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Fiscal Adjustment and Federalism in Brazil*

1. INTRODUCTION

The objectives of consistent poverty reduction and economic advancement can only be achieved by emerging countries that can sustain high rates of economic growth over extended periods of time. Sustainable growth is therefore the concrete goal of economic policy makers across the globe. There is ample empirical evidence supporting the assertion that fiscal equilibrium is a necessary, although not sufficient, condition for achieving sustainable growth. This is even more the case in emerging economies which are more susceptible to external shocks that affect critical macroeconomic variables such as exchange rates, interest rates and capital flows. Because these economies are more exposed to these risks of the global economy, their internal economic foundations have to be strong and steady.

Emerging economies should devote attention not only to the maintenance of prudent fiscal policies in each short economic or budgetary period, but perhaps most importantly to building a perception that, over the long-run, fiscal policy will be coherent, consistent and a reliable source of stability. It is this perception of the long term trend, based on the quality of institutions, actions and results, that allows economic actors to accept a lower real interest rate and country risk premium, important fuels for sustained economic growth. In other words, the path towards poverty reduction and economic advancement starts at uncovering the methods through which countries can establish sound and sustainable fiscal policies, delivering consistent results with strong institutions and effective execution.

The existence of large and persistent budget deficits in several countries is frequently associated with political and institutional factors that create incentives for excessive spending and negative fiscal outcomes. One possible explanation for persistent deficits is that the costs of higher deficits are broadly dispersed, while the benefits of lower taxes, higher primary spending and deficits are concentrated¹. According to this view, deficits arise because the government's tax fund is a "common property resource" from which projects of public policy are being financed. In this context, the cost-benefit analysis may create the wrong incentives for excessive spending

¹ See Poterba and von Hagen (1999).

The idea that institutions matter reinforced the use of fiscal rules as an alternative for improving fiscal performance. The definition of simple and credible rules restricting the outcome of the budget process, procedural designs that contribute to providing the proper incentives, and constraints to promote and enforce fiscal discipline and increasing transparency are examples of institutional factors that could improve fiscal performance.

Another important dimension of this problem is the design of fiscal federalism in each country. The rules governing the relationship between the federal governments and subnational governments affect the allocation of public resources, conditioning, therefore, the outcome of fiscal policy. Expenditure assignment, revenue assignment, intergovernmental transfers, and control of subnational debt are the main areas of fiscal federalism that interact with others fiscal institutions in determining fiscal performance.

The objective of this paper is to analyze the characteristics of fiscal federalism in Brazil and its impact on the fiscal adjustment promoted after 1998. The key argument is that the design of the fiscal federalist system in Brazil explains a lot about the form taken by the adjustment process and is a central element for preserving fiscal policy sustainability in the future.

This paper is divided in six parts. In the second part the focus is on the conceptual and theoretical discussion about the main areas of fiscal federalism and their relationship to fiscal adjustment. The idea is to present a conceptual framework for analyzing the Brazilian experience. In the third part we analyze revenue assignment in Brazil, identifying the major problems associated with the tax system in Brazil, its relationship to the fiscal adjustment promoted and the characteristics of fiscal federalism. In the fourth part we analyze the mechanism of revenue sharing in Brazil and how they have been and will continue to be an important part of fiscal adjustment at the subnational level. Section 5 will discuss the control of subnational debt in Brazil. It will try to demonstrate that the institutional changes promoted are the answer to understanding the recent fiscal performance in Brazil. In the last part we present the main findings and conclusions.

2. CONCEPTUAL AND THEORETICAL DISCUSSION ABOUT THE MAIN AREAS OF FISCAL FEDERALISM AND THEIR RELATIONSHIP TO FISCAL ADJUSTMENT

Before analyzing the specific characteristics of the Brazilian fiscal federalist system and how they contributed to the country's recent fiscal adjustment, it is important to establish an overall theoretical framework through which we can look at the Brazilian case. This very summarized theoretical discussion owes much to the academic and empirical literature developed in recent years by scholars and practitioners². This section will summarize general observations and concepts about four broad areas of intergovernmental fiscal relations: i) expenditure assignment, ii) revenue assignment, iii) intergovernmental transfers, and iv) control of subnational debt. In each area we will highlight those aspects that have a more direct relationship with processes of fiscal adjustment. The underlying argument here is that a well-executed fiscal adjustment program requires coordination between the federal, state and local levels of government. Therefore, understanding the fiscal federalist system is imperative to know which tools are at one's disposal to implement the coordinated fiscal adjustment. Furthermore, by understanding the fiscal federalist system, policymakers can try to adjust or reform it in order for this system to support the continuation and consolidation of the fiscal adjustment program.

I. Expenditure assignment

Expenditure assignment issues arise from the decisions that countries have to make about how to organize the provision and therefore the financing of public services to its population. Public services vary widely in nature and in cost from national defense to garbage collection, including government insurance, regulation of telecommunications and university-level research, among many others. The generally accepted theory today argues that expenditures should be as decentralized as possible, with each level of government taking responsibility for those items whose beneficiaries are most closely represented by that respective level of government. In this model, the national government should limit itself to providing public services that cannot be decentralized such as national defense, foreign policy and interstate highways. On the other end of the spectrum, one should find municipal governments with responsibility for most day-to-day public services, such as health, schools, public transportation and police. States or provinces would stand in the middle with items that have some economies of scale like highways, suburban trains, etc. Yet the empirical evidence shows that countries adopt much more complex systems for expenditures assignment that intertwine the roles of national, state and local governments, not necessarily following the theoretical recipe above.

Actual systems for expenditure assignment have to deal with three main constraints that alter the theoretical model in the direction of more centralization. First is the reality of deep regional disparities within countries. Regional income disparities cause local and state governments to have very different capabilities to respond to the needs of their population. Decentralized expenditure assignment would lead to sub-optimal levels of services and a further deepening of regional disparities. In order to mend these regional unbalances some central government intervention occurs usually through funding and setting of national standards, but oftentimes through the direct delivery of services by the national authority.

The second reason why decentralization of expenditures is less far-reaching than theory would prescribe is that local and state government tend to be less efficient and have higher administrative

² See Ter-Minassian (1999), Alesina and Perotti (1996, 1999)

costs. In most countries the national bureaucracy is better paid, trained, more structured and less corrupt than local and state governments. Weak management systems and administrative tools at the local level, make decentralization of expenditures oftentimes costly and inefficient. In many instances it is preferable to have a small allocative inefficiency caused by inadequate centralization of an expense category than to have a large cost inefficiency caused by decentralization to a less competent level of government. This is particularly relevant for large federal emerging economies, like Brazil, where the number of small municipalities (with less efficient and trained bureaucracy) is quite relevant.

Finally, the third reason for more centralization of expenditure assignment has to do with fiscal policy coordination. More decentralized systems require better coordination in order to achieve macro-economic fiscal objectives. Countries that have a weak tradition of coordination or that undergo severe economic crises tend to reduce decentralization as a means to facilitate fiscal policy implementation. Painful fiscal adjustment measures can be more efficiently and rapidly deployed when the national government has most expenditures under its direct control. Although theory suggests a strong link between centralization and fiscal policy coordination, there are examples – like the Brazilian case – where a well designed system for controlling subnational borrowing resulted in an efficient combination between decentralization and fiscal coordination.

Expenditure assignment is an area where fiscal federalism and adjustment programs have important interfaces. Decentralized expenditures are often funded by legally mandated intergovernmental transfers which add rigidity to the federal budget making fiscal adjustment, specially emergency measures, more difficult to implement. On the other hand subnational expenditures can serve to smoothen the effect of harsh federal expenditure reductions, making the adjustment process more palatable in the medium term.

II. Revenue assignment

Deciding which level of government should raise which type of revenue is among the most delicate aspects of any economic and administrative system. The experience of countries indicates that there are major conflicting forces at work that shape the different revenue assignment models. On one side, pushing governments towards more centralized revenue collection, one finds the need for national governments to exert control over macroeconomic performance and to minimize geographical allocative distortions of goods and factors. On the other side, tilting the balance towards greater decentralization of revenue assignment, there are issues such as the need for accountability of local politicians (those providing the services should be those raising the revenues) and the need to adjust taxation to regional economic realities. The end result of these contrary forces is that governments adopt a wide range of mixed revenue assignment models that combine multi-level taxation with intergovernmental transfers. Still, the literature finds some consensus in defining a few universal ‘best practices’ that can guide governments in reforming or implementing tax regimes. Unfortunately, some of these ‘best practices’ must be set aside in a context of fiscal adjustment, as the Brazilian case clearly demonstrates.

Taxation by the central government should usually be imposed on bases that are unevenly distributed across regions (such as natural resources like oil). This is to allow the redistribution of revenues generated by such ‘national goods’. Central governments should also collect taxes on the more mobile tax bases. This is to prevent ‘tax wars’ among subnationals that reduce overall revenues and create geographical allocative distortions of factors of production. Finally, tax revenues that are very sensitive to economic activity should in principle also be in the hands of the central government. This is to prevent very dramatic swings in subnational budgets and also to

allow the national government to use these taxes as stabilization mechanisms. Under these principles, most business taxes should be levied at the central government level.

The responsibility for raising sales taxes depends on the type of sales taxes implemented. Single-stage and excise taxes are more favorable for collection at the state level, particularly when there are small differences among rates in different regions (otherwise there are opportunities for inter-state smuggling). Multi-stage sales taxes (such as VAT) should preferably be under a national rule so there is no need for complex and expensive coordination and information systems among states.

As regards personal income taxes there is no clear consensus on the ideal assignment. Because individuals and households tend to be less mobile than businesses, there is a case for state-level taxation. Yet, individuals may have sources of income beyond the borders of their state of residence, so that states must share information efficiently in order to tax all personal income of their residents. National income taxes are more advisable when such information sharing is difficult and also when internal migration movements are to be avoided.

Finally, there are some taxes that could be called ‘typically local’. Property taxes, business licenses, user fees for local services and other levies whose base is relatively immobile are to be found under this category. Although these general guidelines derive from practical experience with what works or does not work, countries only adopt a few of these practices because tax systems owe much to political arrangements, historical traditions and broader economic models.

Unfortunately, one of the first victims of a fiscal adjustment process is the efficiency of the overall tax system of a country. The need to reduce budget deficits is so critical for the economy as whole and for rebuilding confidence and credibility among economic actors, that governments are compelled to implement tax measures that are less than optimal. Centralization of revenues tends to increase because the central government carries the largest responsibility for the adjustment. Oftentimes new taxes are created, specially those with easy collection such as taxes on corporate revenues, fuels and financial transactions, as well as increases in income taxes for those companies and individuals who already pay. The challenge for countries faced with these emergency fiscal situations that lead to tax distortions is twofold. One is to try to reform the system and correct distortions after the toughest phase of the adjustment is completed. This is very difficult because each level of government will be very ‘protective’ of its tax revenues (since the adjustment will not yet be consolidated and the economy will not yet be in full recovery). The second challenge is to show to the society at large that those emergency tax measures were necessary because of the fiscal imbalance that needed urgent correction. Stating this clearly would introduce in the ‘political’ discussion the fact that in order to give room for the dismantling of these inefficient tax models, the country must adopt sustainable long term adjustment measures (usually reduction of government current expenditures).

III. Intergovernmental transfers

Within a country, regional financial imbalances will occur if there are no mechanisms for intergovernmental transfers. This will be the case for two main reasons. First because subnational entities typically collect less taxes than what they would need to finance all their expenditures. Second, because regions across the country will have disproportionate tax bases (e.g. industry is unevenly distributed geographically) and financial needs (e.g. more public health expenditures needed in certain areas). If governments do not transfer resources internally, these imbalances will cause subnational fiscal crises, excessive subnational borrowing, poor social services or all of the

above. In most instances one finds that countries combine two types of intergovernmental transfer mechanisms: grants and revenue-sharing arrangements.

Grants are resources transferred from the national purse to subnational governments with no need for repayment in the future (as opposed to federal loans). Grants can be for a specific purpose (an investment project or social program), for a broad sector (like education, public safety), or for general purposes. Countries have developed different characteristics in their grant programs in order to achieve certain objectives. Grants may have a lot of conditions attached to them (social indicators must be under a certain threshold for states to qualify, or states must meet certain performance targets in order to keep receiving grant resources). These conditions work well for implementing national standards and reducing regional disparities. Yet excessive conditionality works against the principle of expense decentralization, because state and local governments lose some control over the use of the money. Also countries must consider carefully how to enforce conditions imposed for grants. Non-enforcement of conditionality creates a credibility problem, so sometimes it might be better to have fewer conditions than to have conditions one cannot enforce.

Another defining characteristic of grants is whether they require or not matched funding from the subnational's budget. Matching has two positive effects: redirection of subnational spending towards nationally-defined critical areas, and alignment of interest between those who are supplying most of the money (national government), and those who are spending the money (state or local government). But matching also has some downsides so it should not be used in all cases. Matching funds to central government grants will force subnationals to reduce other types of spending which may be more relevant for the local population. Also, if matching requirements are too expensive and inflexible, poorer states and municipalities may be unable to participate in grant-funded programs, which will deepen regional disparities.

In addition to grants, governments also make extensive use of revenue-sharing arrangements to reallocate resources across the levels of government and regions. Two important questions must be addressed when designing these arrangements: i) how much of the revenues collected centrally will be distributed to states and local governments as a whole (this is the national vs. subnational question), and ii) how much of the shared revenues will go to each state or local government (this is the subnational vs. subnational question).

In order to deal with the first question some arrangements define percentages of total centrally-collected taxes that will be distributed, or define different percentages for each type of tax. Doing this on a tax-by-tax basis creates incentives for the central government to change rules on certain taxes in a way that reduces transfers to subnationals (specially at times of central government fiscal adjustment). Over the long-run this can create severe distortions in the tax system with repercussions on overall microeconomic efficiency. Brazil, as will be described in more detail below, has been a case where an emergency fiscal adjustment created the need for less revenue sharing with the states, so the federal governments increased those taxes that were not included in the revenue sharing formulas.

The second question has to do with the use of revenue-sharing to correct regional differences. Hypothetically, if a country were to have no regional disparities, it could use a system based only on the derivation criteria (i.e. each state gets a part of the revenue equivalent to its own contribution in collecting that revenue). This is the most efficient way of aligning interest in order to increase collection of national taxes by state authorities. Yet most countries use their revenue-sharing systems to do intergovernmental transfers. Criteria such as income per capital, education and other socio-economic indicators are used in formulae that redirect revenues towards poorer regions. The percentage a state will get from a particular tax varies according to these criteria and will change

over time. The shapes of these rules are decided on the political arena and will not always be the most efficient in economic terms. The Brazilian case has some interesting mechanisms for transferring revenues between levels of governments and across regions.

An important point about intergovernmental transfers is that they should not be exclusively tied to the level of revenues collected by the national government. This would make transfers very procyclical (more transfers when economy is well, less when it is in a recession), and create great volatility in subnational budgets. Long-term grant programs and revenue-sharing arrangements with variable rates help make some of these effects milder.

The system of intergovernmental transfers is an important tool in a context of fiscal adjustment. As discussed above, revenue-sharing mechanisms might have to be circumvented to retain more revenues at the federal level. Also, federal governments will reduce voluntary transfers to subnational governments in order to meet budget surplus objectives. Prior commitments to make regular transfers for social programs might suffer, sometimes requiring subnational governments to increase the share of matching funds. In sum, a fiscal adjustment program will almost certainly leave its mark on the mechanisms of intergovernmental transfers. When looking at fiscal stability and adjustment in the long run, it is important to understand that sustainable fiscal performance in all levels of government needs to be supported by a well-balanced system of intergovernmental transfers.

IV. Control of subnational debt

The control of subnational debt has been a topic of great interest recently and many countries have adopted new practices in this area. This is so because countries (mostly emerging economies) have found that no fiscal adjustment is complete without a new institutional environment for subnational borrowing. Although there is no perfect system for controlling subnational debt there is some consensus about good practices and one can identify three broad types of arrangements that countries mix in search of the ideal formula for their situation. These are: rules-based controls, administrative controls, and reliance on market discipline.

Subnational debt can be controlled by laws (constitutional or other), decrees, ministerial instructions and other formal rules-based mechanisms. Some countries impose limits on absolute levels of debt for states and local governments. Other rules set limits based on debt-service ratios. Finally, rules can be in place to restrict the types of expenditures that may be financed with debt (domestic or foreign).

Administrative controls are also frequently used for managing subnational debt. These controls can be in the form of establishing annual limitations for subnational borrowing. Also, central governments may have the power to review and authorize the borrowing operations of states and municipalities. In certain countries, administrative control is exerted via centralized borrowing combined with on-lending to subnationals. This type of control can also be implemented through the use of federal banks that can lend to subnationals (this is similar to on-lending).

Market based approaches to subnational debt control have been losing force as it is now recognized that sole reliance on market discipline brings more problems than it solves. The failure of a state to meet payments to market investors will force a federal government bailout which will destroy the credibility of the entire market-based system for years. Yet, there are several aspects of market discipline that can be incorporated into debt control mechanisms. First is transparency, with rules that require subnationals to disclose financial information regularly, punctually, accurately and broadly. External auditing of financials must try to contain subnational attempts to circumvent

controls (the same role played in the market by rating agencies, auditors and fixed income analysts). The second valuable feature of market system is that the market is apolitical. Subnational debt control systems implemented by the federal government should aim at being fact-based, impersonal and using homogeneous criteria for analysis, in short being apolitical.

In general there is consensus that rules are better than administrative controls (although both are necessary in any system). Administrative controls (such as annual limits and transaction approvals) are subject to discretionary decisions and may be influenced by short-term political negotiations. Another important point is that rule-based systems must have very clear definitions. It is critical to know precisely what should be accounted for as debt (or net debt), what are revenues (or recurring revenues), how to calculate indices, etc. Finally, one more observation regarding debt control arrangements has to do with the golden rule present in several countries: borrowing allowed only for investment projects. This is a very sound and educative rule (specially for countries with a tradition of weak fiscal controls). Yet this golden rule is not enough because investment projects (funded by debt) must also have a positive economic and social rate return. Some scholars and practitioners have argued that some types of social expenditures (education or health) have a higher rate of return than capital investment projects. Although this might be the case, funding the former with debt might be a dangerous idea in the long run, and government should try to reallocate resources to fund these programs with own budget sources, not third party borrowing.

The vital link that exists between debt control (particularly subnational debt control) and fiscal adjustment is well documented and researched. Here, suffices to say that debt control policies (both emergency, or short term and structural, or long term) are the most important element of an effective, credible and lasting fiscal adjustment process.

This section has looked at some conceptual and theoretical aspects of fiscal federalism and its relationship to fiscal adjustment. Obviously there is no clear recipe for how to organize a federation in terms of fiscal relationships between the levels of government, but over the years there have been important experiences and conclusions about what works best. The four key areas discussed above: expenditure assignment, revenue assignment, intergovernmental transfers, and the control of subnational debt, form the core of any federal economic system. The aim of this summary was to put the Brazilian issues into a more formal context and point out how fiscal adjustment needs to be molded taking into consideration fiscal federalism systems. We will now turn to look at the recent Brazilian experience.

3. REVENUE ASSIGNMENT IN BRAZIL

I. Overview

The degree of fiscal decentralization in Brazil, as measured by subnational governments' participation in total revenues and expenditures, is quite close to that of the more developed federations. In 2002, subnational governments were responsible for 31.3% of the overall tax collected and, considering the federal government legal transfers, 42.2% of the overall disposable revenue. Subnational governments' disposable revenue increased from 8.4% of GDP in 1988 to 15.0% of GDP in 2001.

Tax assignment in Brazil is clearly defined in the Federal Constitution, and the proceeds of most taxes are transferred to subnational governments according to non-discretionary constitutional rules. Taxes are assigned to the three tiers of government that administrate, collect and legislate about them:

- The federal government is responsible for the: Import Tax (II), Export Tax (IE), Income Tax (IR), Tax on Rural Properties (ITR), Tax on Financial Operations (IOF), a VAT on industrialized products (IPI), and a Tax on Great Fortunes (IGF)³.
- The states are responsible for: a VAT on goods and services (ICMS), Tax on Property Transfers (ITCMD) due to inheritance, legacy and donation, and a Tax on Vehicle Property (IPVA).
- Local governments are responsible for: the Urban Property Tax (IPTU), the Tax on Real State Transactions (ITBI) and the Tax on Services (ISS)⁴.

In addition to the 13 taxes listed above, there are nine so-called “social contributions”, five of which are payroll taxes. Seven of them finance social security expenditures, defined as encompassing health, social insurance and social assistance activities. Further, there is a “Contribution for Intervention in the Economic Domain” (CIDE), which is levied on oil and its by-products. All of these “contributions” but one are collected exclusively by the federal government.

The breakdown of the nine “social contributions” is described as follows:

- Five social contribution on the payroll: i) Social Security Contribution - paid both by employers on payroll and employees on wages to finance the state-run social security system of the private sector employees (INSS); ii) FGTS – employee contribution to the individual severance fund; iii) Educational Contribution (Salário Educação) - earmarked to finance basic education; iv) “S System” contributions - earmarked to finance several specific industry social and training programs developed by the private sector; and v) Social Contributions on civil servants and military personnel - paid by civil servants to their employers (federal, state and municipal governments) to finance their own social security system.
- Four other federal social contributions: i) COFINS – Contribution for the financing of social security expenditures (a cascading turnover levy); ii) PIS/PASEP – Contribution to the program of social integration (a cascading turnover levy); iii) CPMF – Contribution on financial transactions (bank debit tax, thus cascading); iv) CSLL – Social contribution on net profits (virtually a CIT surtax). Finally, there is the CIDE – Contribution on oil and derived products (single stage production tax)

Table 1
Brazil's Major Taxes and Social Contributions
2002 Estimate
(Revenue as % of GDP)

³ This tax was never regulated, and, therefore, never collected.

⁴ Except for telecommunications and transport services which are taxed by the state VAT (ICMS).

	Level	Revenue (as % GDP)	% of Total Tax Base
ICMS (State VAT)	State	7.94	22.3
Income Tax	Federal	6.49	18.2
Social Security Contribution (INSS)	Federal	5.65	15.9
COFINS	Federal	3.96	11.1
FGTS - Severance Fund	Federal	1.70	4.8
CPMF	Federal	1.54	4.3
IPI	Federal	1.50	4.2
CSLL	Federal	1.01	2.8
PIS/PASEP	Federal	0.97	2.7
Import Tax	Federal	0.60	1.7
Others		4.26	12.0
TOTAL		35.62	100.0

source: Ministry of Finance and BNDES

There are three major problems related to the Brazilian tax system: i) existence of several cumulative taxes; ii) inefficiencies associated with the existence of a state-level VAT; and iii) dispute between state and local governments for the ICMS and ISS tax base.

II. Cumulative Taxes

Cumulative taxes are those that are levied at each stage of the productive chain with no compensation mechanisms. Taxes on turnover are the best example, because each firm includes the tax burden in the final sale price of its products. Firms buy their inputs from suppliers with taxes, transform these inputs during productive processes and then add more taxes before selling them to clients in the next stage. Products reach final consumers with the cumulative burden of the taxes paid at each stage.

In Brazil Social Contributions over payroll – INSS and FGTS - represents 20.6% of total revenue, or 7.4% of the GDP (Table 1). Cumulative taxes and social contributions – IOF, PIS, COFINS, CPMF - are responsible for approximately 20% of the total tax revenue. The increase of these cumulative taxes and social contribution from 1996 to 2002 represented 44% of the revenue growth in the period, increasing from 4.3% of the GDP to 6.7% in 2002. It is clear that the burden of these taxes and social contributions is excessive, compromising the efficiency of the economy and the competitiveness of Brazilian exports.

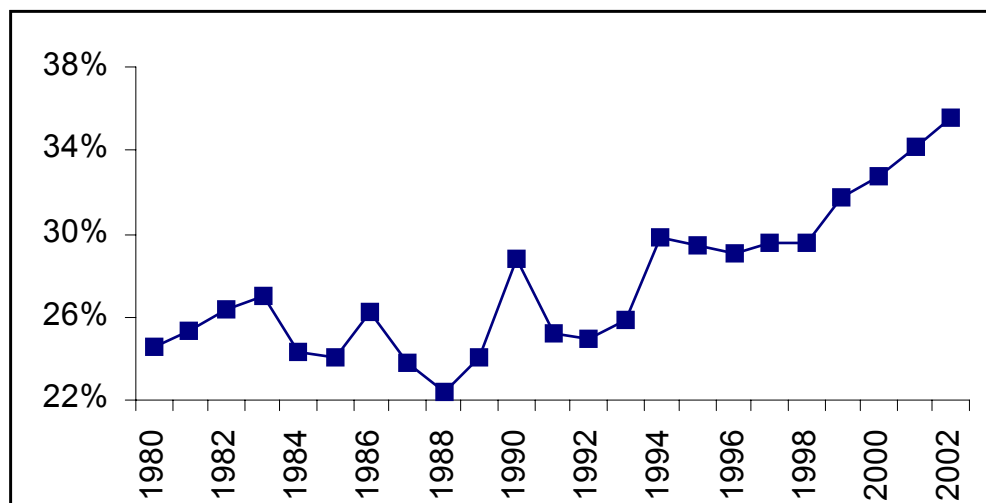
The excessive participation of cumulative taxes and social contributions in the Brazilian tax System has two major explanations: the characteristics of the fiscal adjustment program implemented after 1998, and the incentives to increase federal taxes and social contributions that are not shared with subnational governments⁵.

The fiscal consolidation process initiated in 1998 was heavily based on the revenue side. The fragility of the Brazilian economy in 1997 - fiscal imbalance, current account deficit (approximately 4% of the GDP), and an overvalued currency – in the context of an adverse international scenario

⁵ This second aspect will be discussed in detail in the next section.

after the Asian and Russian crises imposed the need of a front loaded fiscal adjustment program. Given the rigidities found on the expenditure side, it would have been impossible to promote a fiscal shift equivalent to 5% of the GDP in a few years without increasing the tax burden. The primary result of the consolidated public sector in Brazil improved from a deficit of 1.0% of the GDP in 1997 to a surplus of 4.1% of the GDP in 2002 (Table A1, Annex).

Figure 1
Brazil's Tax Burden 1980-2002
(% of GDP)



source: Ministry of Finance and BNDES

The overall tax burden increased from 29.6% of the GDP in 1997 to 35.6% of the GDP in 2002 (Figure 1 and Table A2, Annex). Considering that the deficit of the state run social security system of the private sector employees increased from practically zero to 1.3% of the GDP in the same period, it is clear the importance of the revenue side on the adjustment promoted⁶. In other words, most of the adjustment was based on the public sector's capability of not spending the revenue gain obtained via tax increases. It is important to highlight that given the high degree of earmarking of revenues existing in Brazil this achievement required considerable expenditure compression in the areas not protected by the earmarking. The negative side of the adjustment was that most of the tax revenue growth was associated with an increase in cascading tax and contribution: CPMF, PIS and COFINS increased their participation in the total revenue from 31% in 1997 to 38% in 2002.

There was a clear incentive for the federal government to concentrate the adjustment in those social contributions, as they are not shared with the states and local governments. Just as an example, to achieve the same objective by increasing the income tax the revenue increase would have had to be twice the increase promoted, as the income tax is shared with subnational governments. This goes back to the point made earlier that more revenue sharing makes fiscal adjustment more difficult to implement at the central government level. The Brazilian case shows that when fiscal disequilibria

⁶ The consolidated deficit of the Social Security System (private and public sector employees) reached 5.5% of the GDP in 2002.

must be rapidly corrected, distortive tax policies may need to be adopted even when policy-makers know that the side effects for the economic efficiency are negative.

III. The State VAT (ICMS) and “Fiscal War”

The quality of the tax system in Brazil is also affected by the distortions in the state VAT, the ICMS. This tax is administrated and collected differently in each one of the 27 Brazilian states. With annual revenues equivalent to 8% of the GDP, the ICMS is the most important tax in Brazil. There are three major problems associated with it: complexity, tax evasion and fiscal wars.

Although there is a federal law regulating the general guidelines for the ICMS, each state has considerable autonomy to legislate about this tax. In practical terms, there are 27 different set of laws regulating the ICMS. For businesses that operate across states, this increases the compliance costs and creates tax-avoidance opportunities. The complexity of this tax is clearly a negative aspect for foreign companies willing to invest in Brazil.

The inherently complex nature of any VAT allied with the multiplicity of state laws and decrees regulating the ICMS in Brazil create several opportunities for tax evasion. Considering that sizable economic sectors are taxed by the ICMS – notably oil and its by-products, tobacco, and beverages – the impact of evasion on overall revenue collection is thought to be considerable, although there are no reliable estimates about the magnitude of this problem.

The existence of autonomous state legislation brings practical problems for both taxpayers and state governments. The first and more evident problem is that VAT rates for the same product vary significantly across the country. There is not a precise figure about the number of rates applied today, but estimates indicate that this number is over 40.

As the ICMS is a VAT, the rules for assessing the tax credit are a key issue for the computation of the effective tax burden. Therefore, the multiplicity of rules across the states increases even more the complexity and distortions regarding the ICMS. One exemplary case is the treatment for imported goods, especially capital goods. According to the ICMS federal legislation, companies should credit the costs of purchased capital goods in 48 months. Nevertheless, several states – especially those that do not have a capital good industry – allow companies to register the credit related to the imported capital goods immediately. This practice became even more troublesome because frequently this incentive is granted to a single company. In other words, in several states it is not a general rule, but an incentive to individual companies. This non-transparent practice has negative impacts on the allocation of productive resources and jeopardizes fair competition among companies.

Few federative countries have opted for a state VAT. Generally this type of tax is more appropriately assigned to central level of government or used in unitary countries. At least four reasons justify this empirical evidence: a) administrative capabilities to operate the tax; b) need to make the VAT neutral with respect to spatial allocation of production and consumption (destination principle); c) revenue from VAT on imports; d) burden of VAT refunds on exports.

The major difficulty associated to the state VAT is the treatment of interstate transactions. There are two key issues: where the tax should be collected (at the state of origin or destination) and to whom belongs the revenue (to the state of origin or destination). To deal with both problems Brazil opted for an intermediate solution, the tax revenue is shared among the states and both the state of origin and that of destination collect the respective tax. In Brazil there are two interstate rates set by the Federal Senate. For transactions originating in the states of the South and Southwest Regions

(richer), the interstate rate is 7%⁷. For transactions originating in the others Regions (North, Northwest and Central-East) the interstate rate is 12%⁸. In other words, the existing system is closer to the origin principle when the operation starts in the poorer states and tends to the destinations principle when it starts in the richer states. This is a transfer mechanism implemented via the tax system.

This advantageous difference in rates has been the main mechanism used by the poorest states to engage in what is called “a fiscal wars”. This has become one of the most serious federative problems nowadays in Brazil. Although illegal⁹, it has become a widespread practice for states to attract companies offering reductions in the interstate ICMS rate. From the offering states’ point of view the logic is quite clear: any rate varying from 0 to 12% will be an advantage for the state if this incentive results in a new investment at the state. Explaining better: in one interstate operation from the North to the South, for example, the state of origin should levy 12% (paid directly to state of origin). The state of destination should absorb the credit of the tax paid and collect the tax when the product is sold to the final consumer using the local rate (usually 17%). Therefore, to attract industries states are offering reductions in the interstate rate.

This widespread practice in Brazil has been a source of several problems. From the fiscal point of view, it not only reduces the overall tax revenue, but also reduces the states’ primary surplus¹⁰. As these incentives are not transparent – sometimes the act that granted the benefit is not even public – it is very difficult to evaluate this tax expenditure. Finally, it distorts the allocation of resources in the economy and stimulates unfair competition. From the investors point of view it also introduces one considerable degree of uncertainty, as it is always possible that one competitor could be granted an even bigger tax incentive, in the same state or in another state.

It is important to emphasize that fiscal war distortions become even bigger when the incentive is granted to a company already installed in another state (as compared to a case where incentives are granted for new investments). When an existing firm moves to another state because of a tax incentive, the reduction on tax revenues and on the primary result is not marginal, but absolute. Further, the jobs created in the state that granted the incentive is offset by the unemployment created in the other state. There is not a precise estimate of the impact of the fiscal war among the states in Brazil. What is known for sure is that these practices are reducing substantially the tax revenue, therefore worsening the fiscal stance in Brazil.

Fiscal competition is also a problem when considered the relationship between the lower levels of government. The most important tax collected by the municipalities is the Tax on Services (ISS), which is particularly relevant for the largest cities. Given that the state VAT is also charged on telecommunication and transportation services, there is a dispute between states and local governments over the right to tax some of these services. One typical example is Internet

⁷ For transactions within the states of these two Regions the interstate rate is 12%.

⁸ Although the state of Espírito Santo belongs to the Southwest Regions, it has the same treatment of the poorest states.

⁹ According to the Federal Constitution, each tax incentive related to the ICMS should be unanimously approved by a Council composed by the Secretaries of Finance of the 27 states. Nevertheless states are not respecting this obligation and the Judiciary System has been extremely slow to judge complaints.

¹⁰ As will be discussed in section 5, the states’ primary surplus is basically defined by the debt refinancing agreement with the Federal Government. According to these agreements, states have to pay a fixed percentage of their net revenue to the National Treasury (usually 13%). Therefore, if the revenue is been reduced because of the fiscal incentives, the primary surplus will be reduced in an amount equivalent to 13% of the incentive granted.

connection services: both states and local governments want to collect taxes on this services. The result is that the tax is not being paid. Because there is a legal dispute among states and municipalities, companies are opting to make judicial deposits or simply not pay. Again, the result is a reduction of the tax revenue.

Both the tax war among the states and dispute between subnational governments are examples of the Brazilian's tax systems distortions that hinder the fiscal adjustment, distort competition and increase the tax administrative costs, for both the public and private sectors. This section has shown some of the peculiarities of the Brazilian tax system. Its recent evolution and current problems owe much to the fiscal adjustment started in 1998. The correction of some of the distortions described here will have to take into account the need to consolidate and deepen the fiscal adjustment process in the coming years. Performing a tax reform without understanding how the system came to have its current structure is unadvisable since it could result in a new tax system that is incompatible with long term fiscal discipline at the three levels of government.

4. INTERGOVERNAMENTAL TRANSFERS

I. Overview

The Brazilian system of intergovernmental transfers has its roots in the tax reform of 1967, which led to greater centralization of revenue assignment and therefore required the development of transfer mechanisms to subnational governments. Yet, the 1988 Constitution implemented some important changes to the system, increasing transfers, especially those aimed at reducing regional disparities. This section will briefly describe the current system of intergovernmental transfers in Brazil. In order to make the explanation easier to follow it will be based on a model developed by Sergio Prado for his study of the Brazilian transfer system published in 2003. We will also use some data from Prado (based on actual transfer data from the year 2000) to see some of the effects of the transfer system on the allocation of revenues in the Brazilian federation.

The analytical model takes as its unit of analysis the states. It starts from revenues directly collected by the states and takes us through all the transfers (in and out of states) until arriving at the actual revenues available for spending by the states. There are five broad types of transfers as summarized in Table 2.

The first two types of transfers (devolution and compensation) have no horizontal redistributive effects (i.e. no intention of equalizing revenues of richer and poorer states). These transfers serve just to rebalance a centralized collection system where higher levels of government (national or state) collect taxes 'on behalf' of lower levels (states or municipalities). Thus tax devolutions and tax compensations are made strictly following each subnational's tax base and reflect the spatial allocation of tax sources (industry, income, exports, etc) across the country. This is also known as derivation principle. These transfers are the means for the federal government to give back to the states the federal taxes collected (devolution), or that could have been collected (compensation)¹¹ in each jurisdiction. The third type of transfers are the intra-state redistributions. These are resources that are reallocated among local governments *within* a state, following criteria other than tax

¹¹ Compensation is given to states to reimburse them for tax exemptions given by federal laws and that have a serious fiscal impact on states budgets.

collection capacity (or direct contribution to revenues actually collected). Because our unit of analysis is the state, and these transfers occur *within* each state and with no resources from outside, we consider these transfers also as horizontally neutral. If the system were to have only these three types of transfers, richer states would have a level of disposable revenue that would be much higher than poorer states (in exactly the same proportion as the difference in tax bases or taxing ability).

But the transfer system also includes important redistributive transfers. These are resources that one state gives to another state (usually using the federal government as an intermediary). A slice of the revenues collected from richer states' tax bases are sent to the federal government, which transfers it to poorer states with smaller tax bases. This is aimed at reducing regional differences in spending capacity and over the long-run reducing income disparities among states. In Brazil, most of these transfers are legally mandated and represent a very large reallocation of resources. In addition to the regular transfers, the central government also has the ability to do voluntary (or discretionary) transfers that fluctuate according to the yearly budget. When one looks at the long-term financial capacity of the states, this last type of transfers should not be included in the calculations.

Table 2 Analytical Model for the Brazilian Transfer System	
I. States' Tax Collection	
+ Tax Devolution	1. Education Salary (Salário Educação) 2. Tax on Financial Transactions – Gold 3. Rural Property Tax 4. VAT Devolution (75% of 25% of ICMS)
+ Tax Compensation	5. 75% of Export Tax (exempted) 6. 75% of VAT on Exports (exempted)
= II. States' Own Revenues	
+ Intra-State Redistributive Transfers (from states to municipalities)	7. Intra-State FUNDEF (Education Fund) 8. Co-participation System for Municipalities 25% of 25% of ICMS 25% of Export Tax (exempted) 25% of VAT on Exports (exempted)
= III. Available Revenues by Economic Performance	Reflect each State's tax generation capacity
+ Inter-State Redistributive Transfers	9. Unified Health System (SUS) 10. National FUNDEF – Education Fund 11. State and Municipal Participation Funds (FPE and FPM)
= IV. Long Term Available Revenues	
+ Voluntary Transfers	12. Voluntary Transfers (described in the yearly federal and state budgets)
= V. Total Available Revenues	

II. Description of the Brazilian Transfer System

Out of the twelve sources of transfers presented in Table 2, there are three that are most important for the federal fiscal equation.

Compensation of VAT on Exports – Because the VAT (ICMS) is the most important state tax, when Brazil decided to exempt exports from VAT, the federal government had to establish a mechanism to compensate states so that their budgets would not suffer severe imbalances. From the VAT on Exports Fund, states receive 75% and municipalities receive 25%. The funds transfers to each state are related to (although not 100% based on) the export capacity of each state.

FUNDEF (Education Fund) – part of the state VAT revenues (ICMS) must be directed towards the FUNDEF, whose objective is to invest in basic education and teachers training. Each state must send some funds to the federal government. These funds come back to the municipalities (which are responsible for basic education expenditures). So some of these transfers are horizontally neutral (the part that come back to the states where revenues were generated) and some have a redistributive characteristic because the cities that receive the money are in states different from where the FUNDEF money (ICMS) was generated.

State and Municipal Participation Funds (FPE and FPM) – These funds are the most important source of horizontal transfers. They are constitutionally mandated and their calculation takes into account regional disparities in income per capita, demographic patterns and political agreements made at the time of their establishment. The source of the money is the centrally collected Income Tax (IR) and Industrial Production Tax (IPI). The percentage of the IR and IPI sent to states and municipalities has changed since the funds were set up in 1967. Today, the FPM receives 22.5% of IR and IPI while the FPE receives 21.5%. Because so much of the IR and IPI are directed to states and cities, during Brazil's recent fiscal adjustment the central government focused its tax increases on other taxes. This reduced the revenue-sharing increasing centralization of revenues. Although this was seen by subnationals as an 'unfair' measure, it was necessary to minimize the macro effect of the tax increases needed for the fiscal adjustment. It is estimated that if part of federal tax revenues had gone to the FPE and FPM, taxes would have had to rise by twice as much in order to produce the same effect in terms of primary result.

III. Results of the Brazilian Transfer System

In his study of the Brazilian transfer system, Sergio Prado presented very interesting data showing how revenues are reallocated among geographic regions and to municipalities. The two sets of data in Table 3 and Figure 2 show the most important practical results of the existing transfer system.

Table 3 demonstrates how resources are transferred basically from the Southeast Region to the other regions of Brazil. The indicator used is the *relative average revenue per capita* of each region for the year 2000. To calculate this indicator, first the revenues available at each stage of the transfer process (I through V in Table 2) are divided by that region's population. This number (*average revenue per capita* in Reais) is then compared to the national average so as to highlight the relative differences among regions. So, for example, states in the Southeast have an autonomous tax collection per capital (item I) that is 140% of the national average for autonomous tax collection per capital. In contrast, the states in the Northeast enter the system with only 47% of the national average for autonomous tax collection per capital. As transfers are successively made following the rules of the transfer system, the Southeast and South lose revenue per capita and the other regions gain. At the end of the process (stage V), a lot of regional equalization has occurred and the difference in total available revenues is much smaller among regions. The South and Center-West are almost neutral to the transfer system showing not much difference between revenues collected

autonomously and revenues available at the end. The North and Northeast are large net receivers of resources, improving their position vis-à-vis the national average. The Southeast is the main provider of revenues to the poorer regions. Although the Northeast starts with the lowest revenue base, it is the North that receives the largest relative benefit from the transfer system, improving its position by 52.5%.

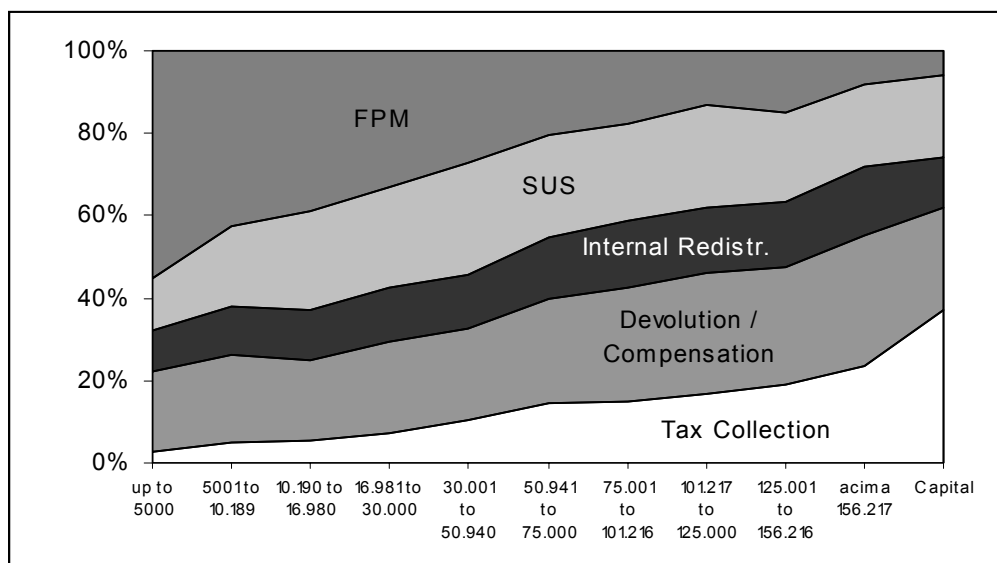
Table 3
Relative average revenue per capita (2000)

Region	I. Autonomous Tax Collection	II. Own Revenues	III. Available Revenues by Economic Performance	IV. Long-Term Available Revenues	V. Total Available Revenues	Gains/ (Losses)
BRAZIL	100	100	100	100	100	
North	57,3	62,7	63,6	107,9	109,8	52,5
Northeast	47,5	47,3	46,5	68,6	71,1	23,6
Southeast	140,2	137,5	138,3	118,5	116,8	-23,5
South	103,9	107,9	107,2	99,2	97,7	-6,2
Center-West	104,1	107,0	107,7	107,2	108,4	4,3

Source: Prado, page 90

An important effect shown by the data is that the key horizontal transfers between regions occur from stage III to stage IV. Referring to Table 2 we can see that this is where the State and Municipal Participation Funds (FPE and FPM) come in. They are the most important revenues equalization mechanisms available in Brazil.

Figure 2
Composition of Municipal Sources of Revenues
(% of Total Available Revenues)



Source: Prado, page 106

The second analysis performed by Sergio Prado using data from Brazil is shown in Figure 2. This focuses on the sources of financing for municipalities depending of their size (by population). The Brazilian transfer system sends (via the FPM) a large quantity of resources to small municipalities. These transfers make up the bulk of their revenues overshadowing other sources such as own tax

collection. Devolution and internal redistributions are equally important as sources of revenues to towns of all sizes, making up a combined 40% of revenues. While in small towns the FPM is responsible for providing over 50% of the municipal available revenues, in capital cities this number is around 6%. Understanding the importance of the FPM to small municipalities is key for defining how these subnational entities can uphold sustainable fiscal policies for the long term.

These two sets of data show the results and the importance of the Brazilian transfer system. The link between a federalist transfer system and fiscal adjustment becomes clear once we quantify the relevance of the transfer mechanisms to the finances of subnational entities. The Brazilian case demonstrates that a well-designed and stable transfer system is critical for states to implement their own fiscal adjustments. States (and municipalities) need to know how much available revenue they will have in the foreseeable future so they can determine how much to spend, and how to implement fiscal adjustment.

5. CONTROL OF SUBNATIONAL GOVERNMENTS DEBT

I. Antecedents

The fiscal consolidation process initiated in the late nineties in Brazil has as one of its pillars a significant change in the control of subnational governments' debt. This control is based on two major instruments: the debt rescheduling agreements between subnationals and the federal government (signed between 1997 and May 2000) and the Fiscal Responsibility Law, enacted in May 2000. These two instruments promoted a significant change in intergovernmental fiscal relations in Brazil, eliminating a long tradition of federal bailouts of state and local governments and imposing fiscal discipline to the lower levels of government.

Since the late eighties the federal government was forced to bailout state and local governments several times, specially the biggest states and municipalities that concentrated most of the subnational debt. The indebtedness problem of subnational governments in Brazil stemmed from a combination of very permissive rules for rolling over their debts and the lack of market discipline for limiting the debt. Although the Federal Senate has a constitutional responsibility to regulate subnational governments debt, the experience up to the late nineties has demonstrated that the instruments used were based on strict rules for controlling the new borrowing but being very flexible on the rollover rules. In the context of high real interest rates – notably during the nineties – this policy was inefficient for avoiding the debt growth.

The flexibility for rolling over their debts and the support of the federal government allowed states and local government to capitalize the debt service and to avoid the political cost of the necessary fiscal adjustment required to stabilize it. The federal support was offered in the form of bailouts – absorbing the subnational debt and refinancing it - or exchanging state bonds for federal bonds in local markets. It is important to mention that most of the state bonds were held by state banks, which used to buy them in the secondary market. These banks knew that they could count with the Central Bank support if they had problems to finance their positions. These recurrent practices created the (correct) perception that subnational governments would always be guaranteed by the federal government or the Central Bank, reducing therefore the perception of risk and the effectiveness of market discipline for regulating subnational debt in Brazil¹².

¹² For a more comprehensive view of the debt control mechanism in Brazil see Goldfajn and Guardia (2003).

II. The New Institutional Framework

The deterioration in the international scenario that followed the Asian and Russian Crises and the widespread perception of the Brazilian macroeconomic vulnerability imposed the need of a significant fiscal consolidation process. Given the fiscal effort required to change the risk perception associated with the Brazilian economy, the federal government would not have been able to promote the adjustment required without the subnational governments' participation. In this context, the federal government initiated the debt-rescheduling program with the states.

The strategy adopted can be described as a top-down approach¹³. The federal government offered attractive (uniform) conditions for rescheduling the subnational debts and imposed a fiscal adjustment program to each state. These programs are monitored and revised annually by the National Treasury, which specifies six annual targets: i) total revenue; ii) primary surplus; iii) personnel expenditures; iv) investments; v) privatization; and vi) administrative reform.

Practically all states – 25 out of 27 – signed the rescheduling agreement with the federal government between December 1997 and May 2000¹⁴. According to this agreement the federal government assumed the state debts, including the state bonds held by the state banks, and refinanced it in 30 years with fixed real interest rates (6% per annum)¹⁵. States are committed to a monthly payment up to an amount equivalent to 13% of the state Net Revenue. If the amount due exceed this limit, the difference is capitalized to the debt stock.

One important feature of the debts negotiation agreement is that the states and municipalities were obliged to give their own revenue and the federal legal transfers as guarantee. In other words, in case of default, the National Treasury is authorized to withhold the legal transfer or confiscate the state own bank account up to the amount due. This mechanism has proved to be very efficient: since 1997 there is no installment unpaid.¹⁶

This program imposed a significant fiscal cost to the federal government, as the National Treasury was obliged to issue bonds to redeem the subnationals' debt. The fiscal cost was equivalent to the interest rate differential between the National Treasury cost of financing (market rates) and the (subsidized) interest paid by the states. According to federal government estimates this cost reached US\$ 22 billion by July 2001¹⁷.

Two important aspects of this program require emphasis. One is that for the first time in the relationship between federal and state governments, the bailout was followed by an explicit obligation for the states to commit themselves to an agreed-upon fiscal adjustment program, including a declining path for the state debt. The fiscal program, approved by the Senate on a case-by-case basis, also sets targets for revenue and expenditures, and determines the use of privatization proceeds to retire public debt.

The Fiscal Responsibility Law was the second pillar of the new institutional framework for improving fiscal coordination and controlling subnationals' debt. The law sets a general framework

¹³ See Kopits, 2001.

¹⁴ After Fiscal Responsibility Law enactment, in May 2000, new refinancing packages are forbidden.

¹⁵ The debts are indexed to a wholesale price index, the IGP.

¹⁶ Section 4 explains the transfer mechanisms and the importance for states of federal transfers such as the FPE, VAT on Exports, etc. It is important to highlight that not only transfers but also states' own revenues (ICMS) are subject to confiscation by the National Treasury.

¹⁷ See Goldfajn and Guardia (2003).

for budgetary planning, execution, and reporting for the three levels of government¹⁸. The law calls for sustaining the structural adjustment of public finances and constraining public indebtedness. It comprises three types of fiscal rules: general targets and limits for selected fiscal indicators; corrective institutional mechanisms in case of noncompliance; and institutional sanctions for noncompliance¹⁹. The Fiscal Responsibility Law promoted several important changes in the Brazilian fiscal regime, but certainly the most important innovation was the prohibition of the federal government from financing state and local governments²⁰.

The combination of a top-down fiscal program for the subnational governments and the legal prohibition of future bailouts, enforced by the Fiscal Responsibility Law, forced the states and local governments into a fiscal consolidation program. It is important to mention that the strategy adopted in Brazil for imposing fiscal discipline at the subnational level can be divided in two stages. First the federal government dealt with the subnational governments imbalance by rescheduling their debts, creating therefore the conditions for a sustainable fiscal adjustment program. In the second stage, the Fiscal Responsibility Law imposed several prudential rules and transparency requirements. The basic idea is that it would not be sufficient to impose fiscal rules if they were not feasible and credible. In other words, the debt burden existing in the mid nineties was so excessive that it would not have been possible to promote the adjustment and impose sound rules for the future without the federal government support in the first place. The maintenance of this successful strategy in the future lies in one fundamental aspect already mentioned: the prohibition of future bailouts.

The Fiscal Responsibility Law's explicit prohibition on the federal government from financing state and local governments means that the existing fiscal programs - and therefore the commitment of 13% of the net revenue for the debt repayment - cannot be changed. This is the key element in the new fiscal federalism framework in Brazil. As long it is preserved, states and local governments finances will be balanced.

Tables A1 to A5 in the Annex provide a interesting view of the results obtained so far. From 1998 to 2002 the primary result of the states went from a deficit equivalent to 0.4% of the GDP to a surplus of 0.7% of the GDP (Table A1, Annex). In the same period, the disposable revenue (after transfers from the federal government and to the local governments) increased from 7.4% of the GDP to 9.1% of the GDP (Table A2, Annex). Considering that almost 40% of the revenue is earmarked (25% to education²¹ and 12% to health), it is clear that the adjustment was also based on the expenditure side. This is certainly one important feature of the adjustment promoted.

From the year 2000 to 2002 18 states improved their primary surplus, 8 went from deficit to surplus in the period and only 3 states presented primary deficit in 2002 (Table A3, Annex). Considering the same period, 18 states improved the personal/revenue ratio, and only 3 states are above the limit fixed at Fiscal Responsibility Law (Table A4, Annex)²². The debt ratio also improved: 16 out of 27

¹⁸ Because the Fiscal Responsibility Law is a complementary law (as opposed to a regular law) its modification requires a qualified majority (60%) of Congress.

¹⁹ IMF, 2001.

²⁰ For a comprehensive description of the Brazilian Fiscal Responsibility Law see IMF (2001).

²¹ In some states the earmarking to education is 30% of the tax revenue.

²² Fiscal Responsibility Law sets a personal/revenue ratio for each level of government. For the states, the personal expenditure - considering the Executive, Legislative and Judiciary branch - should be lower than 60% of the state Net Current Revenue. There is also a specific limit for each branch: 49% for the Executive, 6% for the Judiciary, 3% for the Legislative and 2% for the *Ministério Público* (Public Defendants). The law also defines a prudential limit, equivalent to 95% of each legal

states reduced their debt ratio from 2000 to 2002, and only seven states are above the limit set at Fiscal Responsibility Law²³.

III. Lessons from the Recent Experience

After almost seven years of implementation of the debt rescheduling agreement and almost four years of Fiscal Responsibility Law enforcement, it is possible to draw a few lessons about the recent experience.

First, the data is clear in demonstrating the effectiveness of the strategy adopted to enforce fiscal discipline at the subnational level and to contribute to the required fiscal adjustment in Brazil. Therefore, from the macroeconomic perspective, the strategy was extremely successful.

Notwithstanding the important achievements in the macro perspective, from the micro point of view there are some states facing a considerable degree of fiscal repression. The best examples are the states of Minas Gerais, Rio de Janeiro and Rio Grande do Sul (some of the most important states in Brazil). Although those states are paying their debts, they have virtually zero investment. The main problem is that their commitment with personnel expenditure is too high.

The persistent excessive burden of payroll expenditures in several states is associated with two major problems: the social security imbalance and the legal restrictions for a more effective personnel management policy (human resources).

The Social Security Reform approved in the National Congress in late 2003 was an important step towards the consolidation of the fiscal adjustment in Brazil. Although the deficit will continue to exist, the reform will avoid a further deterioration of the present situation. The biggest challenge today is to promote an Administrative Reform that could allow for more flexibility in the personnel management policy. The critical point is that according to the existing rules, it is practically impossible to reduce the number of civil servants. In this context, the only alternative for the public managers to reduce this expenditure line is by reducing real wages. This alternative is very limited in a context of low inflation²⁴ and also has negative reflexes on civil servants' productivity, morale, professional development and recruitment.

The issue here is that the sustainability of the existing institutional framework for controlling subnational governments debt and for imposing fiscal discipline requires the assessment of this problems to minimize the negative impact of the current fiscal tension. The priority now should be the creation of conditions for states to provide the necessary public investments, notably in infrastructure and public security (as education and health are protected by the earmarking). The risk is that the states' incapacity to invest could result in pressures for revising the existing programs with the National Treasury, aiming at reducing the debt payment to increase the (necessary) investments. As a matter of fact, the real trade-off is not between fiscal discipline and investments, but between the latter and excessive personnel expenditures and revenue earmarking. Therefore, administrative reform and a deep revision of the earmarking mechanisms should be seen as one of the most urgent challenges to consolidate the program initiated in 1998. These two measures will ensure that the two pillars of fiscal adjustment (subnationals' fiscal programs and the

limit. If the state exceed the prudential limit legal prohibition comes in preventing any salary increase or civil servant hiring.

²³ In 2001, a debt limit equivalent to two times the state Net Current Revenue was set. States that were above this ratio were given a 15 year period to adjust to the limit. Each year, the states have to reduce 1/15 of the difference.

²⁴ The Consumer Price Index in 2003 will be near 9%, and the expectation for 2004 is 6,5%.

Fiscal Responsibility Law) are not blamed for the shortage in investments and put under political pressure.

Last but not least, the recent experience has demonstrated that the escape clauses are a crucial feature of a well design fiscal rule. In 2002 the Brazilian economy was submitted to a strong confidence crises due to the uncertainty of the political transition. The result was a 53% nominal devaluation of the national currency (the Real) with impact on inflation, specially the wholesale price index (IGP), which is the index of the subnational refinanced debt. Therefore, despite the maintenance of fiscal discipline, the subnational debt has grown in 2002 because of the hike in the wholesale price index. From 2001 to 2002, the states net debt / net revenue ratio has increase from 1.73 to 1.93 (Table A5, Annex).

As can be seen in Table A5, by December 2002 seven states had exceeded the debt limit set by the Fiscal Responsibility Law, which is two times the Net Current Revenue. According to the law, the general rule is that when such a breach occurs, states should increase the primary surplus to return to the limit in three quarters. Let's take the State of São Paulo (SP) as an example. By December 2002 São Paulo's debt ratio was 2.24. Therefore, according to the rule, the state should reduce the debt in an amount equivalent to 0.24 the Net Current Revenue. The problem is that the adjustment required was almost equivalent to the annual amount of the active civil servant personnel expenditure. Of course this is not a feasible adjustment, so it would have no credibility. To avoid this kind of problem the law provides a special treatment in cases of macroeconomic disturbance (recession, inflation and interest rate hike, and excessive currency depreciation), increasing the adjustment period up to more four quarters²⁵. If this is not sufficient, the limits could be revised by the Senate based on a proposition of the President of the Republic. The escape clauses have proven to be an essential feature of the Fiscal Responsibility Law. Without it the Law would have come under severe pressure during 2003. Either it would have had to be changed to adjust to the economic reality of the year 2002, or it would have lost considerable credibility because its disciplinary mechanisms would not have been implemented on subnational governments because the adjustments needed were unfeasible.

6. CONCLUDING REMARKS

Brazil's recent experience in fiscal consolidation has demonstrated that fiscal performance is strongly affected by institutional aspects. i.e. the way in which laws, rules, contracts and government bodies in different levels work and interact. The purpose of this paper was to discuss the institutional characteristics of fiscal federalism in Brazil, the recent changes and the impact on the fiscal outcome of subnational governments. Three aspects were emphasized: revenue assignment, intergovernmental transfers mechanisms and control of subnational debt, which are the defining elements in the relationship between the different levels of governments in any country. In each one of these areas, we found strong evidence to affirm that the characteristics of the federalist system in Brazil have been a key element in the choice of the policies used to promote the fiscal adjustment and in explaining its result.

The characteristics of revenue assignment and transfers mechanisms in Brazil created incentives for the federal government to use distortive tax and contributions to promote the required fiscal adjustment. Authorities in Brazil faced a clear trade-off between fiscal performance and economic efficiency. The need for an urgent fiscal adjustment in the late nineties, in a context of extreme budget rigidity, lead authorities to increase the tax burden to achieve the fiscal objectives. Since practically all relevant federal taxes are shared with subnational governments, there was a strong

²⁵ In 2003 the Senate approved one Resolution increasing the adjustment period in more four quarters. Therefore, states will have to return to the limits up to April 2005.

incentive for increasing (cumulative) social contributions that are not shared. On one hand, the strategy was successful in promoting the required fiscal adjustment. On the other hand, the burden of cumulative taxes has increased a lot, affecting the competitiveness of Brazilian exports. The cost benefit has certainly paid off, as a sound fiscal stance is a necessary condition for preserving macroeconomic stability and therefore achieving sustainable growth

A top-down fiscal adjustment based on the debt rescheduling agreement with the National Treasury and the enactment of the Fiscal Responsibility Law was the strategy adopted for controlling subnational governments' debt and for imposing fiscal discipline on states and municipalities. The core elements of the Brazilian strategy have been the refinancing of the subnational governments' debt by the federal government, combined with the imposition of a credible fiscal adjustment program (based on clear and consistent rules and targets) and the legal prohibition for future bailouts. The contribution of states and local governments to the fiscal adjustment was decisive to the overall results of the adjustment process and will certainly continue to be indispensable for its maintenance.

Brazil is still consolidating its credibility (internally and externally), so it must continue to strengthen its institutional arrangements. The changing fiscal federalist system in Brazil will continue to play a central role in preserving fiscal discipline at the subnational level in the future. The greatest challenges will be the continued enforcement of the Fiscal Responsibility Law and of the subnationals' debt agreement with the National Treasury. The preservation of this relatively new institutional framework will strongly depend on the country's ability to create conditions for the subnationals (especially states) to reduce budget rigidity and increase public sector investment. To achieve this goal it will be imperative that Brazil addresses two sensitive issues: reducing the burden of personnel expenditures and the excessive revenue earmarking.

The Brazilian experience has also shown that the use of escape clauses and legal exceptions (when well used), help to preserve laws and institutions. If a fiscal rule is excessively strict and offers no 'way out' in case of extreme situations (which must be specified in the design of the rule) it may lose credibility and be discarded as useful tool to improve fiscal performance. The importance of escape clauses is even more critical for emerging economies still facing credibility problems and consolidating macroeconomic adjustments, as these economies are more susceptible to economic fluctuations.

A well implemented fiscal adjustment program and a reliable system of fiscal federalism are two inextricably linked ingredients in the achievement of long term macroeconomic stability. Large federations should look at their fiscal federalist system of rules and mechanisms as a central piece of their overall economic architecture. Particularly during times of fiscal adjustment (but also during more stable periods) the fiscal federalist system is simultaneously an important tool for policy makers and a focus of vulnerability if not given the deserved attention. Brazil's successful fiscal adjustment owes much to way in which, on one hand, adjustment measures have been adopted in accordance to the existing fiscal federalist system and, on the other hand, changes to the federalist system have been done keeping in mind the macroeconomic fiscal adjustment objectives.

Annex

Table A1
Primary Result – Consolidated Public Sector
(as % of GDP)

	1997	1998	1999	2000	2001	2002
Federal Government	-0,3	0,6	2,4	1,9	1,9	2,5
Subnational Governments	-0,7	-0,2	0,3	0,5	0,9	0,9
- States		-0,4	0,2	0,4	0,6	0,7
- Municipalities		0,2	0,1	0,1	0,3	0,2
Public Enterprises	-0,1	-0,3	0,6	1,0	0,9	0,7
TOTAL	-1,1	0,0	3,2	3,5	3,7	4,1

Source: Central Bank of Brazil
 (+) surplus (-) deficit

Table A2
Tax Revenues
(as % of GDP)

Tax Revenues Available after Transfers				
Government				
	Total Tax Burden	Federal	State	Local
1992	25.0 %	15.0 %	6.8 %	3.2 %
1993	25.8 %	16.1 %	6.5 %	3.1 %
1994	29.8 %	19.0 %	7.4 %	3.4 %
1995	29.4 %	18.1 %	7.6 %	3.6 %
1996	29.1 %	17.9 %	7.6 %	3.6 %
1997	29.6 %	18.6 %	7.4 %	3.6 %
1998	29.6 %	18.6 %	7.2 %	3.7 %
1999	31.7 %	20.0 %	7.6 %	4.1 %
2000	32.7 %	20.5 %	8.0 %	4.2 %
2001	34.1 %	21.3 %	8.4 %	4.4 %
2002	35.6 %	20.6 %	9.1 %	5.9 %

source: Ministry of Finance and BNDES

Table A3
Primary and Nominal Fiscal Results of the States
(in thousands of Reais)

State	Primary Result				Nominal Results		
	2000	2001	2002		2000	2001	2002
AC	(12.816)	158.116	87.380	♦	93.306	(35.018)	63.636
AL	103.170	899.476	146.813		n.d.	174.591	800.390
AM	495.487	(216.407)	305.788		318.000	(230.000)	(46.000)
AP	83.863	130.278	205.050		n.d.	4.634	(39.614)
BA	76.064	170.920	642.037		880.993	1.115.111	2.397.589
CE	21.392	328.184	433.684		n.d.	(324.000)	(331.000)
DF	108.252	219.461	137.524		24.702	46.680	424.356
ES	(29.776)	637.159	626.955	♦	n.d.	10.709	675.265
GO	(44.906)	372.907	532.442	♦	n.d.	772.594	1.910.480
MA	271.324	(77.911)	57.316		n.d.	663.787	982.774
MG	(315.347)	270.555	448.875	♦	13.669	2.288.780	(874.341)
MS	(72.073)	207.907	380.389	♦	n.d.	230.100	920.718
MT	29.726	360.482	408.808		n.d.	432.868	2.423.826
PA	114.210	123.847	134.631		41.301	60.365	424.369
PB	253.512	(23.364)	259.975		125.834	(29.100)	453.859
PE	(486.581)	(442.781)	(227.494)		24.387	194.731	734.395
PI	(138.102)	(160.087)	259.079	♦	99.375	148.520	177.803
PR	2.520.608	643.313	778.572		(610.250)	943.325	3.352.383
RJ	1.096.659	721.296	255.808		n.d.	1.970.975	4.990.012
RN	71.227	138	59.579		122.519	13.416	327.867
RO	167.581	86.724	49.490		(39.571)	15.485	(177.520)
RR	(61.909)	596.265	926.042	♦	n.d.	31.525	(139.853)
RS	455.044	(294.643)	(64.528)		2.465.395	2.813.778	4.961.712
SC	(17.289)	720.275	(151.848)		306.550	(28.739)	2.560.272
SE	(28.671)	(56.224)	150.311	♦	45.448	22.437	128.670
SP	1.606.756	2.556.917	3.011.269		n.d.	8.040.708	19.184.823
TO	140.916	161.139	85.645		(46.776)	(74.998)	223.824
Total	6.408.321	8.093.942	9.939.592		3.864.882	19.273.264	46.510.695
Total/GDP	0,58%	0,67%	0,75%		0,35%	1,61%	3,52%

Table A4
Net Personnel Expenses – Executive Branch State Level (in thousands of Reais) – includes active and retired civil servants)

State	Net Personell Expenses - Executive			Net Recurring Revenues			Personell / Revenues (%)			
	2000	2001	2002	2000	2001	2002	2000	2001	2002	
AC	320.390	370.578	439.769	677.082	784.799	975.983	47,32	47,22	45,06	
AL	529.607	611.847	692.715	1.195.875	1.375.355	1.477.875	44,29	44,49	46,87	
AM	861.788	932.216	1.103.455	1.925.171	2.288.852	2.767.751	44,76	40,73	39,87	
AP	250.000	265.757	247.511	678.300	701.103	794.910	36,86	37,91	31,14	
BA	1.970.983	2.195.055	3.240.103	5.492.482	5.715.509	6.693.303	35,89	38,41	48,41	
CE	1.321.548	1.843.000	1.871.000	3.103.121	3.628.078	3.863.702	42,59	50,80	48,43	
DF	1.055.579	1.165.876	1.359.824	3.209.332	3.419.965	3.990.683	32,89	34,09	34,07	
ES	977.225	1.029.085	1.063.153	2.176.256	2.565.412	2.560.765	44,90	40,11	41,52	
GO	1.313.716	1.474.605	1.855.521	2.671.633	3.208.572	3.820.033	49,17	45,96	48,57	◆
MA	870.808	993.864	1.041.231	1.794.116	2.121.935	2.370.422	48,54	46,84	43,93	
MG	6.150.000	7.170.322	7.735.116	9.629.796	11.412.858	12.542.039	63,86	62,83	61,67	
MS	609.958	744.839	614.126	1.335.384	1.531.786	1.756.128	45,68	48,63	34,97	
MT	745.872	819.413	921.062	1.748.543	2.085.871	2.512.858	42,66	39,28	36,65	
PA	977.782	1.154.556	1.381.771	2.313.543	2.706.265	3.204.737	42,26	42,66	43,12	
PB	673.212	708.921	936.702	1.599.214	1.801.118	1.944.563	42,10	39,36	48,17	
PE	1.702.072	1.832.140	2.048.301	3.458.438	3.803.157	4.361.020	49,22	48,17	46,97	◆
PI	522.438	607.942	770.225	1.155.252	1.290.514	1.586.525	45,22	47,11	48,55	
PR	2.602.458	3.071.227	3.335.849	5.709.876	6.260.845	7.490.807	45,58	49,05	44,53	
RJ	4.600.584	4.782.106	5.670.261	11.529.908	13.608.848	15.100.326	39,90	35,14	37,55	
RN	666.741	816.645	980.190	1.620.144	1.784.766	1.999.524	41,15	45,76	49,02	
RO	406.482	401.970	488.022	902.789	1.022.129	1.201.624	45,03	39,33	40,61	
RR	200.000	199.298	227.717	517.009	604.774	730.866	38,68	32,95	31,16	
RS	4.106.292	3.825.221	4.103.566	6.657.896	7.378.894	8.414.927	61,68	51,84	48,77	◆
SC	1.710.773	1.796.422	2.162.069	3.288.096	3.904.463	4.373.551	52,03	46,01	49,44	
SE	700.000	661.504	771.466	1.209.361	1.395.943	1.674.710	57,88	47,39	46,07	◆
SP	15.913.965	17.103.072	19.039.721	32.298.817	35.683.659	39.675.808	49,27	47,93	47,99	◆
TO	314.988	389.747	583.017	922.333	1.084.734	1.391.422	34,15	35,93	41,90	
Total	52.075.261	56.967.229	64.683.463	108.819.767	123.170.204	139.276.862	47,85	46,25	46,44	

* 18 out of 27 states improved personell / revenues ratio compared to 2000	
* 5 went from above 49% to bellow 49% between 2000 and 2002	◆
* 3 states were above 49% limit in 2002	

Table A5
Net Consolidated Debt of the States
(in thousands of Reais)

S t a t e	N e t D e b t / R e v e n u e s R a t i o				
	D e c . 3 1 2 0 0 0	D e c . 3 1 2 0 0 1	D e c . 3 1 2 0 0 2	A p r . 3 0 2 0 0 3	
A C	1,04	0,83	0,73	0,67	
A L	2,23	1,78	1,95	1,93	◆
A M	1,00	0,69	0,67	0,52	
A P	0,05	0,05	0,28	0,16	
B A	1,66	1,72	1,82	1,61	
C E	0,87	0,94	1,18	1,18	
D F	0,36	0,35	0,40	0,37	
E S	0,98	0,83	1,16	1,00	
G O	3,13	2,81	2,85	2,68	
M A	2,58	2,10	2,27	2,18	
M G	1,41	2,34	2,63	2,58	
M S	3,10	2,87	3,10	2,93	
M T	2,50	1,97	1,59	1,45	◆
P A	0,57	0,63	0,67	0,59	
P B	1,53	1,10	1,42	1,42	
P E	0,86	1,12	1,25	1,17	
P I	1,73	1,74	1,64	1,49	
P R	1,29	1,34	1,24	0,97	
R J	2,07	1,90	2,35	2,13	
R N	0,71	0,54	0,65	0,57	
R O	1,11	1,05	0,79	0,63	
R R	0,31	0,28	0,35	0,39	
R S	2,66	2,51	2,79	2,72	
S C	1,83	1,45	1,95	1,81	
S E	0,88	0,78	0,73	0,64	
S P	1,93	1,97	2,24	2,21	
T O	0,35	0,27	0,37	0,22	
T o t a l	1,70	1,73	1,93	1,83	

16 out of 27 states reduced
debt / revenues ratio
compared to 2000

2 went from above 2,00 to
below 2,00 between 2000
and April 2003

7 states were above 2,00
times limit in April 2003

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