POLITICAL STRUCTURE AS DETERMINANT OF FEDERAL SPENDING

Philippe V. Duchateau[1]
Basilia Aguirre[2]

This article seeks to analyze the allocation of federal government discretionary spending among Brazil's states. In Brazil, the bulk of federal public budget must be compulsorily executed. Personnel expenditures and social taxes, social security benefits and a series of constitutionally mandatory transfers to states and municipalities are examples of expenditures over which the government has no discretionary powers whatsoever. Even the vast majority of current expenditures can be considered compulsory, since they finance the government's operations. Although the budget is heavily constrained by these expenditures, the Executive retain approximately R$ 20bn at its disposal for discretionary spending in 2003, equivalent to 6% of total expenditures, mainly comprising new programs or expansion of existing programs and public investments.

The vast literature on fiscal federalism and budget allocation takes painstaking efforts to identify determinants of federal spending between various jurisdictions and inter-government transfers. Standard normative theory suggests that spending should follow a policy aimed at maximizing some function of social well being used by a benevolent central planner. Federal funds should be allocated in accordance with the specific needs of each jurisdiction, and inter-government transfers are instruments for correcting externalities, improving tax system and resolving financial imbalances caused by decisions on the tax collection distribution and provision of public goods and services (Oates, 1999).

Although normative theories offer important elements for subsidizing policy-makers decisions, they ignore a fundamental aspect in determining the attributions related to

---

[1] Economist of the São Paulo City Finance Department, e-mail: philippe@usp.br
[2] Professor at Universidade de São Paulo, e-mail: basil@usp.br

taxation and investment of public funds: the political process. Positive theories, in turn, argue that public policies are the result of a process, where several different interests are at stake. This process is governed by a set of rules and each agent seeks to maximize his gains within the possibilities offered by these rules and by the strategies of the other agents involved in the process. Public policies should thus be the results of the interaction of these agents under the rules established, and not of the action of a benevolent central planner looking to attain the highest level of well being for society.

One of the first publications in this context was Niskanen (1971), who sought to incorporate the simple idea that the aim of policy-makers is to maximize the volume of funds available for their policies. Since then, literature on budget allocation has evolved significantly, and currently there are two major theoretical approaches. The first relates to congressional theories, which stress the role of the organization of legislative sphere and of the individual and independent action of the representatives under the institutions that govern the functioning of legislative process. Alternatively, an extensive party literature focuses on the role that political parties have as influence organizations. According to this school of thought, public policies aimed at favoring party objectives would be more effective than the individual and independent activities of the representatives.

This article aims to identify by which means individual representatives and political parties influence the federal budget, and to empirically test the relevance of these means in budget execution. A recent study on the U.S. budget, Larcinese, Rizzo, and Testa (2004), suggests the strong influence of party theories at the expense of congressional evidence, and the President's significant power in distributing the budget among states. Evidently, these theories and the empirical tests developed by U.S. literature are inherent to its own structures and institutions. The crossover to the Brazilian case requires a more in-depth analysis of the federal budget process and of how representative Brazilian political parties are. This is discussed in the five subsequent sections. The next section features a description of the main stages involved in preparing and executing the federal budget. The following section presents summaries of the main developments of the congressional and party theories on budget allocation and the caveats required for analyzing the Brazilian

case. Section three presents the database and methodology used in the empirical tests. The results of the empirical tests and the final conclusions are contained in the last section.

1 THE FEDERAL PUBLIC BUDGET

The budget bill elaboration begins with the Executive, or more specifically with the Planning, Budget and Management Ministry (MPO), which estimates revenues and determines the group of expenditures of each branch of Government, Congress and the Judiciary, as well as producing the Annual Budget Proposal (POA), which defines parameters for operational expenditures and investments. The Annual Budget Proposal establishes both the volume of funds for these expenditures and the spending limits on each program that each one of the public agencies plans to develop. Once the parameters are established, each ministry and public agency prepares the detailing of their expenditures and returns their projects to the Planning, Budget and Management Ministry, which is responsible for consolidating everything into one single proposal, the Budget Law, which should be signed by Brazil's President and sent to Congress.

On reaching Congress, the Budget Law is submitted to the Joint Congress Planning, Budget and Monitoring Committee (CMPOF in its Brazilian Portuguese acronym). The participation of congressmen in the budget cycle mainly occurs in this committee[3]. The composition of the committee is based on the proportion of seats held by each party in Congress. Thus, large parties are better represented on the committee. Similarly, governments that consolidate a coalition comprising the majority of congressmen in Congress will have their interests well represented on this committee.

Party actions of within the committee are mainly exerted through their leaders. According to Congress internal rules, party leaders are responsible for appointing members for the Joint Congress Planning, Budget and Monitoring Committee, and they also have

---

[3] Even though, some congressmen, especially those with most prestige and political power, resort to their political networks within the ministries and federal agencies to include their own projects in the proposal that the government should send to Congress. According to Pereira and Mueller (2002), these congressmen skip an important stage of the negotiations in Congress, ensuring that their requests already feature in the bill sent by Brazil's President.

considerable influence in choosing the chairman and the three vice-chairmen. The budget general reporter, a very important role in the process, as well as the partial reporters is chosen by the chairman.

Before describing the stages of the budget process within the Joint Congress Planning, Budget and Monitoring Committee, we stress that the expenditures that can be modified by congressmen represent only a small part of the budget. The bulk of expenditures must be compulsorily executed, such as personnel expenses, social security benefits, constitutional transfers to states and municipalities, interest payments and public debt amortization. Even the vast majority of current expenditures fall under this category, since there is no way of avoiding payment of water, electricity and cleaning bills, essential for government's activities functioning. Funds that can be used to sponsor public policies that meet congressmen's alleged electoral interests basically mean funds intended for investment.

When the bill reaches the committee, the general reporter first task is to prepare a preliminary report and submit it to a vote by all committee members. In addition to determining the deadlines for submitting amendments[4], this report also sets parameters for examining the proposal sent by the Executive. The report determines a series of linear cuts in all the spending lines that can be modified and selective cuts in specific spending lines. The cuts should obey the limits for canceling budget allocations by spending group. These limits are also established in the preliminary report. However, the amendments can only use the funds available by the cuts made within the set of budget units that comprise the subject

---

[4] We can divide parliamentary amendments into three different groups, depending on the proponent: individual, collective and reporter. Collective amendments are divided into three sub-types: amendments of state blocs, of regional blocs and of Senate and House committees. According to Pereira and Mueller (2002, p. 272), "Collective amendments have more chances of approval because they have the support not only of individuals, but of a group that reached a collective agreement. However, the admission of collective amendments does not mean that individual amendments have disappeared or lost importance. It is not uncommon for congressmen to enter into agreements with politicians in states and municipalities to propose individual amendments – known as 'rachadinhas' – disguised as collective amendments, since they involve submitting generic amendments to the budget, with no indication by the municipality of where the funds will be invested. After the amendment is approved, however, congressmen send to the ministry responsible for the project a list of municipalities that should be considered when it comes to distributing budget funds."

area of each sub-report manager post. This leads to, what in budget jargon is called, "purses of amendments" or "purses of sources". In other words, there is a fund limit in each sub-reporter post – determined by the preliminary report – which can be modified by the parliamentary amendments.

These "purses of amendments", defined in the preliminary report, are the cause of intense negotiations between party leaderships and the government's political articulators. Why? Because they are another important means of limiting Congress's scope to alter the executive's original proposal.

The general reporter preliminary report approval by the committee plenary triggers a new stage of sub-committees negotiations. Congressmen propose amendments to the Executive's proposal. After the deadline for submitting amendments expires, a sector reporter is chosen for each sub-committee. These reporters' task should is to determine the allocation of funds that corresponds to their piece of the pie. Part of the expenses must be compulsorily executed, as mentioned above, and will not be modified. Other expenditures are subject to negotiations with the general reporter during the preliminary report preparation phase, and are also exempt from any changes. This leaves the expenditures that can be negotiated, in order to meet the requests of individual parliamentary amendments. These amendments are examined and approved in each sub-committee, within the allocation limits imposed by the "purse of amendments".

The sector report managers have significant decision-making powers and their election requires intricate negotiations between the chairman of the committee and party leaderships. However, the sector reports will be approved if they comply with a minimum number of amendments of influential congressmen on the Joint Congressional Planning, Budget and Oversight Committee.

Once approved, the sector reports are sent to the general reporter for inclusion in his final report. There is then a new stage of negotiations, where previously unsolved interests may be satisfied. Everyone negotiates with the general reporter: the sector reporters, the Executive, the party leaderships and the other congressmen, on or off the committee. According to Santos *et al* (1997, p.110), the general reporter has a relative autonomy. He is

chosen by the group of leaders, where his immediate loyalty goes to. He also serves the so-called 'churches of reporters, and important parliamentary influences. In the sequence he also serve interest of other members of the committee and finally of other Congress members. Instead of being bound to these interests, the report manager can position himself among them and meet mainly the strongest interests and marginally, but sufficiently, the weakest, while preserving his autonomy and own interests.

Once negotiations are concluded and the final report approved, it is sent to both Congress houses, which do not make any major changes, either due to the excessively short time for a new round of negotiations, or the fact that the final report sufficiently represents the Congressmen and their parties interests. Once the report is reviewed and voted, the Annual Budget Bill is submitted to presidential sanctioning and finally sent to the Treasury Secretariat of Brazil's Finance Ministry, for effective execution.

The Annual Budget Law, approved by Congress and written into law by the President of Brazil, is not the end result of the distributive conflicts involved in the budget. During the budget execution phase, the government, through the Treasury, has instruments to alter the original proposal. The so-called *additional credits* pave the way for introducing new amendments to the budget, with potential for redistribution.

There are three types of additional credits: supplementary, special and extraordinary. Supplementary credits reinforce the budget allocations already included in the LOA whenever the original amount of funds is insufficient to conclude the project. However, this increase should obey the limits stipulated in the LOA[5]. Supplementary credits can be authorized by presidential decree, without Congress's authorization. Special credits must be used if changes in allocations exceed the limits established in the LOA or if the government plans to create a new project or activity. This requires a draft bill to be sent to Congress. Firstly, this draft bill should be approved in the CMPOF. However, the committee cannot alter the credit amount or the distribution of funds. Upon approval by the committee, the

---

[5] These supplementation limits have varied between 15% and 20% of the allocated budget amount.

draft bill is sent to Congress, where a simple majority is needed for approval. Extraordinary credits are only used in urgent and unforeseen events such as war, natural disasters or similar situations, and should be authorized by Provisory Measure.

In addition to the additional credits, the government has another instrument for altering distribution of budget funds. Although the Annual Budget Bill is the result of a series of negotiations between the government, congressmen and other influential agents, there is no guarantee that the projects approved and sanctioned by the President will actually be implemented – due to the `authorizing´ nature of the bill. This means that the Executive needs Congress´ permission to carry out any spending, but it is not obliged to enforce all the authorized expenditures. It is up to the government to determine which expenditures will be implemented, depending on the funds available at Brazil's Treasury.

Even though there is a broad range of interests involved in budget negotiations, the Executive has a relative control of the process. However, despite having the last word on arguments over budget allocation/distribution, the Executive does not have everything its own way. It is required to negotiate vetoes, spending cuts and additional credits in return for support for its key agenda policies. According to Santos et al (1997: 119), "It is reasonable to assume [...] that the support of congressmen is largely contingent on the agreement previously expressed in the instruments of the Annual Budget Bill, negotiated in the Joint Congress Planning, Budget and Monitoring Committee".

2 THEORIES ON BUDGET ALLOCATION

2.1. Congressional theories

Congressional budget theories emphasize the atomist actions of Brazil's legislators. The basic premise is that congressmen's aim is to channel as much funds as possible to their districts in order to receive electoral support. And congressmen with key roles in the budget process or who belong to high-ranking committees involved in the budget process are more equipped to benefit their voters. U.S. literature on budget allocation stresses the role of the committees. Two different theoretical lines support different arguments for the role of committees: the distributive theory and the informational theory.

According to the distributive theory (Weingast and Marshall, 1988; Shepsle and Weingast, 1987), committees are institutions equipped to handle the ´transaction costs´ incurred by support exchanges between congressmen's. This system thus splits decision-making power in jurisdictions where their members would have a significant advantage in imposing their preferences, even if these preferences are not consensual, from the point of view of most members. Under the informational theory (Gilligan and Krehbiel, 1987; Krehbiel, 1991), Congress as a whole grants certain powers to the committees as incentive for them to specialize, acquire information and pass this information on to Congress. With these powers, committee members can influence the structure of the proposal and enhance their prospects when it comes to budget allocation. Congress knows that its committee members will act this way, but it accepts the ´distributive loss´ as a cost due to asymmetrical information, which will be compensated by uncertainty reduction gains. Congressional theories thus state that committees have a strong influence on the budget, and, that influential members on these committees can favor their districts disproportional. Empirical studies on the U.S. budget process (Owens and Wade, 1984; Alvarez and Saving, 1997) show that districts whose congressmen hold seats on key committees receive, disproportionably, more funds. Evidently, this literature had the structure and institutions of U.S. Congress as its backdrop. Crossing these results over to the goals and analyses of this article should be done with great care, and we tackle this question in the following section.

To analyze the results of public budget policies and, more specifically, analyze federal government discretionary spending, we should limit our analysis to the elaboration of the Annual Budget Bill and its procedural passage in the Joint Congress Planning, Budget and Monitoring Committee. To do this, we must analyze the Executive's influence in drafting the law, and its influence in implementing the budget law.

As stated above, it is the responsibility of the Executive, not Congress, to initiate the budget bill procedures. The proposal is received by the chairmen (plus other senior members) of Congress and sent directly to the Joint Congress Planning, Budget and Monitoring Committee, which must present a final report containing all the amendments to the draft. From this perspective, the relationship between Congress and committee can be seen as an agent-principal relationship, but not in form suggested by the distributive and the

informational theories. To the Joint Congress Planning, Budget and Monitoring Committee is given the initial task of examining and including amendments to the Executive's draft and not the agenda power over budget proposals. In other words, the committee's aim is to produce a series of amendments aligned with the objectives of the median voter of Congress, and not to formulate any public policies. This breaking down of the power of agenda is, we believe, the first restriction in committee members´ ability to influence the allocation of federal budget discretionary spending funds.

The committee's ability to make changes is also limited by the approval of the general budget reporter preliminary report. As stated above, this report determines the amount of funds available for introducing amendments in each sub-committee. These sub-committees thus function as a part of the Joint Congress Planning, Budget and Monitoring Committee To these sub-committees is assigned the power to indicate the amendments beyond the Executive proposal, correspondent to their jurisdiction area, respecting the limits established by the general reporter. Thus, congressmen with seats on these sub-divisions can approve policies that disproportionably favor their voters at the expenses of the interests of the rest of Congress. However, there are countless ways for the amendments passed in the sub-divisions to be modified before approval of the budget bill. After the partial reports are approved, there is another round of negotiations over producing the general reporter final report. After the final report is approved, it is sent to Congress, which can also make changes. Thus, the control mechanisms to which congressmen are submitted are close to an open amendments proposals process. In other words, while the budget bill created by this process may even favor congressmen whose amendments were approved in the sub-divisions, the Annual Budget Bill is unlikely to stray too far from the interests of Congress as a whole.

Even approval and sanctioning of the Annual Budget Bill is no guarantee that congressmen's individual amendments will actually be implemented. As stated in the previous section, the budget bill does not impose, it authorizes. In other words, the government needs authorization from Congress to carry out any expenditure, but it is not required to implement all the authorized expenditures. The government may also use the additional credits to alter the proposal approved in the Annual Budget Bill. This takes

negotiations into the following year, and implementation of the amendments may depend on a series of issues not related to the topics being negotiated, for consolidation of the Annual Budget Bill.[6]

The Executive's exclusive right to initiate budget proposals, congressmen's small scope for making modifications and the discretionary nature of the government in meeting, or even modifying, the authorized budget all help reduce the institutional power of the Joint Congress Planning, Budget and Monitoring Committee. This absence of power and the high turnover of congressmen on the Joint Congress Planning, Budget and Monitoring Committee are important factors that reduce congressmen's capacity to channel disproportional funds to their districts in order to gain immediate and individual electoral support.

2.2. Party Theories on Budget Allocation

Contrary to congressional theories, party theories on budget allocation highlight the importance of political parties in the budget process. The independent and individual action of legislators is replaced here by action via parties seeking their electoral interests. Party literature signals three mechanisms of influence for political parties: electoral competition, ideological favoring and party alignment.

Electoral competition models (Lindbeck and Weibull, 1987 and 1993 and Dixit and Londregan, 1996) assume that voters´ preferences are simultaneously oriented by party affinities and public policies in their benefit. On the other hand, political parties commit to a platform of public policies and their aim is to win the election. The political balance that emerges in these models channels a greater amount of funds to districts, or states, with more swing voters.

---

[6] Pereira and Mueller (2002) state that it is the discretionary power, in the execution of the annual budget, that guarantees the Executive the possibility of making pressure over congressmen. According to Pereira and Mueller (Ibid., p. 274), *"It is the lack of synchrony between tax receipts and the established spending that enables the government to act strategically in conditioning the granting of individual amendments on the availability of funds. (...) The evidence presented in this article shows that the President of Brazil rewards congressmen who systematically vote in favor of government legislation, authorizing the execution of their individual amendments and, at the same time, punishing those who do not vote in favor of government legislation, by simply not authorizing their own individual amendments"*.

Cox and McCubbins (1986) challenge the results of the electoral competition models. According to them, these models rarely take into account the stability of the divergent electoral coalitions. Transaction costs in "vote buying" can vary between groups or states. If the costs or uncertainties about campaign promises efficiency in ensuring votes are lower among the groups that systematically support the party, this party will offer a political platform that will privilege its electoral circles and support the existing coalitions. In this case, funds will be oriented preferentially to the states where the policymaker obtains greater electoral support.

Alternatively, the reputation of political parties can be treated as a public good for its members. Cox and McCubbins (1993) suggest that members of a party collaborate with each other to boost their reelection chances or to ensure the election of one of their fellow party members. In this sense, budget allocation should be influenced by this cooperation between members of the same party. Empirically, party alignment between congressmen from different levels of government (President and state governor, for example) would influence budget allocation among states.

Again, we stress that this party literature is largely based on the institutions and specificities of the U.S. budget process. In the U.S., only two parties effectively contest the preference of voters and an electoral system comprising electoral colleges further reinforces the results established by the above models.

By empirically testing this set of theories for the U.S. case, Larcinese, Rizzo and Testa (2004) state that party alignment between the President and state governors significantly influences federal budget allocation. They also found evidence that the results of presidential elections are also influential. States supporting the party elected to government tend to receive more funds, as do States that are historically more volatile at presidential election time.

The crossover of these models to the Brazilian case needs to include an important caveat. All the above models assume that political parties are representative. Political parties should express social differences and represent the interest groups of society, as well as

being relatively disciplined, well structured and ideologically consistent. And this ´representative´ factor is discussed at length in the literature on the Brazilian party system.

Literature challenging the `representative´ nature of the Brazilian party system[7] presents numerous aspects to support its analyses, including the excessive number of political parties; their weaknesses – expressed by the fact that some of them disappear; congressmen's continues switches from party to another; the coalitions that contradict any ideological or programmatic consistency – parties that join forces, for example, to contest the election for a specific state government often compete against each other in other states and even in the presidential race; patronage, clientelism and the patrimonial nature of political parties; the individualism of congressmen, shown in their desire to forge personal links with their voters; and, finally, party indiscipline.

However, more recent research challenges these arguments. Studies on the ideological logic of electoral coalitions signal that these are not as random as public opinion and some political scientists would have believed. Novaes (1994) states that coalitions, most of the time, are made between parties with some ideological affinity: between right-wing parties, right-wing parties with center-right parties, between left-wing parties, and left-wing parties with center-left parties. Schmitt (1998) reinforces this idea by studying the coalitions in the House of Representatives elections in the period 1986 to 1994. According to the author, the inconsistent coalitions – left-wing parties allied with right-wing parties – totaled only 15.5% of total coalitions. And consistent coalitions – between parties with the same ideology – represented 65.9% of the total.

Although party migration remains high, the impact of changes on party representation in Congress is increasingly less (Nicolau, 1996). Also, this process of party migration is not completely random – changes mainly occur between parties of the same ideology (Schmitt, 1999).

---

[7] Mainwaring (1993, 1995, 1999); Mainwaring and Scully (1994); Ames (2001); Lamounier and Meneguello (1986); Kinzo (1993); Lima Jr. (1993a, 1993b)

We also highlight the study of Argelina Cheibub Figueiredo and Fernando Limongi (1999) on how members from different parties voted in the period 1989 to 1998. After assessing several key votes in the House of Representatives, the authors concluded that the parties showed strong cohesion and consistent programmatic content. Jairo Nicolau (2000) reinforces this idea by assessing party discipline in the 51st Legislature (1995-1998). According to the author, when ordered by their party leaders to vote in a certain way in Congress, congressmen showed a high degree of party discipline. Parties such as the PT and PC do B obtained almost 100% ´obedience´; the PFL, PDT, PSDB, PSB and PTB obtained around 90%; while the PPR/PPB, PMDB and PL were the most undisciplined with 80%.

From a political sociological standpoint, Rodrigues (2002) contributes to the debate with a study that seeks to analyze parties' social recruitment sources. The author assesses the social composition of Brazil's six main parties in the House of Representatives as elected in 1998 (PPB, PFL, PMDB, PSDB, PDT and PT) based on data on the professions, occupations, educational levels and financial wealth of the congressmen. The study concludes that there are differences between the social compositions, and that parties´ actions in Congress correspond to these differences.

3 DATABASE AND METHODOLGY

The positive theories of budget allocation presented in the previous sections provide assumptions on the allocation of public expenditures between states that can be tested empirically. The objective of this section is to present a methodology to be used in the empirical tests on the explanatory power of the theories presented above. The results of the tests and the final conclusions will be presented in the last section.

To analyze the discretionary spending of the federal government between Brazil's states, according to the logic of the theories previously discussed, we can list the following set of hypotheses to be tested empirically:

H1: congressmen with key positions on the Joint Congress Planning, Budget and Monitoring Committee influence budget allocation in favor of their own states (influence of the committees);

H2: funds are allocated in disproportional fashion in states with a higher proportion of voters with low party bias in the presidential elections (electoral competition);

H3: funds are allocated in disproportional fashion in states where the President has greater electoral support (ideological favoring);

H4: party alignment between congressmen from different levels of government favors receiving of budget funds (party alignment).

To test these hypotheses, we will use annual data on Brazil's 27 states in the period 1999 to 2003. Economic and demographic data on Brazil's states was taken from the Annual Household Survey (PNAD), census data and projections of the Brazilian government statistics institute (IBGE). Electoral data was taken from the Rio de Janeiro University of Research Institute (IUPERJ) and from information provided by the House of Representatives and the Senate. Budget data was obtained from two sources: the Treasury and the House of Representatives Budget Consultancy and Financial Supervision Division.

As dependent variables, we will test the federal government's voluntary transfers to state governments and to the Federal District (Distrito Federal). Under the terms of the Fiscal Responsibility Law, voluntary transfers are defined as the delivery of current or capital funds to another state, as cooperation, aid or financial assistance, which is not ordered by a constitutional or legal ruling, or the funds channeled to Brazil's Health System (*Sistema Único de Saúde – SUS*). Financial funds are passed on via signing of contracts, agreements, adjustments or other similar instruments for carrying out works and services of mutual interest to the three spheres of government. In addition to voluntary transfers, we will also test the uses of the funds set aside and assigned for public investments. We will add the funds invested directly by the federal government and the funds transferred to states and the Federal District. However, the data related to these funds present two important problems. The first problem relates to the direct investments of the federal government. We can

assume that the funds from investments transferred to the coffers of state governments and the Federal District are not influenced in any way by municipal governments. However, we cannot assume the same for direct investments[8]. In other words, municipal governments are an important variable for explaining the application of federal funds in states, and it is not being considered. The second problem relates to the regionalization of federal spending. Although the entire budget is effectively spent on states, only a part of these funds are, in accounting terms, regionalized. In 2003, for example, only 37% of the funds set aside and assigned were regionalized in the states.

Voluntary transfers and investment expenditures, both in per capita terms and real values (tax base-year = 2003), will be the dependent variables of the models to be tested empirically. The functional formula that will be used for the tests is shown in the equation below.

$$Yit = \beta t + \rho 1 Yit\text{-}1 + \theta 1 Zit + \theta 2 Wit + ci + uit \qquad (5.1)$$

$$i = 1, ... , 27 \quad t = 1999, ... , 2003$$

Where Yit represents the dependent variable to used for state i in year t; βt is a vector of dummy variables for the years 1999 to 2002; $Y_{it\text{-}1}$ is the dependent variable with a lag of one period; Z_{it} expresses the vector of economic and demographic variables used as control and W_{it} is the vector of explicative variables specific to the positive theories to be tested; c_i is a latent variable that expresses specific effects, fixed in time, of each state; and u_{it} are the idiosyncratic errors.

The use of dummy variables for the years 1999 to 2002 (*βt*) is aimed at controlling the influence of the factors that only influence the amount of federal government spending in each year, and not the distribution of spending between Brazil's states. The use of the

---

[8] Except for the Federal District (Distrito Federal), which does not have any municipalities.

lagged dependent variable (Y_{it-1}) is explained by the auto-regressive nature of federal spending. Agreements signed between the federal government and states, and public investment projects, may last for more than one year. In other words, despite being controlled by the other variables, the spending of the previous year influences the spending of the current year.

The hypotheses presented in this section will be tested by stages. Firstly, the economic and demographic variables will be tested on their own ($W_{it} = 0$). *Zit* expresses the vector of state economic and demographic variables that contain population, income per capita, unemployment rate, percentage of the population under 15 and percentage of the population above 64[9]. Then we will test the congressional and party assumptions, one by one, maintaining the vector of economic and demographic variables (Z_{it}) as control.

Congressional theories, as previously discussed, are expected to result in the favoring of groups, or regions, whose congressmen occupy key positions in the budget process. Here, in particular, politicians with key positions on the Joint Congress Planning, Budget and Monitoring Committee are better equipped to favor their voters and channel greater funds to their states. As explicative variables, we will include dummy variables for the senior positions of the Joint Congress Planning, Budget and Monitoring Committee: chairman, three vice-chairmen, Budget Guidelines Law reporter and general budget reporter, as well as the sector reporters. If the committee is in fact able to influence the allocation of budget funds, some or all of the θ_2 coefficients will be significantly positive.

We will then analyze the hypotheses of electoral competition and ideological bias together. As independent variables, we will use the percentage of votes obtained by Brazil's President in each state in the previous election and a dummy variable that shows if the President won the elections in that state. If the coefficients associated with these variables are significantly positive, it will corroborate the idea that governments favor, preferentially, their electoral circles. The variables for capturing the influence of electoral competition will

---

[9] In appendix 1 we include a complete list of the variables used in all the regressions.

be: the variance in the percentages of votes of the four best placed candidates in the previous presidential election in each state, plus a dummy variable indicating if the state altered its preference for president in the previous election. Significantly negative and positive coefficients, respectively, corroborate the hypothesis of electoral competition.

To test the assumption of party alignment, we will use dummy variables that indicate alignment between the President and state governors, plus variables measuring the alignment of the President and state governors with congressmen from the House of Representatives and the Senate. Alignments of the president with state governors, with congressmen from the state bloc in the House of Representatives and with senators from the state bloc tend to favor the channeling of funds to these states. Alignments between state governors and congressmen may also influence the budget. We will consider both the alignment of state governors with state blocs and alignments between state governors and congressmen in general. Significantly positive coefficients for these variables corroborate the hypotheses of party alignment.

Up to this point, the hypotheses resulting from the positive theories have been tested separately. In this case, important correlations may be being ignored. To resolve this problem, we will also analyze all these hypotheses together.

The method used for realizing empirical tests is that of Arelano and Bond (1991). This method is necessary due to the presence of the lagged dependent variable in the equation, which negates the hypothesis of strict exogeneity[10], necessary for estimating the data by fixed effects or random effects. The procedure used for this set of estimations was to obtain the first difference of the equations and use lagged levels of the dependent variable and of the predetermined variables as an instrument for the first differences obtained, in a structure of Methods of Generalized Moments. As a condition for identifying these estimations, we hereby assume that the explicative variables are sequentially exogenous, contingent on the

---

[10] And $(uit \mid xi1, xi2, ..., xiT, ci) = 0$; $t = 1999, ...,2003$. Where xit is the set of explicative variables in the period t.

unobserved effect c_i.[11]; And the post of the matrix of regressive factors of the differentiated equation is equal to the number of explicative variables used. To ensure the efficiency of the estimators, the regressions used estimators of the robust matrix of variance and covariance, the heterocedasticity and autocorrelation of the idiosyncratic errors.

In this method of estimation, we should also take into account the validity of the instruments used. The instruments should have little correlation with the idiosyncratic errors and be highly correlated with the regressors. To test the validity of the instruments, we will use the Sargan test on identification. As well as the Sargan tests, the tests of autocorrelation of the primary and secondary residues will also be reported.

4 RESULTS

4.1. Economic and Demographic Variables

Table 1 presents the coefficients obtained in the estimations using economic and demographic variables as independent variables. Two sets of tests were carried out. The first with the economic and demographic variables presented previously. And the second added a new variable to try to capture the effect of the over-representative nature that smaller States may have: senators per capita.

---

[11] And ($uit \mid xit, xit\text{-}1, ..., xi1, ci$) = 0; t = 1999, ..., 2003. Where xit is the set of explicative variables in the period t.

TABLE 1. Economic and Demographic Variables

	(1.1) TV	(1.2) TV	(2.1) INV	(2.2) INV
ESTIMAÇÕES POR ARELANO & BOND				
Y_{t-1}	0,035	0,143	0,270	0,247
	(0,26)	(2,01)**	(1,81)*	(2,43)**
população	5,73E-06	-2,39E-06	2,81E-05	1,34E-05
	(0,78)	(-0,39)	(2,68)***	(2,23)**
jovens (%)	-656,545	-574,320	-396,955	-337,381
	(-1,99)**	(-2,07)**	(-1,19)	(-1,18)
idosos (%)	1069,635	850,958	283,193	-195,581
	(1,60)	(1,64)	(0,52)	(-0,37)
Renda	0,035	-0,028	0,166	0,061
	(0,29)	(-0,62)	(1,61)	(1,04)
desemprego (%)	209,862	124,129	417,239	361,582
	(1,02)	(0,71)	(2,22)**	(2,20)**
Senadores PC		4,42E+07		8,02E+07
		(1,10)		(1,63)
Num. Obs.	81	81	81	81
Wald	82,08	116,07	113,71	185,08
Sargan	43,70	51,90	55,06	60,67
Prob > Chi2	0,9538	0,9381	0,6900	0,7524
Ar (1)	-1,93	-1,98	-2,19	-1,89
Prob > Z	0,0540	0,0476	0,0286	0,0590
Ar (2)	-0,14	0,4812	-0,92	-1,12
Prob > Z	0,8924	0,70	0,3570	0,2625

The results suggest that the lagged dependent variable is positive and significant, both for voluntary transfers and for spending on investments. This reaffirms the hypothesis that the preparation of the budget has a certain degree of continuity. Projects and agreements between the federal government and states may last for more than one year. Despite the possibility of this dynamism lasting for more than two years, the tests do not reject the hypotheses of non auto-correlation of the residues. Therefore, a single lag of the dependent variable was sufficient to capture the effect of previous spending on the current year's budget.

As well as the lagged dependent variable, economic and demographic variables were also relevant. We can differentiate the results obtained based on the variables that we intend to explain. For spending on investments, unemployment and population were relevant. As expected, the coefficient associated with unemployment was positive and significant for spending on investments. The higher the unemployment rate in the state, the greater the volume of funds per capita received. Population coefficients were also positive and

significant. In other words, more populous states received more funds per capita – which, to a certain extent, came as something of a surprise. Due to economies of scale in public investments, the bigger the population, fewer funds per capita are required. The proportion of the young and elderly and income per capita does not show any correlation to spending on investments in states.

The employment and population variables, which are relevant in explaining the investments, did not present significant coefficients in the regressions using voluntary transfers as a dependent variable. In these, only the proportion of the young population was relevant. The coefficient sign of the proportion of young people, in turn, surprised. States with a higher proportion of young people and schoolchildren received fewer funds per capita. Although the federative pact established in Brazil makes states and municipalities responsible for education (from nursery to high school), this does not justify the significantly negative coefficient sign obtained in the regressions.

Although we can see that some economic and demographic variables are correlated with spending in the states, it is impossible to distinguish, using the results presented here, if the public policies assessed were designed to meet objectives strictly associated with maximizing social well-being or if they were results of a political process where the people designing the policies were driven by electoral goals. Just as policies that aim to maximize social well-being would tend to channel more funds to locations where unemployment is more serious, congressmen with electoral aims would tend to favor these locations, since the increase at the margin of these public funds is greater in places with less fortunate socio-economic conditions. In an attempt to distinguish these effects, the regressions that seek to gauge the explicative power of the positive theories use economic and demographic variables as control.

4.2. The Joint Congress Budget Committee

Table 2 carries the results obtained in the estimations that use the variables that capture the influence of the Joint Congress Planning, Budget and Monitoring Committee as explicative factors. As in Table 1, the results again show that the dependent variable with a lag of one period is sufficient to capture the effects of spending in previous years on spending in the

current year. Furthermore, population, unemployment and proportion of young people were again significant in this new set of regressions.

TABLE 2. Influence of the Joint Congress Planning, Budget and Monitoring Committee

	(1.1) TV	(1.1) TV	(2.1) INV	(2.1) INV
ESTIMAÇÕES POR ARELANO & BOND				
Y_{t-1}	0,19	0,15	0,24	0,23
	(3,07)***	(2,45)**	(1,99)**	(2,12)**
presidente	-10,58	-1,99	-6,54	-4,17
	(-2,13)**	(-0,49)	(-0,83)	(-0,62)
vice1	1,80		7,84	
	(0,37)		(1,05)	
vice2	-16,77		-9,87	
	(-1,97)**		(-1,49)	
vice3	0,56		-0,87	
	(0,10)		(-0,15)	
relldo	6,78	1,38	8,46	5,01
	(1,62)	(0,30)	(1,00)	(0,64)
relor	-0,92	3,10	-11,87	-7,11
	(-0,12)	(0,54)	(-1,21)	(-1,05)
educ	2,33		10,14	
	(0,37)		(1,13)	
saude	-11,56		1,79	
	(-1,51)		(0,22)	
infra	3,26		2,13	
	(0,79)		(0,40)	
planej	-20,75		8,05	
	(-0,87)		(0,59)	
intnacma	-22,89		-16,03	
	(-2,29)**		(-1,26)	
agric	-4,18		0,52	
	(-0,83)		(0,07)	
população	-4,86E-06	-2,46E-06	1,36E-05	1,27E-05
	(-0,86)	(-0,44)	(2,73)***	(2,36)**
jovens (%)	-505,441	-574,01	-190,869	-304,89
	(-2,33)**	(-2,27)**	(-0,94)	(-1,14)
idosos (%)	1273,886	670,50	186,7572	17,93
	(2,4)**	(1,58)	(0,41)	(0,04)
renda	-0,084	-0,03	0,056	0,062
	(-1,43)	(-0,79)	(0,66)	(1,02)
desemprego (%)	44,253	111,83	252,257	353,02
	(0,38)	(0,74)	(2,77)***	(2,49)**
Senadores PC	5,34E+07	4,55E+07	7,66E+07	8,02E+07
	(1,27)	(1,12)	(1,59)	(1,66)*
Num. Obs.	81	81	81	81
Wald	371,84	119,44	401,04	176,62
Sargan	55,24	58,27	58,35	63,60
Prob > Chi2	1,0000	0,9982	1,0000	0,9915
Ar (1)	-2,73	-1,89	-1,93	-1,90
Prob > Z	0,0064	0,0591	0,0537	0,0580
Ar (2)	-0,29	0,75	-1,04	-1,10
Prob > Z	0,7708	0,4531	0,2968	0,2707

Although some of the variables used to gauge the influence of the committees proved significant, their coefficient signs were contrary to what was expected by congressional theories. Also, by using only the dummy variables for the chairman and report managers of the committee, key elements in the budget amendment process, the results produce statistically insignificant coefficients.

4.3. Electoral Competition and Ideological Favoring

Table 3 contains the hypotheses of electoral competition and ideological favoring. For each dependent variable, we tested each one of the two hypotheses separately and both together. The results suggest that, both for voluntary transfers and spending on investments, the variables that attempt to capture ideological favoring are not relevant. As observed in the correlations matrix, "pres_share" and "win_pres" are positively correlated. However, regressions considering each one of the variables on their own do not present significant results.

TABLE 3. Electoral Competition and Ideological Favoring

	(1.1) TV	(1.2) TV	(1.3) TV	(2.1) INV	(2.2) INV	(2.3) INV
	ESTIMAÇÕES POR ARELANO E BOND					
Y_{t-1}	0,161	0,141	0,170	0,241	0,212	0,218
	(2,92)***	(2,91)***	(3,45)***	(2,53)**	(2,24)**	(2,36)**
pres_share	-15,1698		41,544	-27,40576		52,549
	(-0,54)		(0,80)	(-0,75)		(0,59)
var4mais		-0,095	-108,939		44,91688	-125,6563
		(0,00)	(-0,96)		(0,61)	(-0,67)
win_pres	3,057167		4,230	9,181		9,948
	(0,57)		(0,85)	(1,34)		(1,24)
trpres_ult		6,690	5,874		14,310	12,697
		(1,93)*	(1,75)*		(2,68)***	(2,46)**
população	-1,54E-06	-2,88E-06	-1,05E-06	1,52E-05	1,23E-05	1,55E-05
	(-0,27)	(-0,49)	(-0,20)	(2,38)**	(1,85)*	(2,14)**
jovens (%)	-577,730	-589,859	-612,554	-361,008	-388,786	-410,276
	(-2,21)**	(-2,24)**	(-2,31)**	(-1,35)	(-1,40)	(-1,54)
idosos (%)	666,8239	755,4135	537,7249	-457,4722	-447,8654	-695,403
	(1,04)	(1,45)	(0,93)	(-0,72)	(-0,77)	(-1,12)
renda	-0,029	-0,041	-0,024	0,053	0,053	0,059
	(-0,72)	(-0,95)	(-0,54)	(0,94)	(0,93)	(1,02)
desemprego (%)	132,987	125,277	168,461	380,111	390,010	412,763
	(0,70)	(0,76)	(0,95)	(2,35)**	(2,56)**	(2,63)***
Senadores PC	4,53E+07	4,87E+07	4,79E+07	8,36E+07	8,98E+07	9,07E+07
	(1,13)	(1,21)	(1,24)	(1,71)*	(1,82)*	(1,90)*
Num. Obs.	135	135	135	135	135	135
Wald	52,32	52,66	51,9	59,34	61,83	59,78
Sargan	0,9980	0,9977	1,0000	0,9845	0,9724	0,9996
Prob > Chi2	97,08	116,14	130,49	160,32	230,45	149,72
Ar (1)	-1,95	-1,86	-1,84	-1,91	-1,91	-1,95
Prob > Z	0,0508	0,0631	0,0660	0,0565	0,0560	0,0513
Ar (2)	0,77	0,45	0,55	-1,02	-0,99	-0,89
Prob > Z	0,4435	0,6524	0,5807	0,3082	0,3206	0,3724

On the other hand, by testing the model of electoral competition on its own and together with the variables of ideological favoring, the coefficient associated with the "trpres_ult" variable was significantly positive, both for voluntary transfers and for spending on investments. This result indicates that states that switched their preferences in the last presidential election received more funds. Again, we can see here the correlation between the "var4mais" and "trpres_ult" variables. Although there is a negative correlation between both, regressions using each one of them do not alter the results.

It is important at this point to make some caveats to the results obtained for this set of regressions. Although the hypothesis of electoral competition has prevailed over the assumption of ideological favoring, the sample in question is constituted by the results of only two elections. With a relatively short sample, it is difficult to construct variables that show the ideological-party positioning of states. A few more years of presidential elections are necessary to differentiate, more accurately; ideologically well-defined states from states that alternate their electoral preferences.

4.4. Party Alignment

Table 4 contains the results obtained in the estimations using the various party alignments of state governors, President and congressmen as independent variables. Four groups of possible alignments were tested. In the first two groups, we used variables representing the possible alignments of state (and Federal District) governors. We began by using the party alignments of state governors with Brazil's President, with the House of Representatives and with the Federal Senate. Then the party alignment of state governors with the President and the alignments of state governors´ parties with the state benches in the House and the Senate. The third group of regressions used the variables of party alignment of President with state governors and the alignment between the ruling government coalition and the state benches in the House and the Senate as explicative variables. The fourth and last group of regressions used all the forms of alignment together.

The results, in general, corroborate the results established by the party theories. Having state governors aligned, in party terms, with the President, and senators from ruling government-coalition parties helps states obtain federal budget funds, either via voluntary

transfers or spending on investments. The alignments of state governors with Congress as a whole are not significant. But the alignment between state governors and senators from the respective state bloc helps funds to be obtained via voluntary transfers, although the same cannot be said when we examine investment funds.

TABLE 4. Party Alignments

	ESTIMAÇÕES POR ARELANO E BOND							
	(1.1)	**(1.2)**	**(1.3)**	**(1.4)**	**(2.1)**	**(2.2)**	**(2.3)**	**(2.4)**
	TV	TV	TV	TV	INV	INV	INV	INV
Y_{t-1}	0,11	0,07	0,15	0,14	0,25	0,24	0,21	0,23
	(2,24)**	(0,93)	(3,70)***	(3,17)***	(2,44)**	(2,48)**	(2,24)**	(2,57)***
g_p	10,80	7,48	8,31	11,48	13,26	7,46	10,55	14,40
	(2,41)**	(1,63)	(2,23)**	(2,53)**	(2,29)**	(1,33)	(1,27)**	(2,48)**
g_s	0,29			0,185	0,307			0,336
	(0,89)			(0,58)	(0,80)			(0,79)
g_c_aa	-0,03			-0,211	-0,150			-0,270
	(-0,20)			(-1,38)	(-0,87)			(-1,49)
g_s_uf		4,058		3,576		-0,969		-2,438
		(1,71)*		(1,78)*		(-0,33)		(-0,99)
g_c_uf		35,66		31,95		20,95		29,40
		(1,27)		(1,42)		(0,65)		(1,01)
colp_s_uf			2,693	2,275			5,084	5,046
			(2,05)**	(1,80)*			(2,12)**	(2,00)**
colp_c_uf			7,089	3,220			-13,26	-10,15
			(0,51)	(0,24)			(-0,66)	(-0,55)
população	2,17E-07	-2,32E-06	2,83E-06	-2,88E-07	1,96E-05	1,61E-05	2,1E-05	1,86E-05
	0,38	(-0,30)	(0,46)	(-0,04)	(2,91)***	(2,13)**	(2,88)***	(2,23)**
jovens (%)	-615,87	-607,43	-595,12	-618,91	-319,48	-333,31	-368,78	-317,79
	(-2,60)***	(-2,65)***	(-2,47)**	(-2,77)***	(-1,27)	(-1,37)	(-1,45)	(-1,32)
idosos (%)	564,06	774,77	516,69	563,36	-245,35	-243,85	-517,45	-214,56
	(1,26)	(1,67)*	(0,97)	(1,29)	(-0,49)	(-0,55)	(-0,80)	(-0,43)
renda	-0,05	-0,040	-0,007	-0,445	0,058	0,054	0,075	0,081
	(-1,37)	(-1,82)*	(-0,15)	(-0,91)	(0,85)	(0,89)	(1,37)	(1,27)
desemp (%)	148,09	147,36	138,72	153,09	312,96	334,65	347,09	316,10
	(0,96)	(0,98)	(1,05)	(1,10)	(1,86)*	(2,05)**	(2,41)**	(1,95)*
Sen PC	5,31E+07	5,57E+07	5,09E+07	5,51E+07	8,31E+07	8,46E+07	4,51E+07	9,12E+07
	(1,23)	(1,46)	(1,38)	(1,53)	(1,61)	(1,84)*	(2,05)**	(2,03)**
Num. Obs.	81	81	81	81	81	81	81	81
Wald	182,52	168,38	167,54	206,62	207,21	188,54	437,69	615,16
Sargan	57,00	54,44	54,34	54,21	64,77	64,07	63,48	62,67
Prob > Chi2	0,9988	0,9995	0,9995	1,0000	0,9886	0,9904	0,9917	1,0000
Ar (1)	-1,88	-1,87	-1,80	-1,79	-1,88	-1,90	-2,11	-2,13
Prob > Z	0,0601	0,0611	0,0714	0,0733	0,0596	0,0574	0,0348	0,0333
Ar (2)	0,17	-0,02	0,44	0,27	-1,21	-1,25	-1,13	-1,00
Prob > Z	0,8626	0,9841	0,6625	0,7834	0,2280	0,2111	0,2572	0,3166

4.5. All the Hypotheses Together

By testing the hypotheses separately, important correlations between the variables may be omitted, which would result in inconsistent estimations. To discover if the results previously obtained are robust to more complete specifications, Table 5 contains all the independent variables in the same regression. Two sets of regressions were estimated, one excluding all the variables that capture the influence of the Joint Congress Planning, Budget

and Monitoring Committee, which were not relevant in the previous tests, and another with the dummy variables for committee chairman and budget report manager.

TABLE 5. All the Hypotheses Together

ESTIMAÇÕES POR ARELANO E BOND				
	(1.1)	**(1.2)**	**(2.1)**	**(2.2)**
	TV	TV	INV	INV
Y_{t-1}	0,137	0,148	0,236	0,237
	(3,73)***	(4,29)***	(2,55)**	(2,54)**
g_p	10,68	9,59	13,63	13,43
	(1,88)*	(1,65)*	(2,01)**	(1,94)*
g_s	0,103	-0,093	0,097	0,060
	(0,26)	(-0,25)	(0,18)	(0,11)
g_c_aa	-0,176	-0,123	-0,196	-0,186
	(-1,23)	(-0,85)	(-1,08)	(-1,01)
g_s_uf	3,546	2,863	-4,240	-4,369
	(1,93)*	(1,33)	(-1,60)	(-1,48)
g_c_uf	35,97	39,56	39,10	39,85
	(1,76)*	(1,89)*	(1,53)	(1,50)
colp_s_uf	1,594	2,100	4,022	4,123
	(1,21)	(1,56)	(1,46)	(1,45)
colp_c_uf	7,286	10,32	-7,996	-7,527
	(0,49)	(0,71)	(-0,40)	(-0,37)
pres_share	-30,79	-0,829	70,97	75,52
	(-0,48)	(-0,01)	(1,15)	(1,14)
var4mais	-19,41	-79,66	-236,62	-247,38
	(-0,16)	(-0,64)	(-1,77)*	(-1,63)
win_pres	7,08	5,995	8,51	8,455
	(1,36)	(1,15)	(1,20)	(1,03)
trpres_ult	2,306	6,675	2,972	3,605
	(0,46)	(1,17)	(0,53)	(0,56)
presidente		-1,281		0,259
		(-0,27)		(0,03)
relor		13,56		2,333
		(1,79)*		(0,50)
população	3,36E-07	6,06E-08	2,08E-05	2,09E-05
	(0,46)	(0,01)	(2,15)**	(1,85)*
jovens (%)	-611,68	-607,74	-320,03	-320,76
	(-2,73)***	(-2,59)***	(-1,33)	(-1,29)
idosos (%)	615,52	525,78	-257,55	-278,07
	(1,29)	(1,21)	(-0,46)	(-0,44)
renda	-0,045	-0,181	0,089	0,093
	(-0,95)	(-0,41)	(1,38)	(1,42)
desemprego (%)	167,74	165,34	342,00	341,98
	(1,13)	(1,12)	(2,17)**	(2,17)**
Senadores PC	5,55E+07	5,51E+07	9,13E+07	9,12E+07
	(1,54)*	(1,61)	(2,08)**	(2,08)**
Num. Obs.	81	81	81	81
Wald	363,55	437,84	1892,39	3849,90
Sargan	51,62	50,26	58,06	56,30
Prob > Chi2	1,0000	1,0000	1,0000	1,0000
Ar (1)	-1,74	-1,68	-2,13	-2,13
Prob > Z	0,0817	0,0934	0,0328	0,0330
Ar (2)	-0,08	-0,11	-1,05	-1,06
Prob > Z	0,9394	0,9098	0,2943	0,2877

The results suggest that many of the variables deemed relevant when the hypotheses were tested separately remain relevant when all the hypotheses were tested together. Roughly 14% of the voluntary transfers and 23% of spending on investments are explained by the volume of spending in the previous year. Population, unemployment and proportion of young people are again important in the distribution of federal funds.

In terms of the hypotheses of positive theories, party alignments between the President and state governors continued to boost the amount of federal funds received by states, via both voluntary transfers and investments. Alignments between state governors and the respective blocs in the House and the Senate favor the receipt of voluntary transfers. However, when we consider the dummy variables of the chairman and general report manager of the Joint Congress Planning, Budget and Monitoring Committee, only the coefficient of party alignment between state governors and party blocs in state legislative assemblies remains significantly positive.

In terms of the variables that test the hypotheses of electoral competition, we noted that the variable "var4mais" was significant for spending on investments, although it was not relevant for voluntary transfers. Variables testing ideological favoring were not relevant for any of the dependent variables considered. This outcome reaffirms the results obtained in analyzing these hypotheses separately. However, here is an opportune moment to return to something previously discussed in this article. The available sample provides only a few election years to construct variables that differentiate, with adequate precision, ideologically defined states from ideologically undefined states. And, thus, the coefficients associated with these variables may be capturing different effects from the ones we intend to evaluate.

In terms of the influence of the committees, the coefficient associated with the dummy variable for the budget general report manager was significantly positive for voluntary transfers, which corroborates the hypotheses of congressional theories. However, this result is not observed when we analyze spending on investments.

5 CONCLUSIONS

The results presented suggest that some economic and demographic variables are significant for influencing the obtaining of discretionary spending funds from the federal government. States with larger populations and higher unemployment rates receive more funds per capita from federal investment. And, even considering the assumptions of the

congressional theories in the empirical tests, these variables continue showing positive and statistically significant coefficient signs.

Congressional theories were not sufficiently corroborated by the tests presented. Occupying key positions on the Joint Congress Planning, Budget and Monitoring Committee proved ineffective in enabling congressmen to influence the allocation of federal budget funds to their states. The wide representation of Congress the interests as a whole in the committee, plus the possibility of future amendments to the budget, appear to limit any influence that congressmen may have by occupying key posts on the committee. However, we need to make an important caveat here. Voluntary transfers and investment spending funds transferred to municipal coffers are not considered in the analysis of these tests. Congressmen may have interests, and House Representatives certainly do, in smaller electoral territories than an entire state. The effects of the influence in the committee may be underestimated, due to the fact that the sample does not include these transfers to municipalities.

The hypotheses of ideological favoring and electoral competition, tested together, showed a relative preponderance of the results previewed by the electoral competition models. However, important caveats should be made in relation to the results suggested. The sample available provides only a few electoral years. In particular, only two elections are available. Although the results corroborate the hypotheses of electoral competition, differentiating, with adequate precision, ideologically defined states from ideologically undefined states would require a few more years of democracy in Brazil.

The results presented also offer evidence in favor of the party theories. The alignments between President and state governors are significant in all the functional forms by which they were tested. Some party alignments between congressmen and the federal and state governments are also relevant. These results corroborate the arguments singled out by Cox and McCubbins (1993), which suggest that budget fund allocation may be influenced by the degree of cooperation between members of the same party and, in Brazil's case, cooperation between members of the same party alliance.

BIBLIOGRAPHY

AFONSO, José Roberto; MELLO, Luiz de. Brazil: An Evolving Federation. *In:* IMF/FAD SEMINAR ON DESCENTRALIZATION, Washington D.C.: IMF, 2000.

ALVAREZ, R. Michael; SAVING, Jason. *Congressional Committees and the Political Economy of Federal Outlay*. Public Choice, vol. 92, p. 55-73, 1997.

ARELLANO, M.; BOND, S. R.. *Some Specification Tests for Panel Data: Monte Carlo Evidence and an Application to Employment Equation.* Review of Economic Studies, vol. 49, p. 431-434, 1991.

AMES, Barry. *The Deadlock of Democracy in Brazil.* Michigan: Michigan University Press, 2001.

COX Gary W.; MCCUBBINS, Mathew D. *Electoral Politics as a Redistributive Game*. Journal of Politics, vol. 48, p. 370-389, 1986.

_____. *Legislative leviathan: party government in the House*. Berkeley: University of California Press, 1993.

DIXIT, Avinash; LONDREGAN, John. *The Determinants of Success of Special Interest in Redistributive Politics.* Journal of Politics, vol. 58, p. 1132-1155, 1996.

FIGUEIREDO, Argelina Cheibub; LIMONGI, Fernando. O Processo Legislativo e a Produção Legal no Congresso Pós-Constituinte. Novos Estudos CEBRAP, vol. 38, , março 1999.

GILLIGAN, Thomas; KREHBIEL, Keith. *Collective decision-making and standing committees: an informational rationale for restrictive amendment procedures.* Journal of Law, Economics, and Organization, vol. 3, p. 287-335, 1987.

KINZO, Maria D'Alva Gil. Radiografia do Quadro Político Brasileiro. São Paulo: Konrad-Adenauer-Stiftung, 1993.

KREHBIEL, Keith. *Information and legislative organization*. Ann Arbor: University of Michigan Press, 1991.

LARCINESE, Valentino; RIZZO, Leonzio; TESTA, Cecilia. *The power of purse: what do the data say on US federal budget allocation to the states? In:* SEMINÁRIO DE MICROECONOMIA APLICADA FEA-USP, São Paulo, jun. 2004.

LIMA JR., Olavo Brasil de. A Reforma das Instituições Políticas: A Experiência Brasileira e o Aperfeiçoamento Democrático. Dados, vol. 36, n.1, 1993a.

_____. Democracia e Instituições Políticas no Brasil dos Anos 80. Rio de Janeiro: Edições Loyola, 1993b.

LAMOUNIER, Bolivar; MENEGUELLO, Rachel. Partidos Políticos e Consolidação Democrárica. O Caso Brasileiro. São Paulo: Brasiliense, 1986.

LINDBECK, Assar; WEIBULL, Jorgen. *Balanced-budget redistribution as the outcome of political competition.* Public choice, vol. 52, p. 273-297, 1987.

_____. *A model of political equilibrium in a representative democracy*. Journal of Public Economics, vol. 51 p. 195-209, 1993.

MAINWARNING, Scott. Democracia Presidencialista Multipartidária: O Caso do Brasil. Lua Nova, n.28/29, São Paulo: Cedec, 1993.

_____. *Brazil. Weaks Parties, Feckless Democracy. In:* MAINWARNING, Scott; SCULLY, Timothy (eds.) *Building Democratic Institutions. Party Systems in Latin America.* Stanford: Stanford University Press, 1995.

_____. *Rethinking Party Systems in the Third Wave of Democratization. The Case of Brazil.* Stanford: Stanford University Press, 1999.

MAINWARNING, Scott; SCULLY, Timothy. A Institucionalização dos Sistemas Partidários na América Latina. Dados, vol. 37, n. 1, 1994.

NICOLAU, Jairo. Multipartidarismo e Democracia. Rio de Janeiro: Editora Fundação Getúlio Vargas, 1996.

_____. Disciplina Partidária e Base Parlamentar na Câmara dos Deputados no Primeiro Governo Fernando Henrique Cardoso (1995-1998). Dados, vol. 43, n.4, 2000.

NOVAES, Carlos Alberto. Dinâmica Institucional de Representação. Novos Estudos CEBRAP, vol. 35, março 1994.

OATES, Wallace E. *An Essay on Fiscal Federalism*. Journal of Economic Literature, vol. 37, p. 1120-1149, sep. 1999.

OWENS, John; WADE, Larry. *Federal Spending in Congressional Districts*. The Western Political Quarterly, vol. 37, p. 404-423, 1984.

PEREIRA, Carlos; MUELLER, Bernardo. Comportamento Estratégico em Presidencialismo de Coalizão: As Relações entre Executivo e Legislativo na Elaboração do Orçamento Brasileiro. Dados, vol. 45, no. 2, p.265-301, 2002.

SANTOS, Maria Helena de C.; MACHADO, Érika M.; Rocha, Eduardo N. De M. O jogo orçamentário da União: Relações Executivo-Legislativo na Terra do *Pork-Barrel. In:* Diniz, E.; Azevedo, S. (orgs) Reforma do Estado e Democracia no Brasil. Brasília: Editora da UNB/ENAP, 1997.

RODRIGUES, Leôncio Martins. Partidos, Ideologia e Composição Social: Um Estudo das Bancadas Partidárias na Câmara dos Deputados. São Paulo: Editora da Universidade de São Paulo, 2002.

SHEPSLE, Kenneth; WEINGAST, Barry. *When Do Rules of Procedure Matter?* The Journal of Politics, vol. 43, p. 206-221, 1984.

SHEPSLE, Kenneth; BONCHEK, Mark. *Analysing Politics: rationality, behavior and institutions.* New York: W.W. Norton, 1997.

SCHMITT, Rogério. Coligações Eleitorais e Sistema Partidário no Brasil. Rio de Janeiro, 1998. Tese de Doutorado – IUPERJ.

_____. Migração Partidária e Reeleição na Câmara dos Deputados. Novos Estudos CEBRAP, vol. 54, julho 1999.

WEINGAST, Barry; MARSHALL, William. *The Industrial Organization of Congress; or, Why Legislatures, Like Firms, Are Not Organized as Markets*. Journal of Political Economy vol. 96, no.1, p. 642-664, 1988.

APPENDIX 1: LIST OF VARIABLES

Dependent Variables:

All per capita and real values, with 2003 used as tax base-year

Source: Brazilian Treasury (STN).

TV: federal government voluntary transfers to state governments and Federal District (*Distrito Federal*);

Source: House of Representatives Budget Consultancy and Supervision.

INV: investment spending funds used by the federal government in Brazil's states and in the Federal District, subtracted from the funds transferred to the municipalities of the respective states;

Economic and Demographic Variables:

Source: Census data, forecasts of the population and the National Household Survey (PNAD) – IBGE

pop_UF: state population;

young: percentage of Brazil's population below the age of 15;

elderly: percentage of Brazil's population above the age of 64;

income: state income per capita;

unemployment: state unemployment rate;

SenatorsPC: the three senators divided by the state's population;

D99, ..., D02: dummy variables for the years 1999 to 2002;

Variables of the Joint Congress Planning, Budget and Monitoring Committee:

Source: House of Representatives.

chairman: dummy variable equal to 1 if the chairman of the Joint Congressional Planning, Budget and Oversight Committee belongs to the state;

vice1: dummy variable equal to 1 if the 1st vice-chairman of the Joint Congressional Planning, Budget and Oversight Committee belongs to the state;

vice2: dummy variable equal to 1 if the 2nd vice-chairman of the Joint Congressional Planning, Budget and Oversight Committee belongs to the state;

vice3: dummy variable equal to 1 if the 3rd vice-chairman of the Joint Congressional Planning, Budget and Oversight Committee belongs to the state;

relldo: dummy variable equal to 1 if the report manager of the Budget Guidelines Law (LDO) in the CMPOF belongs to the state;

relor: dummy variable equal to 1 if the general budget report manager belongs to the state;

educ: dummy variable equal to 1 if the sub-report manager of Education, Culture, Science and Technology, Sport and Tourism belongs to the state;

health: dummy variable equal to 1 if the sub-report manager of Health belongs to the state;

infra: dummy variable equal to 1 if the sub-report manager of Infrastructure belongs to the state;

planning: dummy variable equal to 1 if the sub-report manager of Urban Planning and Development belongs to the state;

intnacma: dummy variable equal to 1 if the sub-report manager of National Integration and Environment belongs to the state;

agric: dummy variable equal to 1 if the sub-report manager of Agriculture and Rural Development belongs to the State;

Electoral Variables:

Source: Electoral data of Brazil (1982 – 2002) Jairo Nicolau IUPERJ.

pres_share: percentage of votes that the incumbent president received in Brazil's states in the 1st round of his election;

var4mais: variance of the four best placed candidates in the first round of the previous election;

win_pres: dummy variable equal to 1 if the president won the last elections in the state in the decisive round (1st round in the 1998 elections and 2nd round in the 2002 elections);

trpres_ult: dummy variable equal to 1 if the state switched preferences for the president in the last election in relation to the previous election;

Party Alignment Variables:

Source: We provided our own source based on the electoral data provided by the IUPERJ and data on the party affiliation of congressmen provided by the House of Representatives and the Senate.

g_p: dummy variable equal to 1 if state governor belongs to party of the President;

g_s: number of senators belonging to the party of the state governor;

g_c: number of House Representatives belonging to the party of the state governor;

g_s_uf: number of senators from state bloc belonging to the party of the state governor;

g_c_uf: proportion of House Representatives in state bloc belonging to the party of the governor;

colp_s_uf: number of senators from the state bloc belonging to the governing-coalition parties;

colp_c_uf: proportion of House Representatives from the state bloc belonging to the governing-coalition parties;

APPENDIX 2: DESCRIPTIVE STATISTICS

Variável	Obs.	Média	Desv. Pad.	Mín.	Máx.
TV	135	35,118	38,710	3,731	214,904
INV	135	44,356	42,836	2,997	228,093
pop_UF	135	6,44E+06	7,70E+06	3,22E+05	3,92E+07
jovens	135	0,310	0,038	0,223	0,394
idosos	135	0,054	0,015	0,020	0,090
rtprinc	135	627,021	205,434	297,015	1285,781
desemp	135	0,071	0,029	0,023	0,204
SenadoresPC	135	1,50E-06	2,00E-06	7,65E-08	9,32E-06
D99	135	0,2	0,401	0	1
D00	135	0,2	0,401	0	1
D01	135	0,2	0,401	0	1
D02	135	0,2	0,401	0	1
D03	135	0,2	0,401	0	1
presidente	135	0,037	0,190	0	1
vice1	135	0,037	0,190	0	1
vice2	135	0,037	0,190	0	1
vice3	135	0,037	0,190	0	1
relldo	135	0,037	0,190	0	1
relor	135	0,037	0,190	0	1
educ	135	0,037	0,190	0	1
saude	135	0,037	0,190	0	1
infra	135	0,037	0,190	0	1
planej	135	0,037	0,190	0	1
intnacma	135	0,037	0,190	0	1
agric	135	0,037	0,190	0	1
g_p	135	0,230	0,422	0	1
g_s	135	14,719	7,660	0	26
g_c	135	75,970	29,437	0	106
g_s_uf	135	0,867	0,937	0	3
g_c_uf	135	0,254	0,132	0	0,545
colp_s_uf	135	1,459	0,929	0	3
colp_c_uf	135	0,525	0,159	0,125	0,875
pres_share	135	0,518	0,097	0,286	0,731
var4mais	135	0,218	0,050	0,063	0,329
win_pres	135	0,667	0,473	0	1
trpres_ult	135	0,267	0,444	0	1