## Creative Accounting and the Quality of Audit Institutions: The Achilles' heel of the Fiscal Responsibility Law in Brazil\*

Marcus Melo, Federal University of Pernambuco

Carlos Pereira, Michigan State University and Getulio Vargas Foundation - FGV

Saulo Souza, Federal University of Pernambuco and Cambridge University

#### Abstract:

Creative accounting has been documented in OECD countries (Milesi-Ferreti 2003, Bernoth and Wolff 2008, Von Hagen and Wolff 2006). In this paper we investigate the extension of the use of creative accounting at the subnational level in Brazil. Despite the hard budget constraints imposed by the Fiscal Responsibility Law in 2000, the Brazilian state governors retain some strategically ability to undertake fiscal window-dressing as a response to fiscal stress. The Fiscal Responsibility Law mandated that state audit institutions (Tribunais de Contas) must audit the enforcement of the law by imposing procedural rules (reporting transparency, etc) that the Tribunal checks. On the basis of empirical exercises we reach two major conclusions. First, there is ample evidence of creative accounting in the states, which in itself represents indication that the influence of the audit institutions (Tribunais de Contas) is binding and that there are costs for breaching the law. Second, because the Tribunais de Contas are not immune to the influence legislature and state governor, there is evidence that the institutional quality of those institutions is associated with more creative accounting. More independent and active institutions constrain the use of creative accounting at the state level. In addition, political competition also matters for creative accounting. Specifically, we find evidence of the correlation between alternation of the elite in power (government turnover) and restos a pagar (unpaid commitments which are delayed to the subsequent fiscal year, whereby postponing their impact on the primary balance) as well as unpaid commitments and the quality of the Tribunais de Contas. The Achilles' heel of the Fiscal Responsibility Law in Brazil is therefore the quality of subnational audit institutions.

\_

<sup>\*</sup> This preliminary version was prepared to be presented at the 13<sup>th</sup> Annual Conference of the International Society for New Institutional Economics, University of California at Berkeley, Walter A. Haas School of Business, USA, June 18-20, 2009.

#### Introduction

The implementation of fiscal rules constraining fiscal deficits and government debts has been a central concern of developed countries (European Union, USA, etc.) in the last two decades or so. Constraints on fiscal policy have also achieved the top of the governments' agenda in several developing countries. Brazil, for instance, has made great improvements in fiscal governance in the last fifteen years. In this paper we develop the argument that in addition to lead to fiscal adjustments and positive economic outcomes, fiscal rules have also encouraged incumbent politicians to make use of "creative accounting" in order to facilitate governments meeting budget deficit ceiling established by the fiscal laws. That is, the use of fiscal window-dressing as a response to fiscal constraints. Given the risk that discretionary fiscal policies may deviate from what may be desirable by a society, legal or regulatory restraints have been advocated as a measure of constraining the ability of governments to decide their levels of taxation and spending (Alesina and Perotti 19995). While the imposition of those fiscal constraints would reduce governments' bias, it may also promote the use of dubious accounting practices and government opportunism, which may lead to distortions and economic costs. Milessi-Ferreti (2003) proposes a model that assumes that the capacity governments have to make use of windowdressing measures depends on "the ability of the public to monitor the government's budgetary action (itself a function of the degree of transparency of the budget) and on the size of window-dressing measure" (378).

In the year of 2000, Brazil implemented a hard-budget constraint legislation – the Fiscal Responsibility Law - FRL, which was applicable to all government levels, regardless of their prior economic conditions. The FRL was introduced as a response to the run against the real (Brazilian currency) and the concomitant confidence crisis that affected the Brazilian economy in the wake of the Asian and Russian crisis. The currency crisis was triggered off by the default of the state of Minas Gerais in a much-publicized move that became headlines in the major economic newspapers worldwide. However the FRL has to be situated within a process of reassertion of federal fiscal authority since 1995. Along with its companion law, the so-called the Fiscal Crimes Law, the FRL is the culmination of a

\_

<sup>&</sup>lt;sup>1</sup> For Latin American experiences see Lora (2006).

relatively successful set of measures to constrain fiscal behavior and control the state governments' indebtedness.

The FRL illustrates the kinds of policy outcomes that reflect the national executive's ability to implement its policy preferences in the political game. In its relations with the state governments, a powerful president and finance minister have managed to recentralize fiscal authority in the country, curbing their fiscal autonomy. The executive was able to implement its preferences because of its institutional prerogatives and because there were gains-from-trade in federal government-state relations. Governors developed an interest in reforms in the wake of the approval of the reelection amendment and in view of the compensation mechanisms involved in the reform process.

Nowadays there is no question about the positive effect of the FRL with regard to the states' fiscal situation, which improved considerably since the enactment of the Fiscal Responsibility Law in 2000. Whereas all states faced a deficit prior to the enactment of the law, the consolidated state accounts have systematically presented a surplus roughly equivalent to 4% of GDP after the FRL (See Figure 1). A similar success story can be told regarding public debt. A succession of primary surpluses enabled the government to effectively reduce the GDP/debt ratio. Since 2002, when it peaked at 55% the GDP/debt ratio, there has been a reduction in net debt as measured by percent of GDP, which is estimated to be under 36 percent in 2008 (see Figure 2).

## [Figures 1 and 2 about here]

Although hard budget constrain legislations, like the FRL, are originally designed to go against fiscal irresponsibility, there are studies that already documented creative accounting measures by governments especially oriented to OECD countries (Milesi-Ferreti 2003, Bernoth and Wolff 2008, Von Hagen and Wolff 2006). In the particular case of Brazil, we identified that subnational governments have made use of unpaid commitments (*restos a pagar*). These are the kind of expenses the payment of which are delayed to the subsequent fiscal year, whereby postponing their impact on the primary balance.

The Fiscal Responsibility Law mandated that state audit institutions (*Tribunais de Contas*) must audit the enforcement of the law by imposing procedural rules (reporting

transparency, etc). The *Tribunais de Contas* are state level institutions, enjoying great level of functional, administrative and political autonomy. These institutions were significantly strengthened by a number of changes introduced in the Constitution of 1988. Although there is considerable homogeneity<sup>2</sup> in the functioning of the *Tribunais de Contas* some important differences in the institutional design remained. For instance there is great variation with regard to organizational aspects in terms of the number of employees, infrastructure and equipment available as well as the number administrative units under their jurisdiction (*jurisdicionados*). There is also great variability concerning the activism<sup>3</sup> among audit institutions. An active *Tribunal de Contas* is one that does much more than the minimum required of one report per administrative unit, especially reports resulting from auditors' self initiatives or third-party denunciations.

In addition to investigate the effect of audit institution, we also analyze the impact of the political competition on the governors' decision to make use of creative accounting. Pereira at al. (2009) have already demonstrated that a key factor behind a greater activism of state audit institutions in Brazil is, indeed, the level of political uncertainty generated by the electoral competition among the state's elite groups. More specifically, they found that the turnover of political elites controlling state governments generates incentives for the strengthening of autonomous audit institutions.

This paper discusses issues pertaining to the sustainability of the Fiscal Responsibility Law – FRL. While we find a negative effect of institutional activism of audit institution and window-dressing initiatives, we demonstrate a positive influence of power alternation on their levels of creative accounting. In other words, the Achilles' heel of the FRL in Brazil is therefore the quality of subnational audit institutions and political competition.

#### **Political determinants of Public Expenditure**

<sup>&</sup>lt;sup>2</sup> Not only do the board members enjoy tenure security but are also appointed until the official retirement age for public servants, currently 70 years old (Speck 2000; 2002).

<sup>&</sup>lt;sup>3</sup> Number of audit files per administrative unit.

The political economy literature specifies that both the composition and magnitude of public expenditures are a result of inter-temporal political transactions at the multiple stages of the budget-making process (e.g. Alston et al 2005). Fiscal outcomes therefore stem from the interactions between strategic political players who to a large extent aim at extracting electoral gains from their budget decisions. In view of that, the literature lists a number of political determinants of the public expenditure and fiscal outcomes. One such determinant is the *ideology* of the party in office. According to Esping-Andersen (1990), left-wing politicians care mostly about welfare policies what make them willing to spend lots of budget money on social programs, whereas right-wing politicians are more concerned with the state of the economy and thus adopt a less expansionist fiscal stance. Also Bosch and Suarez (1995) believe that political parties positioned closer to the left end of the ideological spectrum are prone to spend more, as compared to parties at the right end. Franzese Jr (2000) argues that such situations are more likely to occur whenever an officeholder envisages being replaced by a politician with an opposing ideological view.

Political articulation and bargaining between central and lower-level politicians play a major role in the policy-making process involving the creation of fiscal policy rules. Once the imposition of hard budget constraints on states and municipalities would require the central government to retain strong agenda powers, *political alignment* across government tiers can be an important factor leading fiscal rules to become self-enforcing (Braun and Tommasi, 2004). This perceived need to negotiate over fiscal stabilization policies has given rise to a question of whether it is easier to implement fiscal restraints where *political competition* is higher. Wibbels (2005) for instance, highlights that tight electoral disputes may constrain the ability of politicians in office to manipulate the budget for their private ends. Moreover, for Caplan (2001) and De Figueiredo (2002), in highly competitive political systems, i.e., where politicians are replaced in office regularly, coupled with uncertain prospects for the next election, the opposition parties closely look at how budget resources are being spent in an attempt to avoid fiscal deficits in case they take office. Conversely, outgoing officeholders can have an incentive to carry deficits on to their rival successors.

Additionally, the literature correlates the dynamic of political interactions within legislative bodies to the size and nature of the budget deficit. Accordingly, a large number

of representatives from different parties pursuing their own spending preferences will likely lead to budget unbalances. For Haggard and Kaufman (1995) party fragmentation is conducive to the proliferation of veto players that among other things can be associated with added difficulties to implement fiscal stabilization reforms. Alesina and Perotti (1994) and Persson and Tabellini (2001) argue in turn that highly fragmented party systems tend to postpone the government's response to fiscal crises. Roubini and Sachs (1998) observe that public debt in the 1980s increased more in OECD countries with highest number of parties in coalition governments.

On the other hand, as politicians will likely support their allied parties' budget decisions, incumbents will find themselves in a position to implement fiscal adjustment measures once a majority is secured for the *government's coalition in the legislature*. Webb (2004) for instance, argues that a strong coalition in favor of the government's interests is an element contributing to fiscal discipline, particularly if having a balanced budget will improve the reputation of the coalition parties. For Rodden (2003) this will mostly be the case if the proposed fiscal constraints are expected to bring political benefits to all parties in the coalition, otherwise they will not support the reforms. Alt and Lowry (1994) and Poterba (1994) give examples that although it may not have created the deficit, a divided coalition government tends to procrastinate the adoption of balanced budget measures.

The political economy literature also associates the proximity of elections with changes in the government's fiscal stance, precisely in the sense that the negative impacts of political variables in the budget are more widely observed in pre-election times. The *prospect of re-election* is thus a variable largely used in analyses of the fiscal opportunism of politicians in office. A hypothesis largely tested is whether positive fiscal outcomes would enhance a candidate's chances to retain the office for the sake of their reputation (Alt and Lassen 2003). Conversely, according to models based on a context of soft budget constraints (e.g. Aizenman, 1998), negative re-election prospects could provide incumbents with an incentive to purposefully increase public spending as a means to create fiscal burdens for their successors, unless the likelihood is high that the incoming politicians will be members of some allied party.

#### The Political Sustainability of the FRL

Reforms that culminated in the promulgation of the FRL contain strong endogenous elements not only in terms of fiscal incentives of the federal government to control subnational spending, but also in the response of state governments to the law in a context in which states were fiscally vulnerable and that the common pool problems they face had become systemically unsustainable. Therefore, we argue that the FRL provided benefits not only for the national government but also to state governments. In its relations with the state governments, a powerful president and finance minister have managed to recentralize fiscal authority in the country, curbing state governors' fiscal autonomy.

In addition, the FRL represented a process through which the executive managed to reassert its fiscal authority over subnational governments. While the endogenous component was crucial for reform initiation and its approval, the Cardoso's administration was politically strong, as a result of the reelection amendment. It is also true that over time many of the endogenous elements (for the states, not the federal government) faded away and the sustainability of the FRL has come to depend on the state level *Tribunais de Contas*. This paper discusses the extent to which the audit institutions constitute an effective enforcement technology for the FRL.

Braun and Tommasi (2002) point out that fiscal rules to be enforced require self-enforcement by the players (states) or an external enforcer with the power to ensure compliance. We argue that the Brazilian case approximates self-enforcement case. The executive had the enforcement technology and that the FRL has been an effective commitment device. The executive was able to implement its preferences because of its institutional prerogatives and because there were gains-from-trade in federal government-state relations. Governors developed an interest in reforms in the wake of the approval of the reelection amendment and in view of the compensation mechanisms involved in the reform process.

This argument contrasts with Webb (1994) who takes the external enforcement view. He argues that the passage and sustainability of the FRL was made possible primarily

because of the cooperation of key large states and their governors (such as São Paulo).<sup>4</sup> As discussed at length in Alston et al. (2004) the current depiction of the Brazilian political system as a federal structure in which governors wield vast powers is inaccurate. In fact, the circumstances that produced the former status quo that favored the states were unprecedented and extraordinary: a Constituent Assembly in which the federal executive played a minor role; the political conjuncture of transition to democratic rule, in which fiscal decentralization and increased social spending were important banners; and the specific sequence through which the political transition (democratic elections) occurred first at the state level (1982) and subsequently at the national level, converting the governors to key political figures in the transition.

The president had the capacity to impose his fiscal preferences because: a) it could exchange BNDES advancements in exchange for fiscal reforms, including privatization of state banks and utilities; b) it had agenda powers and other legislative prerogatives to implement its agenda; and c) it was also helped by the approval of the reelection amendment, which strengthened not only the President vis-à-vis governors but also helped extend the time horizons of governors; (19 governors ran for reelection), thus introducing some element of self-enforcement in the fiscal game. Without the reelection amendment, incumbent governors would have an extra incentive to exacerbate the common pool problem by leaving the fiscal problem to future governors. In addition, due to the devastating impact of hyperinflation in the mid 1990s, the President's policies were viewed favorably by a great part of public opinion, which became strongly inflation averse. We argue that the sustainability of the current fiscal situation is therefore not dependent on the state's cooperation. Although the FRL could be reversed, we note that there is some rigidity in it as a majority of 3/5 in two rounds of votes in the two chambers is required for a change in the Law.

The political process that led to the passing of the Fiscal Responsibility Law is illustrative of the preponderance of the executive in the policy-making process. The bill draft (*anteprojecto*) was disclosed shortly after the exchange rate crisis in 1999. The bill

\_

<sup>&</sup>lt;sup>4</sup> His conclusion we believe was inspired by the Argentine case during the Menen and De la Rua's administrations. Webb does not sufficiently note the institutional differences between Argentina and Brazil.

reached Congress in April 1999 and was approved in May 2000. The executive resorted to a sequential strategic maneuver, approving the FRL Bill first (in May), and only then putting the *Leis de Crimes Fiscais* to a vote (in October). The second was more conflictive because it imposed individual penalties, including imprisonment, to mayors and the upper echelons of the executive at the three levels of government. The bill was approved six months before the municipal elections of 2000, and was particularly opposed by mayors who feared that the immediate enforcement of the bill would jeopardize their chances of winning the elections.

The rapporteur of the bill in the Lower House rejected all of the 100 amendments that were proposed both by opposition and pro-government legislators. 93 of these amendments were discarded in totum whereas 23 specific provisions were partially incorporated into the bill – some of which had the endorsement of the Ministry of Planning and Budgeting. During the vote in the Chamber of Deputies, leaders from the government coalition convinced their party members to withdraw 129 individual proposals for the separate vote of specific provisions of the bill (destaques). These included a provision from the Brazilian Association of Municipalities calling for the introduction of a transition period before the law could be put into force. Despite the demonstrations and protests organized by the Brazilian Association of Municipalities, a landslide majority approved the bill - 385 votes for the government and 86 against it. In the Senate, 13 amendments from the Floor were rejected by the rapporteur also with the objective of speeding up the process. The government's proposal was approved by a majority of 60 votes in favor of the bill, 10 against and 3 abstentions. The final version of the bill contained a few changes in relation to the original bill. Governors managed to introduce spending threshold ceilings for the state Legislative Assemblies. Penalties were also reduced for violation of the upper limit of personnel spending (the years of imprisonment were reduced from a minimum of 2 to a maximum of 4, to a minimum of 6 months to 2 years, thus opening up the possibility of community service and fines). Moreover, the venue for evaluating the fiscal crimes was transferred from the Legislative to the Judiciary. The President's promulgation of the bill took place only several weeks after its legislative approval in order to allow for the last renegotiation of sub-national debt – the bill banned further renegotiations - to complete.

Although we argue that the executive has the upper hand in the executive-legislative relations, particularly in fiscal and budgetary matters, the interests of sub-national executives are relevant to explain the highly successful implementation of the law. In order to understand the interest of governors in the law, one has to consider governors as rational actors seeking political survival. Governors have an interest in fiscal expansion because this would help them achieve this goal. However, in the context of highly indebted and fiscally vulnerable states (as a result of the measures described above), governors also have an interest in shifting the blame of austerity measures to other actors. This calculation is however affected by the future electoral chances of governors. In highly polarized states in which governors face close elections, governors would have an interest in "stacking the deck" of the future governor, and curb his "fiscal powers" increasing thus unpaid commitments (Melo 2001: Gama Neto 2007). On the other hand, states in which the elite in power does not face electoral risks the probability of creating account should be smaller.

In case the incumbent is in the second term of office – and therefore barred from competing in the next election – he/she still would have an interest in the law. The incumbent would also benefit from the law because he/she would have an excuse to say no to demands from his own constituency, and particularly for pay hikes. Governors and mayors used the FRL and its companion as an excuse to say no to demands for special interest expenditures and transfers that would violate the FRL. Webb (2004, 8) states that "subnational governments have put up posters telling the penalties, as a reminder of why they are turning down special requests." Therefore, the FRL was "shield" (permitting to evade responsibility and shift the blame) and a "sword" (that can be used to bind the hands of the political competitors). We hypothesize that the more vulnerable fiscally a governor the higher the attractiveness of the "shift the blame strategy," and this support would increase the higher the polarization and political uncertainty over electoral outcomes.

It is the subjective evaluation of the value of blame shifting versus binding the hands of the competitors that will determine the governors' preference intensity. Gama Neto (2007) and Carvalho (2006) provides extensive evidence that in 1999 and 2000, most governors were in a situation of great fiscal vulnerability and most of them would not be able to run for reelection again (in 1998, 19 governors had been elected and would not be allowed to run for a third time).

This explains the high level of support by governors to the law. This support was not sufficient or even maybe necessary as suggested by the approval of many initiatives that directly impinged on sub-national interests. Nonetheless they help explain the smooth and successful implementation of the FRL. Observers who ignore the executive's ability to overcome party fragmentation cannot explain these outcomes without resorting to implausible arguments. Although the effects of the FRL from a fiscal point of view are positive, the extensive use of threshold ceilings and controls generates a system that is difficult to adapt to external shocks and changes in the economic and political environment. Furthermore, they lead the actors involved to see them as targets to be met (as opposed to thresholds), encouraging time-inconsistent behavior that ultimately cancel their intended effects. Ultimately, the extensive controls and limits, which are contained in the law, can be understood as a second best solution to fiscal and budgetary pathologies.

# Centralized rules, decentralized oversight: federalism and creative accounting The *Tribunais de contas*: an effective enforcement technology?

The Audit Courts in Brazil are constitutionally defined as ancillary bodies of the legislature branch, with the purpose of examining the accounts of the three branches of government in terms of their compliance with the principles of the public administration (public morality, impartiality, publicity, efficiency) as well as the specific legal requirements for hiring of personnel, concessions of pensions, procurement, intergovernmental transfers, competitive public bidding and fiscal responsibility. Although the Audit Courts are not technically part of the judicial system, in practice they operate as quasi-independent judicial authorities.<sup>5</sup> Not only do the board members enjoy tenure security but are also appointed until the official retirement age for public servants, currently 70 years old (Speck 2000; 2002).

The *Tribunais de Contas* are state level institutions, enjoying great level of functional, administrative and political independence (see table 1). These institutions were

\_

<sup>&</sup>lt;sup>5</sup> These institutions have a number of features typical of judicial bodies such as the right of reply, strict procedural rites, collegial decision-making, security of tenure of their board members, and civil service status for their employees.

strengthened significantly by a number of changes introduced in the Constitution of 1988. In terms of political autonomy vis-à-vis governors, new provisions restricted the appointment powers of governors over the institutions board, which is made up of 7 members (the *Pleno*). The latter were granted virtual life tenure and cannot be dismissed *ad nutum* by the governors nor the legislatures. Governors appoint one member freely (subject to requirements of expertise among other requirements) and they nominate two members from the pool of the auditors and public prosecutors of the institution, enhancing the institutions' technical profile and political autonomy. These two members are tenured civil servants without any particular loyalty to the governor. The senior auditors and prosecutors are recruited through a very competitive system and enjoy civil service status (tenure) and high salaries (their salaries are set as a percentage of the judges of the Federal High Court). These officials therefore have incentives to be strict in the application of sanctions. Auditors are very critical of the subordination of the courts to the whims of the political market. Senior auditors also participate in the judgment sessions with the right to vote. Introduced in 1988, these features provide important incentives for them to be impartial.

#### [Table 1 about here]

The constitution vested the *Tribunais de Contas* with the role of external control of public administration. They exercise oversight over the execution of budgets. Although they can impose fines on members of the executive and legislative should the law is breached, it is up to the independent auditors and especially public prosecutors to press charges against the perpetrators of crimes (in about half of the states, public prosecutors sit on the board of these institutions). The Fiscal Responsibility Law mandated that the *Tribunais* must audit the enforcement of the law, by imposing procedural rules (reporting transparency, etc.) that the Tribunal checks.

In order to produce their different types of reports a Tribunal de Contas could take on three different forms of activities. First they could work on the mandatory reports of accounts required by law that are submitted every year by the state and municipal governments and legislatures, which is largely a routine work. The second form of action is based on the self-initiative of the auditors and the board as a result of suspicion, evidence or information that they themselves gather about the municipalities or other administrative

units. Actions in the third form are investigations, which are prompted by denunciations or accusations by third parties. These accusations are largely made by municipal councilors, opposition candidates, trade unions, and citizens.

An active Tribunal is one that does much more than the minimum required of one report per administrative unit, especially reports resulting from auditors' decisions or denunciations. As we can see from the Figure 3, there is a huge variation on the degree of activities among audit institutions in Brazil. The activity is measured in terms of a ratio of the number of audit cases performed by each Tribunal and the number of administrative units under its jurisdiction.

[Figure 3 about here]

## **Creative Account (unpaid commitments)**

Initially, for descriptive purposes, we have selected the top seven states in terms of recorded unpaid commitments (*restos a pagar*): Rio Grande do Sul, Goias, Mato Grosso do Sul, Alagoas, Minas Gerais, Rio de Janeiro and Paraiba, ranked by financial deficits after the 2006 elections. We deliberately included information on two additional units, in spite of being states that notified financial surpluses in their 2006 balance sheet data: the state of Sao Paulo, given its political importance and strong impact in the Brazilian GDP, and Pernambuco, for having reported the country's highest primary surplus as a proportion of the RCL in 2006. Such characteristics make these states very useful for a comparison.

The great majority of these states have recorded yearly financial deficits as unpaid commitments (*restos a pagar*). These are the kind of expenses the payment of which are delayed to the subsequent fiscal year, whereby postponing their impact on the primary balance. If inadequately documented over the years, financial deficits, also known as end-of-year negative cash balances, can obscure the evolution of a state's underlying fiscal position. For the most part, unpaid commitments have not been net of the "creative" part of the outlays and as a consequence official information concerning the states' readily observable end-of-term cash balances has been disputed. Figure 4 gives descriptive information of the unpaid commitments of the selected group of states as a proportion of

their net current revenues. Notice that usually the indicator reaches its peak in the preelectoral years of 2001 and 2005 suggesting a cyclical electoral effect.

## [Figure 4 about here]

To a large extent, the state governments resorted to many accounting tricks in their attempt to record expenditures within the FRL spending limits, attention being given to the limit for personnel spending set at 60 percent of RCL. For example, some types of personnel expenses have been wrongly classified as income tax deductions or pension payments have not been reported under the line of personnel spending. In these cases, governors have benefited from lenient interpretations of the state *Tribunal de Contas* regarding the expenses they should record as personnel expenses. Similar inconsistencies of interpretations plagued the calculation of the net current revenue (RCL), leading states such as Pernambuco and Paraiba to amplify the indicator as a means to accommodate spending increases, by adding privatization proceeds to budget revenues.

Additionally, as a result of the FRL restraining overall spending in the electoral year, the states have resorted to expenditure hikes in pre-electoral years, as noted from the graphs of Figure 4. Likewise, spending sprees in the beginning of electoral years have been a common strategy employed by incumbents to circumvent the spending limitation applicable to the last eight months of term. In some cases, state governments struggled to curb basic expenses after elections in order to officially meet fiscal targets and thus avoid financial or even criminal sanctions, as seen in Rio de Janeiro and Sao Paulo. Other somber forms of covering vote-earning expenses included improperly using earmarked funds, e.g. public health funds shifted to finance infrastructure projects, educational funds deviated to cover campaign expenses, and so forth.

Table 2 illustrates how the accounting devices in the Brazilin states have come in many different guises. The table has been constructed based on information extracted from states' fiscal management reports as well as from auditing documents released by the *Tribunais de Contas*. The information has been checked against states' budgetary execution data published by the Brazilian National Treasury.

#### [Table 2 about here]

Therefore, despite the hard budget constraints imposed in the context of the fiscal responsibility legislation, the states retain some ability to undertake fiscal window-dressing as a response to fiscal stress. Box 1 ahead provides a brief summary of the most common creative accounting expedients observed in our states sample.

## [Box 1 about here]

It should be noted that a number of Brazilian states outside of this sample, despite having been regarded close to balance or in surplus under the FRL, have also provided signals of opportunistic fiscal behavior. For instance, in Ceara and Para, where full compliance with headline measures of primary surplus was reported over several years, the fiscal balance suffered a sharp decline in the electoral year of 2006, and the governor-elect in both states claimed to spot financial deficits when they took office in 2007. The Northern states of Amapa, Rondonia and Roraima have minimized reported deficits through fiscal gimmickry as well. Incorrect imputation of privatization proceeds, for example, has helped them cover current expenditures, while increases in public works spending have been underestimated in the approved budget, causing a rise in expenses recorded at a later time as unpaid commitments. Additionally, the expenditure limits of the legislative branch have been consistently circumvented over the years while not recorded accordingly so that budget deficits were understated.

Also, advantage has been taken from a lack of fiscal transparency by governors in Sergipe and Parana, who have released multiple versions of their fiscal reports or have failed to publish their balance sheet data in due time as stated in the fiscal legislation. In sum, some of the fiscal tricks have been less mischievous than others. In any event however, these examples bring to the surface a propensity of incumbents to distort the fiscal position as a means to hide episodes of fiscal profligacy, on one hand, but that augments indebted governments' default probability, on the other.

Therefore, before jumping to the conclusion that the fiscal responsibility legislation has turned the Brazilian subnational politicians into highly disciplined public managers who neither overspend nor treat the public finances irresponsibly in election times, we would rather take a closer look not only at the states' headline primary balances, but also at

how politicians in office managed to minimize the impact on the expenditure level of the numerical budget rules, indicating the existence of a margin for questionable accounting practices in conjunction with lax legislative interpretations to beautify their reported fiscal position.

## Data, Hypothesis, and Econometric Tests

As mentioned before, creative accounting has been documented in OECD countries (Milesi-Ferreti, Von Hagen). We investigate the extension of its use at the subnational level in Brazil. The data for the *restos a pagar* (unpaid commitments) as percentage of per capita GDP comes from the state balance sheets from 2000 to 2002. Figure 5 shows that, during the period analyzed, there is a huge variation of unpaid commitments from a state to the next, where the state of Bahia delayed the smallest amount to be spent in the subsequent fiscal year and the state of Parana was the champion of unpaid commitments. What can explain this variation?

## [Figure 5 about here]

As the *Tribunais de Contas* must audit the enforcement of the FRL, our key explanatory variable is a measure of activism of an audit institution at the subnational level. As proxy of the quality of the *Tribunais de Contas* we use an index of institutional activism created by Melo, Pereira and Figueiredo (forthcoming 2009). In fact, this variable is the ratio of the number of audit cases performed by each Tribunal and the number of administrative units under its jurisdiction. As mentioned before, this is a very good proxy of activism or more appropriately 'productivity.' The *Tribunais de Contas* are legally required to do a routine oversight of each unit under their jurisdiction at least once per year, although we have cases in which Tribunals do not deliver audits for all units (in which case the ratio would less than 1). So, the greater the ratio, the more active a Tribunal is. We expect to find a negative correlation between *restos a pagar* on institutional activism of the Audit institution. That is, the more active a *Tribunal de Contas* is, the smaller the amount of unpaid budgetary commitments.

One may argue that an active audit institution does not mean necessarily independency from politicians' influence. Melo at al. (forthcoming 2009) have already

demonstrated that the key explanatory variable explaining the degree of activism of an audit institution in Brazil is the presence or lack of a senior auditor and/or a public prosecutor in the Audit Board. That is, tribunals with auditors on their boards are more prone to action. Therefore, we included in the model a dummy variable with the value of 1 if the audit institution has a senior auditor on the board and zero otherwise. Consistent with our previous work, we expect that the presence of auditor refrain a governor to make use of unpaid commitments.

In order to deal with the effect of political competition on the probability state governors to make use of unpaid commitments, we included in the model the variable government turnover and legislative party fragmentation in the State Assembly. The former variable consists of an index of elite instability, which was built by taking as a reference the last three consecutive elections for state governors in Brazil: 1994, 1998, and 2002. In line with the literature expectation, we predict a positive coefficient for government turnover and unpaid commitments. That is, the greater the electoral risk, the greater the greater the incentives governors will have to carry deficits on to their rival successors via unpaid commitments. As for legislative fragmentation in the state assembly, it means an index of the number of political parties per seats in the 1999-2002 period. We assume that the greater the fragmentation, more difficulties the governor will face to coordinate his/her legislative coalition generating thus incentives to rely on unpaid commitments mode often.

\_

<sup>&</sup>lt;sup>6</sup> We also tested for the presence of a public prosecutor on the audit board as well. However, as a matter of colinearity with auditor, the variable public prosecutor dropped in our econometric exercises.

<sup>&</sup>lt;sup>7</sup> This index varies from zero (when the same coalition was the winner in all three consecutive electoral episodes) to 4 (when no one single coalition was able to win two elections). The intermediate values of the vulnerability index refer to situations when an electoral coalition won two consecutive elections but lost the third one (index equal to 1); or when the first elite coalition in power is defeated and a new elected elite wins the following two elections (index equal to 2); and finally a situation in which an elite group has its electoral dominance interrupted by a second electoral elite which gains power for just a single electoral period, after which the original elite returns to power (index equal to 3).

<sup>&</sup>lt;sup>8</sup> For more information, please see the *Almanaque de Dados Eleitorais* (Laboratório de Estudos Experimentais), <a href="http://www.ucam.edu.br/leex/">http://www.ucam.edu.br/leex/</a>

We also control for the state per capita GDP because richer states tend to have worse fiscal situation due to a variety of reasons, including the ability to contract loans and issue debt papers.

Although the results generated by our empirical exercises should be interpreted with caution given the small number of cases, we find empirical evidence of the correlation between *restos a pagar* (unpaid commitments) and the activism of *Tribunais de Contas* (See Figure 6). As we expected, the more independent a *Tribunal de Contas* (measured by the presence of a senior auditor on its board), the smaller the incentives governors will have to rely on window dressing mechanisms (measured by unpaid commitments). Political competition, both at the executive branch (See Figure 7) as well as at the legislative sphere, also matter for creative accounting. That is, the higher the government turnover and legislative fragmentation within state assemblies the greater the incentives governors will have to make use of unpaid commitments.

[See figures 6 and 7 about here]

On the basis of these preliminary empirical exercises we reach two major conclusions. First, there is ample evidence of creative accounting in the states, which in itself represents an indication that the influence of the *Tribunais de Contas* is binding and that there are costs for breaching the law. Second, because the *Tribunais de Contas* are not immune to the influence of the legislators and state governors, there is evidence that the institutional quality of the *Tribunais de Contas* is associated with more creative accounting. More independent and active institutions constrain the use of creative accounting at the state level. The Achilles' heel of the law is therefore the quality of subnational institutions and the degree of political competition.

[Tables 3 and 4 about here]

#### Conclusion

In this article, we tested some political determinants of the budget deficit that can account for empirical regularities in the use of unpaid commitments. We replicated existing fragmentation models (Alesina and Perotti, 1994; Persson and Tabellini, 2001) on a sample

of Brazilian states and confirmed the positive results: the magnitude of financial liabilities registered as unpaid commitments was positively correlated with the number of relevant political parties in the legislature. The results are in line with the mentioned literature, in the sense that the logic of the common-pool resource problem clearly applies here, that is, opportunistic politicians in a party will seek to maximize the electoral benefits from overspending and externalize the overall cost to all other parties. Therefore, all else equal, there is evidence that highly fragmented state assemblies are associated with greater unpaid commitments than less fragmented ones.

Also, the hypothesis was tested in our models whether the prospect of not being reelected, i.e. the turnover variable, provides state governors with an incentive to overspend
and then register the deficit as unpaid commitments. According to the visited literature
(Aizenman, 1998; Alt and Lassen 2003), this would create a situation of soft budget
constraints. The variable turned out strongly significant and correlated positively with the
size of unpaid commitments, which means that if there is a rise in the turnover rate, this can
result in higher expenditures and the use of window-dressing expedients by state governors.
The prediction is, therefore, that in the presence of electoral uncertainty, the incumbent
would show above average spending for electoral purposes and thus need to recur to
creative accounting.

The quality of audit institution and its independency from politicians influence are also important factors on governors' decision to rely on window dressing mechanisms. Audit activism and political independence seem to refrain opportunistic fiscal behavior at the subnational level in Brazil.

#### **References:**

- Afonso, Jose R. and R Barroso (2007) Brazil in L Bernardi, A Barreix, Anna Marenzi and P Profeta eds., *Tax Systems and tax reforms in Latina America*, Societá Italiana de Economia Publica.
- Aizenman, J. (1998). Fiscal Discipline in a Union. In: *The Political Economy of Reform*, Ed. Sturzenegger, F. and M. Tommasi, MIT Press: Cambridge, MA.
- Alesina, A. & Perotti, R. (1994). "The Political Economy of Budget Deficits". NBER Working Paper no 37.
- Alt, J. & Lassen, D. (2003). "Fiscal Transparency and Fiscal Policy Outcomes in OECD Countries". EPRU Working Paper Series no 03-02.
- Alt, J. & Lowry, R. (1994). "Divided Government and Budget Deficits: Evidence from the States". *American Political Science Review*, 88: 811-828.
- Alston, Lee J., and Bernardo Mueller. 2006. "Pork for Policy: Executive and Legislative Exchange in Brazil," *Journal of Law, Economics, & Organization* 22: 87-114.
- Ames, Barry. 2002. "Party Discipline in the Chamber of Deputies," in S. Morgenstern and B. Nacif, eds., *Legislative Politics in Latin America*. New York: Cambridge University Press.
- Amorim Neto, Octavio. 2002. "Presidential Cabinets, Electoral Cycles, and Coalition Discipline in Brazil," in S. Morgenstern and B. Nacif, eds., *Legislative Politics in Latin America*. Cambridge: Cambridge University Press.
- Amorim Neto, O. & Borsani, H. (2004). "Presidents and Cabinets: the Political Determinants of Fiscal Behavior in Latin America." *Studies in Comparative International Development*. 39 (1): 3-27.
- Bordin, Luis (1998) "Reforma tributária: Avaliação da nova proposta 'Pedro Parente'," Porto Alegre, *Estudos Econômicos-fiscais*.
- Bosch, N. & Suarez, J. (1995). "Seven Hypothesis about Public Choice and Local Spending". *Public Finance*, 50(1): 36-50.
- Braun, M. & Tommasi, M. (2004). "Fiscal Rules for Subnational Governments: Some Organizing Principles and a Case Study of Argentina". IMF/World Bank Conference. Oaxaca, Mexico.

- Caplan, B. (2001). "When is Two Better Than One? How Federalism Mitigates and Intensifies Imperfect Political Competition." *Journal of Public Economics*, 80: 99-119.
- Cossio, F. A. (2001). "O Comportamento Fiscal dos Estados Brasileiros e seus Determinantes Políticos." ANPEC. Economia, 2 (1): 209-258
- Dain, Sulamis (2005) "A Economia Política da Reforma Tributaria de 2003" *Econômica*, 7 (2): 293-318.
- De Figueiredo, R. J. P. (2002). "Electoral Competition, Political Uncertainty and Political Insulation." *American Political Science Review*, 96: 321-334.
- De Mello, Luiz (2008) "The Brazilian "Tax War", *Public Finance Review*, Vol. 36, No. 2, 169-193.
- De Melo, Luiz and D. Moccero (2007) "Monetary Policy and Macroeconomic Stability in Latin America: The Case of Brazil, Chile, Colombia and Mexico, ECO Working Paper, No. 545.
- ----- (2006) "Consolidating Macroeconomic Adjustment in Brazil," ECO Working Paper, No. 531.
- Desposato, Scott W. 2006. "Parties for Rent? Ambition, Ideology, and Party Switching in Brazil's Chamber of Deputies," *American Journal of Political Science* 50: 62-80.
- Drazen, A. (2004). "Fiscal Rules from a Political Economy Perspective." In: Kopits, G. Rules-Based Fiscal Policy in Emerging Markets: Background, Analysis and Prospects. Palgrave Macmillan. Pp. 15-29.
- Esping-Andersen, G. (1990). *Three Worlds of Welfare Capitalism*. Princeton: University Press.
- Eslava, M. (2006). "The Political Economy of Fiscal Policy: Survey". Inter-American Development Bank. Working Paper no 583.
- Franzese Jr., R. (2000). "Electoral and Partisan Manipulation of Public Debt in Developed Democracies, 1956-90." *In*: Strauch, R. & Von Hagen, J. (2000). *Institutions, Politics and Fiscal Policy*, 2: 61-83.
- Gama Neto, Ricardo (2007). Refém, Cenoura, ou Porrete: Federalismo, Comportamento Fiscal e Ciclo Político. Ph.D. Dissertation.

- Giambiagi, F. (2002). "Do Deficit de Metas as Metas de Deficit: A Politica Fiscal doGoverno Fernando Henrique Cardoso 1995/2002". BNDES. Texto para discussão No93.
- \_\_\_\_\_ (2007). "Dezessete Anos de Política Fiscal no Brasil: 1991-2007." IPEA.Texto para discussão no 1309.
- Goldfajn, I. & Guardia, E. (2004). "Fiscal Rules and Debt Sustainability in Brazil".In:Kopits, G. (2004). Rules-Based Fiscal Policy in Emerging Markets: Background,Analysis and Prospects. Palgrave Macmillan. 114-130.
- Haggard, S. & Kaufman, R. (1995). *The Political Economy of Democratic Transitions*. Princeton, NJ: Princeton University Press.
- Inácio, Magna. 2006. "Entre Presidir e Coordenar: Presidência e Gabinetes Multipartidários no Brasil." Paper presented at the III Congress of the Latin American Political Science Association (ALACIP), Campinas, Brazil, September 4-6.
- Kopits, G. (2004). Rules-Based Fiscal Policy in Emerging Markets: Background, Analysis and Prospects. Palgrave Macmillan.
- Ornament".IMF Working Paper no 01/145.Lima, E. C. (2004). "Regras Fiscais: Teoria e Evidencia". PhD dissertation. UnB Departamento de Economia. Versão de 30/03/2004
- Lora, Eduardo. 2007. *The State of State Reform in Latin America*. Stanford: Stanford University Press.
- Mainwaring, Scott. 1999. *Rethinking Party Systems in the Third Wave of Democratization:*The Case of Brazil. Palo Alto, CA: Stanford University Press.
- Melo, Carlos Ranulfo. 2004. *Retirando as Cadeiras do Lugar: Migração Partidária na Câmara dos Deputados (1985-2002)*. Belo Horizonte: Editora UFMG.
- Melo, Marcus. 2001. "Institutional Obstacles to Market Reform: The Politics of Tax Reform in Brazil. Paper presented at LASA Conference.
- Melo, M., Pereira, C. and Figueiredo, C. (forthcoming 2009). "Political and Institutional Checks on Corruption: Explaining the Performance of Brazilian Audit Institutions." *Comparative Political Studies*, Volume 42, issue 9.

- Milesi-Ferretti, G. M. (2003). "Good, Bad or Ugly? On the Effects of Fiscal Rules with Creative Accounting." *Journal of Public Economics*, 88: 377-394
- Mota, João Ricardo (2008). *A Economia Política das Vinculações de Receita no Brasil*. Ph.D. Dissertation.
- Pereira, Carlos, Timothy J. Power, and Lucio Rennó (2005). "Under What Conditions Do Presidents Resort to Decree Power? Theory and Evidence from the Brazilian Case," *Journal of Politics* 67: 178-200.
- Persson, T. & Tabellini, G. (2001). "Political Institutions and Policy Outcomes: What are the Stylized Facts?". CESifo Working Paper Series no 459.
- Poterba, J. (1994). "State Responses to fiscal Crises: The Effects of Budgetary Institutions and Politics". *Journal of Political Economy*, 102: 798-821.
- Rodden, J. A. (2003). "And the Last Shall Be First: The Political Economy of Federalism and Deficits in Germany." Mimeo. Department of Political Science. MIT.
- Roubini, N. & Sachs, J. (1988). "Political and Economic Determinants of Budget Deficits in the Industrial Democracies". NBER Working Paper n° W2682.
- Rangel, Paulo Euclides and João da Silva Medeiros Neto (2003) *Histórico de reformas Reforma tributária: breve notícia sobre oito anos de trabalhos no âmbito da Câmara dos Deputados*, Consultoria Legislativa, Relatório Especial, Câmara dos Deputados.
- Rodden, J., Eskeland, G. & Litvack, J. (2003). Fiscal Decentralization and the Challenge of Hard Budget Constraints. The MIT Press. Cambridge, MA.
- Samuels, David J. 2000. "The Gubernatorial Coattails Effect: Federalism and Congressional Elections in Brazil," *Journal of Politics* 62: 240-53.
- Souza, Saulo. 2008. A Fria Austeridade das Regras Fiscais Resiste ao Calor das Urnas?

  Oportunismo Fiscal e Contabilidade Criativa nos Estados Brasileiros. Ph.D.

  Dissertation Federal University of Pernambuco.
- Ter-Minassian, Teresa and Jon Craig (1997). "Control of Subnational Government Borrowing," in Ter-Minassian ed., Fiscal Federalism: Theory and Practice. Washington, D.C.: International Monetary Fund.

- Von Hagen, J., and G. B. Wolff (2006): "What Do Deficits Tell Us About Debt? Empirical Evidence on Creative Accounting with Fiscal Rules in the EU," Journal of Banking and Finance.
- Webb, S. B. (2004). "Fiscal responsibility Laws for Subnational Discipline: The Latin American Experience". World Bank Policy Research working paper 3309.
- Werneck, R. L. F. (2003). "Tax Reform in Brazil: Small Achievements and Great Challenges", in: J. A. González, V. Corbo, A. O, Krueger and A. Tornell (eds.), *Latin American Macroeconomic Reforms: The Second Stage* Chicago: The University of Chicago Press.
- Werneck, R. (2006) "An Evaluation of the 2003 Tax Reform Effort in Brazil," *Brazilian Journal of Political Economy*, 26 (1): 75-94.
- Wibbels, E. (2005). Federalism and the Market: Intergovernmental Conflict and Economic Reform in the Developing World. Cambridge University Press. New York.

## **Tables and Figures**

**Table 1: Audit Courts at the State Level** 

State	Year of creation	Number of administrative units under jurisdiction	Number of employees	TC budget (% of state budget)	
Acre	1987	207	149	1.16	
Alagoas	1947	256	681	0.87	
Amazonas	1950	282	515	1.48	
Amapá	1991	120		2.12	
Bahia	1915	380	720	0.45	
Ceará	1935	119	205	0.28	
Federal District	1960	124	589	2.32	
Eírito Santo	1954	386	484	0.81	
Goias	1947	49	507	0.95	
Maranhão	1946	518	306	0.98	
Minas Gerais	1935	2.196	1.291	0.89	
Mato Grosso	1953	497	400	1.61	
Mato Grosso do Sul	1979	630	428	2.55	
Pará	1947	81		1.34	
Pernambuco	1968	720	616	1.47	
Paraíba	1970	650	352	1.05	
Piauí	1891	1.174	104	0.72	
Paraná	1947	1.330	477	0.93	
Rio de Janeiro	1947	640	240	0.80	
Rio Grande do Norte	1957	452	332	0.92	
Rondônia	1983	203	284	1.54	
Roráima	1988	85	206	1.69	
Rio Grande do Sul	1935	1.218	1.005	1.01	
Santa Catarina	1955	1.871	451	0.74	
Sergipe	1969	235	353	1.88	
São Paulo	1921	3.021	1364	0.34	
Tocantins	1989	350	356	0.84	
Bahia *	1980	954	449	0.27	
Ceará *	1954	1.584	300	0.22	
Goiáis *	1977	1.204	293	0.57	
Pará *	1980	630	177	0.77	

<sup>\*</sup> Tribunais de Contas with jurisdiction restricted to the municipal governments in the respective states

Table 2: Creative Accounting: Wriggle Room for Non-Compliance with the FRL

	Operations in break of the FRL	Accounting Tricks	Status of Public Accounting
Alagoas	Personnel spending of legislative branch above the 3 percent ceiling     Overall personnel spending above the 60 percent ceiling     Excessive spending in duodecimal funds to judiciary and legislative branches     Expenditure increases overstepping the limits for election years     Underlying financial deficits conveyed to next administration	Peak expenditures in pre- election years     Personnel expenses not properly recorded     Ambiguous or inaccurate reporting of end-of-term cash balances     Negative balances recorded as unpaid commitments	Primary surplus targets met     All fiscal years approved by court of accounts
Goias	Personnel spending of legislative branch above the 3 percent ceiling Contracting of new personnel in election years Overall personnel spending above the 60 percent ceiling Underlying financial deficits conveyed to next administration	Peak expenditures in pre- election years     Personnel expenses not properly recorded     Improper application, recording of earmarked funds     Ambiguous or inaccurate reporting of end-of-term cash balances     Negative balances recorded as unpaid commitments	Primary surplus targets met     All fiscal years approved, notwithstanding some negative remarks
Mato Grosso do Sul	Failure to pay down debt refinancing contracts in due time     Underlying financial deficits conveyed to next administration	Peak expenditures in pre- election years     Ambiguous or inaccurate reporting of end-of-term cash balances     Negative balances recorded as unpaid commitments	Primary surplus targets met     All fiscal years approved, notwithstanding some negative remarks
Minas Gerais	Expenditure increases overstepping the limits for election years (personnel spending, public works and media spending)     Underlying financial deficits conveyed to next administration	Peak expenditures in pre- election years     Improper application, recording of earmarked funds     Personnel expenses not properly recorded     Inaccurate reporting of end- of-term cash balances     Negative balances recorded as unpaid commitments	Primary deficits in 2001 and 2002     All fiscal years approved by court of accounts
Paraiba	Contracting of new personnel in election years     Expenditure increases overstepping the limits for election years (personnel spending, public works and media spending)     Underlying financial deficits conveyed to next administration	Peak expenditures in pre- election years Improper application, recording of earmarked funds Personnel expenses not properly recorded Recording of privatization proceeds as net revenues Ambiguous reporting of end- of-term cash balances Negative balances recorded as unpaid commitments	Primary deficits in 2001 and 2002     Fiscal year 2002 partially approved by court of accounts, entirely approved by deputies in Legislative Assembly
Pernambuco	Expenditure increases overstepping the limits for election years (public works and media spending)     Underlying financial deficits conveyed to next administration	Peak expenditures in pre- election years     Improper recording of privatization proceeds as net revenues     Ambiguous or inaccurate reporting of end-of-term cash balances     Negative balances recorded	Primary deficits in 2000, 2001 and 2002     All fiscal years approved by court of accounts

	overstepping the limits for election years  Overall personnel spending above the 60 percent ceiling Failure to pay down debt refinancing contracts in due time State debts above legal thresholds Underlying financial deficits conveyed to next administration	election years  • Spending spree in months prior to election  • Personnel expenses not properly recorded  • Expenditure cuts right after elections (specially in public security)  • Ambiguous or inaccurate reporting of end-of-term cash balances  • Negative balances recorded as unpaid commitments	Fiscal year 2002 rejected by court of accounts, approved by deputies in Legislative Assembly
Rio Grande do Sul	Personnel spending of legislative branch above the 3 percent ceiling     State debts above legal thresholds     Failure to pay down debt refinancing contracts in due time     Underlying financial deficits conveyed to next administration	Peak expenditures in pre- election years     Personnel expenses not properly recorded     Ambiguous or inaccurate reporting of end-of-term cash balances     Negative balances recorded as unpaid commitments	Primary surplus targets met     All fiscal years approved by court of accounts
Sao Paulo	Expenditure increases overstepping the limits for election years (social spending, media spending, public security)	Tax rebates to encourage voluntary tax levies in electoral years     Spending spree in months prior to election     Expenditure cuts right after elections (specially in infrastructure projects)	Primary surplus targets met     All fiscal years approved by court of accounts

**Table 3: Determinants of Unpaid Commitments** 

	Models				
	(1)	(2)	(3)	(4)	(5)
Activism	0309**	0263***	0229**	0205**	0235**
	(.0128)	(.0143)	(.0114)	(.0103)	(.0118)
		.0568***	.0699***	.0571***	.0542***
Turnover		(.0174)	(.0145)	(.0146)	(.0173)
Auditor			0818**	0666*	0623*
			(.0439)	(.0383)	(.0384)
Fragmentation				1.2362*	1.1210*
				(.7361)	(.7450)
GDP p/capita					5.87e-06
					(.00001)
Constant	.0128***	.1208***	.1428**	9701	8841
	(.0388)	(.0458)	(.0512)	(.6463)	(.6542)
N	26	26	26	26	26
R <sup>2</sup>	0.0886	0.3242	0.3993	0.4839	0.4900

**Table 4: Descriptive Statistics** 

Observation	Mean	Standard Deviation	Minimum	Maximum
26	.1693057	.1402841	.027194	.5282267
26	1.145306	1.351282	.0048309	5.668421
26	1.384615	1.202561	0	4
26	.5384615	.5083911	0	1
26	.9056923	.0352247	.8106667	.9463333
26	4023.308	2198.409	1421	11272
	26 26 26 26 26	26 .1693057 26 1.145306 26 1.384615 26 .5384615 26 .9056923	26       .1693057       .1402841         26       1.145306       1.351282         26       1.384615       1.202561         26       .5384615       .5083911         26       .9056923       .0352247	26       .1693057       .1402841       .027194         26       1.145306       1.351282       .0048309         26       1.384615       1.202561       0         26       .5384615       .5083911       0         26       .9056923       .0352247       .8106667

## Box 1: Creative accounting at a glance: Brazilian states

## 1) Ambiguous or inaccurate reporting of end-of-term cash balances

States in the sample: Alagoas; Goiás; Mato Grosso do Sul; Minas Gerais; Paraíba; Pernambuco; Rio de Janeiro; Rio Grande do Sul

## 2) Negative balances recorded as unpaid commitments

States in the sample: Alagoas; Goiás; Mato Grosso do Sul; Minas Gerais; Paraíba; Pernambuco; Rio de Janeiro; Rio Grande do Sul

## *3) Peak expenditures in pre-election years*

States in the sample: Alagoas; Goiás; Mato Grosso do Sul; Minas Gerais; Paraíba; Pernambuco; Rio de Janeiro; Rio Grande do Sul

## 4) Personnel expenses not properly recorded

States in the sample: Alagoas; Goiás; Minas Gerais; Paraíba; Rio de Janeiro; Rio Grande do Sul

## 5) Improper application, recording of earmarked funds

States in the sample: Goias; Minas Gerais; Paraiba

## 6) Spending spree in months prior to election

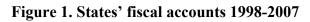
States in the sample: Rio de Janeiro; São Paulo

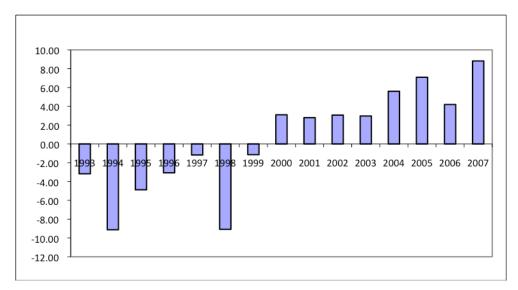
#### 7) Expenditure cuts right after elections

States in the sample: Rio de Janeiro; São Paulo

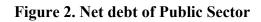
## 8) Improper recording of privatization proceeds as net revenues

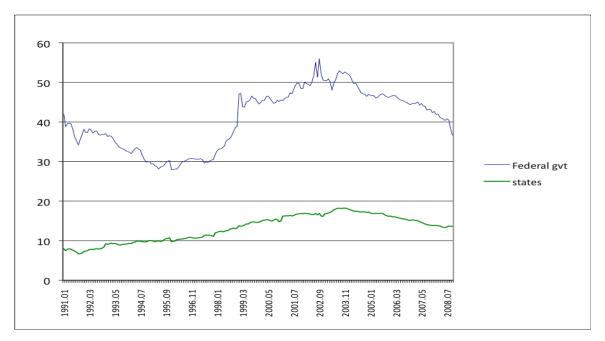
States in the sample: Paraiba; Pernambuco





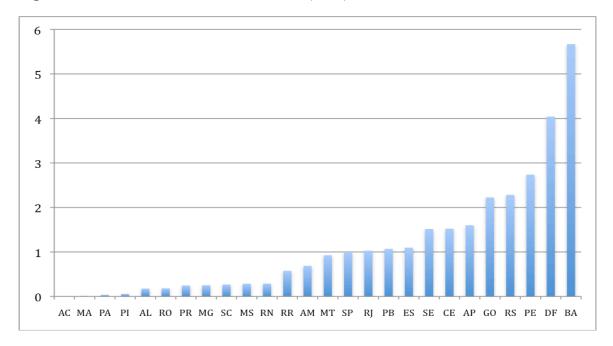
Source: Brazilian National Treasury





Source: Brazilian National Treasury





**Figure 4: Fiscal Behavior in Selected States** 

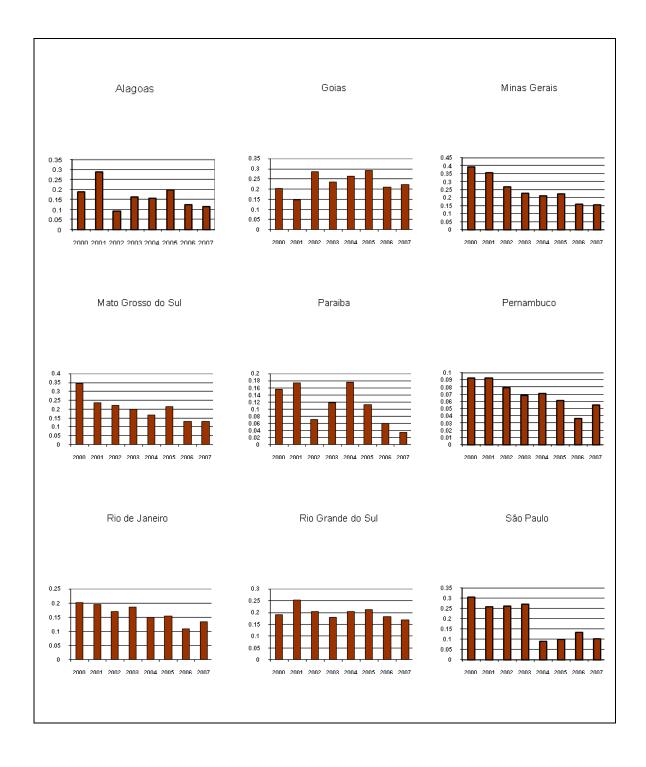


Figure 5. Descriptive Distribution of the Average of Unpaid Commitments by State (2000-2002)

