.4	71.0	65.0	6.4	71.4
Mato Grosso	21.7	4.8	26.5	25.6	9.9	35.5	22.0	7.5	29.5
Mato Grosso do Sul	12.1	2.7	14.8	13.2	4.5	17.6	18.8	6.0	24.9
Minas Gerais	9.5	11.3	20.9	7.4	14.0	21.5	8.4	11.8	20.3
Pará	41.6	5.4	47.0	35.6	10.3	45.9	46.2	11.1	57.3
Paraíba	50.7	3.2	53.9	55.3	4.7	60.0	53.4	3.9	57.3
Paraná	4.1	2.9	7.0	6.9	6.4	13.3	10.1	12.4	22.5
Pernambuco	27.1	7.4	34.5	31.2	7.3	38.5	33.0	6.3	39.3
Piauí	53.2	13.4	66.6	62.4	3.6	66.0	62.3	3.6	65.9
Rio de Janeiro	4.7	10.9	15.6	2.5	10.7	13.2	3.1	12.7	15.7
Rio Grande do Norte	44.4	18.5	62.9	56.7	4.9	61.6	51.1	4.4	55.5
Rio Grande do Sul	4.3	13.7	18.0	5.2	14.1	19.2	6.0	16.4	22.5
Rondônia	-	-	-	29.8	37.0	66.8	40.1	2.6	42.7
Roraima	108.5	0.6	109.2	89.7	7.9	97.6	84.9	2.3	87.2
Santa Catarina	5.9	5.0	10.9	6.5	13.0	19.5	6.6	15.6	22.1
São Paulo	0.6	7.9	8.5	0.5	6.5	7.0	0.5	8.1	8.6
Sergipe	47.0	15.1	62.2	59.3	4.2	63.4	57.7	3.7	61.4
Tocantins	-	-	-	76.5	2.1	78.6	77.9	0.3	78.2
TOTAL	11.0	8.7	19.7	14.0	8.9	22.9	15.8	9.1	25.0
Memorandum items:									
Mid-West Region	11.6	4.4	16.0	12.8	9.8	22.7	15.1	8.5	23.6
North Region	39.3	12.6	51.8	44.3	11.1	55.5	51.8	5.4	57.3
Northeast Region	33.6	9.0	42.6	42.9	6.1	49.0	43.2	5.7	48.9
South Region	4.6	8.5	13.1	6.1	10.9	17.0	7.5	14.9	22.4
Southeast Region	3.3	8.9	12.2	2.5	8.8	11.3	2.7	9.5	12.2

Source: Ministry of Finance.

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