MAJORITY ELECTIONS IN THE BRAZILIAN STATE CAPITALS: FEDERAL INDEPENDENCE AND INTERDEPENDENCE

Márcia Miranda Soares*
Aline Burni**

Abstract: This article explores the implications of the federal dimension of Brazilian electoral behavior. The international and national literature touts how the federation can shape political disputes within a country and influence voting outcome when voters choose their representatives in the different levels of government. In the Brazilian case, the federation is essential to electoral shaping. There are three autonomous levels of electoral competition—national, states, and municipalities—for the political offices of the executive and legislative branches, allowing parties to organize themselves into different territorial bases and connecting those bases in the process of the voting decision. To further the debate, this article explores the impact of national and state executive elections

^{*} Soares holds a doctorate degree in Political Science from the University Research Institute of Rio de Janeiro (Instituto Universitário de Pesquisas do Rio de Janeiro – IUPERJ). She is an adjunct professor in the Political Science Department at the Federal University of Minas Gerais (Universidade Federal de Minas Gerais – UFMG). Her recent publications include "Influência majoritária em eleições proporcionais: os efeitos presidenciais e governatoriais sobre as eleições para a Câmara dos Deputados brasileira (1994-2010)" ["Majority influence on proportional elections: the presidential and gubernatorial effects on elections for the Brazilian Chamber of Deputies (1994-2010)"] Revista Dados, v. 56, n. 2, 2013. Her areas of interest include federalism, intergovernmental relations, and public policy. E-mail: marciamsoares@uol.com.br.

^{**} Burni is a graduate student in Political Science at the Federal University of Minas Gerais (Universidade Federal de Minas Gerais) and holds the bachelor's degree in Social Sciences from the same institution. She is a researcher in the group "Opinião Pública: Marketing Político e Comportamento Eleitoral" ["Public Opinion: Political Marketing and Electoral Behavior"] of the UFMG, in which she participated in the following investigations: "Eleições Municipais de 2008 em Belo Horizonte" ["2008 Municipal Elections in Belo Horizonte"] and "Juventude, Participação e Voto" ["Youth, Participation, and Voting"], done in 2010. Currently, she participates in "Grupo de Estudos em Política Externa Comparada" ["Study Group of Comparative Foreign Policy"] at UFMG. E-mail: alineburni@gmail.com.

on municipal elections in the 26 Brazilian state capitals between 1994 and 2008. It seeks to determine through econometric analysis whether the vote for president and/or governor influences the vote for mayor. According to the results, the answer is yes. When a party shows good performance in the vote for president or governor, the vote for mayor is positively impacted. Additionally, the gubernatorial election has a greater influence on the majority of municipal elections. The findings confirm the importance of federal electoral connections to understanding voting, which presents distinct patterns between the parties and the federal entities and merits additional research and publications.

Keywords: Electoral behavior. Brazilian federalism. Municipal elections.

1 Introduction

Electoral behavior is an oft-studied theme in political science, which points to different explanatory dimensions of the voting decision. A little-considered dimension is federative. The federal structure impacts voting behavior when defining more than one autonomous sphere of power in a national State, extending voters' possibilities when choosing their political representatives. For the composition of autonomous governments, voting occurs in different territories, which signifies voters' independence in choosing candidates and parties that will govern at the national and subnational levels. Nonetheless, choices are made by the same set of voters. A voter in a locality chooses his or her mayor but also votes for governor and president; he or she submits to and evaluates the performance of local government but is also impacted by and evaluates the actions of state and national governments. This leads to another aspect of elections in federal nations: the interdependence between the processes of choice.

Brazil is a federal State with three autonomous levels of government—national, state, and municipal—as established in the 1988 Federal Constitution. This tridimensional federal structure has important impacts for the country's electoral and partisan dynamics, not only because each level allows for a specific electoral arena of partisan

competition but also because there are mutual political influences among these levels. Combined with a democratic, presidential, and multiparty political setting, federalism enables the voter to choose his or her presidents, governors, and mayors with an adequate degree of independence. This means that the voter is free to choose different—or even opposing—parties to govern the municipalities, the states, and the nation. Even so, political influences operate among levels of governments in elections. A political party with a strong performance in national and/or state executive elections can boost the votes of its members in municipal elections, which can refortify the party in the sense that by strengthening itself at the municipal level, the party can also widen its municipal electional base for state and national elections.

Accordingly, federalism seems to point to electoral and partisan dynamics that combines independence and interdependence among the levels of government. This combination is beneficial because independence is an important factor in maintaining the political autonomy of each federal entity, but some interdependence can also foster intergovernmental cooperation in the definition and implementation of public policies.

The objective of this study is to explore this duality in the electoral dynamics of the Brazilian federation, considering what the literature says about the possible impact of federalism on electoral behavior. After the literature review, this work seeks to identify patterns of autonomy and interdependence in the election of the different Brazilian federal entities through a descriptive and econometric analysis of the vote for political parties in the 26 Brazilian state capitals for the offices of mayor, governor, and president in the period 1994-2008. This choice of period is the result of changes in the electoral calendar after 1994, when national and state elections became concomitant and separate from municipal elections. The objective is to determine whether municipal majority elections are influenced by the national and state majority elections that precede them.

This article is organized into four sections. The first is dedicated to the presentation of concepts and explanatory dimensions in voting in accordance with the specialized literature. It will highlight the marginality of the federal dimension in the literature that seeks to explain electoral

behavior. The second section reviews aspects of the literature associated with the federal component in explaining voting behavior. That section highlights the factors identified by the literature related to the impact of federalism on both the parties and Brazilian elections. The third section presents a descriptive analysis of the voting patterns in the Brazilian state capitals during the period 1994-2008, considering the elections for president, governor, and mayor. The fourth section contains an econometric analysis that seeks to explain the extent to which the parties' mayoral votes are influenced by majority elections for president and governor. Are strong parties in presidential and/or gubernatorial elections also strong in mayoral elections? The findings confirm the theory of national and state influence over municipal elections. This article also includes final considerations, synthesizing and balancing this work's findings and positing new perspectives for study.

2 What explains partisan voting in democratic regimes?

Studies about electoral behavior seek to understand how citizens behave with respect to the phenomenon of the "political world" and, more to the point, how voters decide on their vote. (BORBA, 2005). In this sense, important questions arise, such as the following: Which devices are triggered by the voter when making a voting decision? What is the role of parties in the electoral moment? What is the importance of the political campaign? How are citizens' attitudes and ideological positions and their electoral choices linked? What is the importance of social and economic context for voter behavior?

The institutionalization of electoral behavior as an area of knowledge within the field of political science involves three fundamental theories that arose during the mid-twentieth century. These theories were structured in schools of thought and encouraged the development of research and the formation of a theoretical framework for the new area of scientific investigation. Nonetheless, they are not treated as harmonizable and incremental explanations, but instead, different analytical perspectives considered them capable of debate and supplementation, as has occurred in studies and investigations of electoral behavior.

At the end of the 1950s, the so-called Michigan School developed the psychological explanation of voting, in which the individual is the unit of analysis that explains both political behavior and the voting decision. The methodology advocated to capture the elements of the shaping of individual preferences in the survey, which uses as its main research tool the performance of targeted individual interviews using the data source of a questionnaire. This questionnaire is given to a representative sample of the population. The data obtained and analyzed provide standards of conduct that are generalized to the entire population. The following parameters apprehended by this school to understand vote definition appear as important: the level of political involvement, political alienation and political party identification, and elements that are influenced by educational level, age, class position. ethnic origin, religious origin, demographic origin, and institutional conformations (primarily the party system). These aspects, combined with the process of the primary socialization of the individual—usually from the family home—result in attitudinal "fields" that guide the voter's interests and political preferences. From this analytical framework, the Michigan School argues that political-party membership comes before the choice of candidates, emerging from primary socialization and exhibiting an emotional component. The degree of party loyalty controls the direction of the vote, and the higher the degree of party loyalty, the lower the voter response to the momentary appeals of electoral campaigns. Another postulate of this theory is that participation and electoral volatility arise out of not only distribution of the degree of membership but also partisan and political alienation (BORBA, 2005; FIGUEIREDO, 2008).

Another significant effect of the 1950s was the publication of the seminal book *Voting*, by Berelson et al. (1954). That book introduced the sociological perspective, which highlights the importance of both the social context and the group context in understanding voting. This perspective argues that voting is an individual action that results from social interactions and is critical for understanding the context in which the individual is to understand his or her electoral decision. Thus, this macro-social theory posits that electoral behavior would be a function of nature, of the density of interactions in which individuals are

involved, of the opinions formed out of those interactions, and of society's level of socioeconomic development. The primary perspective adopted by the theorists of the sociological school explains electoral results from social data in different regions (FREIRE, 2001). The sociological school highlighted socioeconomic, demographic, and occupational variables (BORBA, 2005). Unlike the psychological school, the focus is no longer the individual: party identity is viewed as a representative contract of social interests between voters and parties (or candidates). In summary, the sociological theory argues that the voting decision depends on the nature of social relations in which the individual is involved, the political identity of the group to which he or she belongs and the campaigns' momentary appeals.

The rational choice or "economic" theory of voting, also established at the end of the 1950s, has its origins in Anthony Downs's work, An economic theory of democracy (1957). This theory takes into account the individual perspective to explain voting but highlights the instrumental and strategic components of political behavior, similar to the conduct of individuals acting in the market. The political sphere is known as a "political market" in which politicians aim to "sell their products" and citizens assume the role of "consumers" who select the "products" that will maximize their gains (BORBA, 2005). The voter is the homo economicus, endowed with rationality to establish cost-benefit calculations that guide his or her actions. This voter considers not only information about parties and candidates but also his or her satisfaction with economic, individual, group, and national realities to decide the direction of his or her vote. Therefore, the voting decision suffers from both economic effects and from the voter's assessment of the government and its policies (so-called retrospective voting). The voter's answers to opposition appeals vary inversely with his or her degree of satisfaction with the current officeholders. Conversely, responses to situationist appeals vary directly depending on the electorate's degree of satisfaction with the present officeholders (FIGUEIREDO, 2008). The voter can also make a prospective evaluation, seeking to identify which candidates have the best ability to offer policies that cater to his or her interests. The theory of rational choice explains voting as resulting from economic interests, differing from the other schools, which emphasize the relevance of the subjective identification of class or position in the social system. The theory does not discount that social class is relevant—albeit indirectly—as a factor that defines individuals' economic interests. Membership in the same social class tends to create similar positions about inflation, variation in individuals' income, and unemployment, among other issues, which impacts how one votes.

These three theories had great influence in works on electoral behavior in Brazil. This area of research began to develop in the 1950s with the pioneering work of Azis Simão (1955), who addresses the blue-collar vote in São Paulo. Thereafter, the findings of this research area intensified during the 1960s and the 1970s through the work of Gláucio Soares (1973), the collections edited by Bolivar Lamounier and Fernando Henrique Cardoso (1975), and the work of Fábio Wanderley Reis (1978). During this period, the studies relied heavily on the postulates and variables of psychological and sociological theories to understand Brazilian electoral behavior. More recently, Marcus Figueiredo (1991) has incorporated the basics of the rational theory of voting.

Throughout the second half of the twentieth century and the beginning of the twenty-first century, several investigations on electoral behavior have applied analytical instruments present in the three theories. Some adopted one school only as a reference, and others sought to integrate the different paradigms (BORBA, 2005). Additionally, criticism of the models to explain voting emerged. With respect to the psychological school, the central criticism revolves around the failure of party identity to act as a fundamental variable to explain electoral behavior. This criticism is especially important in the current context, in which the parties suffer from a crisis of representation (MANIN, 1995), decreasing the proportion of voters who have strong party identities. Individuals no longer trust the political entity as the primary institution of channeling and representing their interests. With respect to the sociological model, according to Freire (2001), the importance attributed to integration and social cleavages as predictors of voting has been questioned. At the individual level, macro-social-level variables are more significant than one's own political attitudes. Social cleavages have also suffered profound changes throughout history, and therefore,

the explanatory social contexts of the vote in the twentieth century may not be observed with such clarity in the present. That same author criticizes the economic theory of voting, which at its core is the concept of voting as merely an instrumental action, thus disregarding voting's ideological and subjective components. There is also an informational aspect. The theory of economic voting makes the erroneous assumption of perfect information about the government, the economic situation, the interests represented by the parties, etc., which constitute the basis for rational behavior. Nevertheless, it is known that the information available to the voter to make his or her voting decision is imperfect and incomplete.

In the quest to explain voting, the national and international literature contains few studies devoted to understanding the influence of the federalist political-institutional arrangement on voters. In the Brazilian case, which provides the voter with three different levels of government composition—and thus voting decisions—it is undeniable that federalism is a relevant variable in the political-electoral dynamic. It is worth asking: how does the Brazilian voter behave in each of these spheres of decision? Does he or she consider the government's performance at the different administrative levels to make his or her voting decision? Or is it that the citizen replicates his or her party preferences at all levels? These are the questions that motivate this study, which does not pretend to exhaust the subject but only to stimulate debate in light of the explanatory theories of voting, focusing on the impact of the Brazilian federal arrangement on voting.

3 The federal dimension of electoral behavior and partisan voting in Brazil

At the international level, the works that analyze the federal dimension in voting include that of Hamann and Pollock (2010). Those authors compare Spain and Germany and show how their distinct institutional aspects can influence voting behavior related to turnout rates in elections at the national and regional levels. In Germany, the Upper House corresponds to one instance of effective representation of the *Landers* (subnational units). The regions are represented in the

Upper House, through which they participate in the country's administration and legislation. In Spain, there is no similar mechanism for representation of the regions. The authors' thesis is that because of the greater importance of the regional (subnational) elections for elaborating public policy at the national level, rates of voter turnout at the regional level in Germany are more closely connected to voter turnout rates at the national level than they are in Spain. In other words, in Germany, when the rate of turnout is high in national elections, it also tends to be high in regional elections. In turn, when the rate of turnout is low in national elections, the tendency is similar in regional elections. The point is that given the correlation between regional elections and national policy, the factors that affect turnout at the national level tend to affect regional elections.

In Brazil, few studies of electoral behavior focus on the federal dimension of voting. Generally, those books consider the Brazilian federation only briefly, belying the importance of this form of the government. A large portion of the most recent studies about electoral behavior highlight the voting decision and its implications for the party system at only one level of representation without connecting the electoral processes of the different federal entities. Thus, we have works that investigate at the national level (CARREIRÃO; KINZO, 2004; HOLZHACKER; BALBACHEVSKY, 2007), at the state level (BORGES et al., 2011), and at the municipal level (LAVAREDA; TELLES, 2011; BARRETO, 2012; FLEISCHER, 2002).

Other Brazilian studies that examine the federation to understand electoral dynamics highlight party congruence between state governors and the federal government. They show that when the state governing coalition coincides with the federal governing coalition, the candidates from these parties benefit from a substantial competitive advantage, relative to opposition candidates, in elections for the Chamber of Deputies. Conversely, where there is no party correspondence between the governments at two levels, the opposition party can take advantage of access to federal programs and patronal resources to better their chances for election to the Chamber (BORGES et al., 2011).

The federation is featured in some political literature of the early 2000s, the focus of which is understanding the party system and behavior

in the Brazilian national legislature. U.S. scholars, so-called Brazilianists such Mainwaring (2001), Ames (2003), and Samuels (2003), argue the thesis that federalism is but one element in the country's political configuration (in addition to those of presidentialism, multipartism, and the proportional vote) contributing to low party identity and the personalism of voting, resulting in fragmentation and low levels of discipline in the national political parties, given that parliamentary behavior is oriented to state and local elections. The result is that it is difficult for the national executive to implement his or her agenda.

Samuels (2003) centers his criticism of the Brazilian federalism on gubernatorial power over the electoral process for the Brazilian Chamber of Deputies. Through a study that utilizes the concept of *coattails*¹⁰ to refer to the effect of the president and the governor on federal deputy elections, that author concludes that governors have a greater influence on voting for the lower chamber than for the presidency. The author's conclusion is that gubernatorial *coattails* prevail over presidential *coattails* and that the power of the governors in national politics is derived from their *coattails*, to the detriment to presidential political power.

Soares (2013) analyzes the majoritarian effect of the occupation and nomination for the positions of president and state governor on proportional election to the Brazilian House of Representatives during the period 1994-2010. The results of that study show no impact from the occupation of majority seats, whether the president or governor is in the majority, on the parties' votes for federal deputies, which contradicts Samuels's thesis about governors' power in national legislative elections. However, it is observed that strong candidates for either the presidency or state governorships boosts the vote for these same party's federal deputies, given that gubernatorial *coattails* are more significant than the presidential *coattails*. Thus, the author concludes that there is a federal dimension to elections for federal

¹⁰ Coattail refers to the rear flaps of a cutaway that, being too long, drag items as they move. The term has been adopted by American political scientists to denote the power of popular candidates or parties over their supporters or allies in different electoral competitions.

deputies that relates to the party's performance in presidential or gubernatorial elections in the Brazilian states. The better the performance in elections for these positions, the more likely the party is to receive votes for the national legislature from their constituencies, i.e., in the states of the federation.

Carreirão and Kinzo (2004) advocate the importance of parties in the electoral process through the study of partisan preference and rejection related to presidential voting during the most recent period of Brazilian redemocratization (1989 to 2002). Analyzing presidential election data and public opinion polls during that period, the authors show that party preference is an important element in identifying where on the ideological spectrum the party for which the voter will vote is found, although it is not necessarily possible to predict how the voter will vote. Moreover, the rate of party preference has a certain relationship with the level of education (it is higher among voters with a high school degree: on average, this contingent, 51% of voters, expressed a preference for some party). Partisan rejection, which signifies a voter's indication of one party for which he or she refuses to vote, seems to have a clear link with the vote because in more than 98% of cases in which a voter rejected a party, he or she did not vote for the candidate of that party.

In the municipal environment, the work of Telles et al. (2011) considers the federal aspect in analyzing the 2008 municipal elections in Belo Horizonte. In those elections, the governor of the state of Minas Gerais (Aécio Neves of the Brazilian Social Democracy Party [Partido da Social Democracia Brasileira—PSDB]) and the mayor of the state's capital (Fernando Pimentel of the Worker's Party [Partido dos Trabalhadores—PT]) signed an alliance in favor of the candidate of the Brazilian Socialist Party [Partido Socialista Brasileiro—PSB], Márcio Lacerda, despite the heated rivalry between the PT and the PSDB at the national level. The authors note that federalism has become the subject of political campaigns, sometimes to assert the autonomy of alliances at the subnational levels and at other times to emphasize a different way of doing politics in Minas Gerais, marked by reconciliation and the prevalence of general interests over the logic of individualistic policy. The repercussions and unfolding of this

alliance, which was broken during the 2012 municipal elections, highlight that strong political differences between national and subnational alliances can be problematic and can have an effect on both the election campaign and the voter's decision. The 2008 alliance and the path toward its breaking in 2012 link two central aspects that we want to emphasize in this study: autonomy and interdependence between the electoral and political processes of the different levels of power in the Brazilian federation.

Also on the municipal level, and focused on federal electoral linkages, Almeida and Carneiro (2008) point to partisan linkages between the local political arena and the state and national political arenas. They propose that partisan organizations at the various levels of the federation allow for the partisan articulation of municipal policy at the higher levels. Through econometric analyses of state and national election data from 1994 and 1998 and of municipal election data from 1996 and 2000, the authors identify the following:

the existence of links between levels in the party system, both in the majority system and in the proportional system [...]. There are significant effects on the vote for mayor and president on the vote for governor; of the vote for mayor and governor on the vote for federal deputy; of the vote for mayor, governor, and federal deputy on the vote for state deputy; of the vote for governor and state deputy on the vote for mayor; and of the vote for mayor on the vote for city councilor (ALMEIDA; CARNEIRO, 2008, p. 424).

Similar to Almeida and Carneiro's work, but using a different methodology and a more limited scope, the following sections of this study seek to present and to analyze possible influences on national and state majority elections, on presidential and gubernatorial elections, and on mayoral elections in the Brazilian capitals. The objective is to determine the extent to which the parties' votes for mayor can be predicted from the electoral performance that they obtained in previous presidential and gubernatorial elections.

4 Partisan strength and majority elections in the Brazilian capitals (1994-2008)

Brazil takes a particular form among the federal experiences and has three autonomous levels of government. The country consists of one nation, 26 states, one federal district, 11 and 5,565 municipalities (IBGE, 2009). This configuration results in a complex system of political representation that involves majority elections for the executive offices at three levels: one president, 27 governors, and 5,565 mayors. In addition, there are proportional elections for the legislative offices: 513 federal deputies, 1,059 state deputies, and 51,976 city councilors (TSE, 2012). At the national level, the legislative power is bicameral, and there are majority elections for the 81 members of the Senate, which is composed of three partisan senators for each State and for the Federal District

This intricate electoral network involving the race for thousands of positions becomes even more complex in a political system that combines multipartism and an open list for choosing candidates for proportional seats. Thus, electoral behavior directly suffers from the influence of both the federal organization and other institutional aspects of the country's political organization. Additionally, two changes that occurred in the 1990s are important to consider with respect to the federal dimension of electoral behavior in Brazil. The first related to the electoral calendar. National and state elections have become concomitant and are separated by two years from the municipal elections. The second related to the introduction of reelection for executive offices in the 1998 elections, which enabled presidents, governors, and mayors to renew their duties for only one subsequent term.

As we have observed, we can consider the correlation among elections at different levels of the federation from the perspective of

¹¹ The Federal District (Distrito Federal – DF) is a hybrid political entity, mixing characteristics of state and municipality. It has one governor and 24 district deputies who are responsible for the combined administration of the DF and Brasília. Brasília, which corresponds to the same geographic space as the DF, is the seat of both the district government and the capital of the Federal Republic of Brazil.

different analytical focuses: the influence of presidential and gubernatorial elections on the election for federal deputies (SAMUELS, 2005; SOARES, 2012); and the influence of national and state elections on partisan disputes in the municipalities (CARNEIRO; ALMEIDA, 2008). The choice of focus is important because of the tangle of possibilities present in an election scenario with so many offices in dispute, which involves so many parties, and which is structured into three territorial levels of power.

This work focuses on the majority elections for president, governors, and mayors in the 26 Brazilian state capitals in the period 1994-2008. The objective is to explore the influence of the elections for the offices of state and national executives on party performance in mayoral elections. The choice of majority elections is justified because majority elections mobilize more resources and interest on the part of the electorate, which leads us to believe that federal electoral linkages can be more easily grasped from this perspective. Given that the presidential and gubernatorial elections occur concurrently and precede municipal elections by two years, we can take as a central proposition that a party's good performance in a municipality during the presidential and/or gubernatorial elections will have a positive impact on its performance in the mayoral elections in the same municipality.

The capitals were chosen as an analytical focus because they correspond to a restricted number of municipalities with quite similar characteristics in terms of populations, economics, and politics. This choice also permits a more accurate analysis of federal election linkages because it focuses on major Brazilian municipalities.

The selected period, from 1994-2008, encompasses the national and state elections of 1994, 1998, 2002, and 2006, and the municipal elections of 1996, 2000, 2004, and 2008.

The universe that we analyzed comprises the fourteen major parties that stood for the majority municipal elections. The cutoff criterion was the average overall performance of the parties in the Brazilian capitals, in the mayoral elections, above 5%. Table 1 shows the parties that contested municipal election during the studied period and their average performance—in each election and during the entire period—in the capitals in which they competed in mayoral elections.

Displayed in decreasing order of average overall performance, in the upper part of the table, we have shaded the fourteen parties that are the objects of our analysis. When combined, these parties obtained more than 90% of the average overall vote for mayor and governor and 88% of the vote for president. The other parties are considered tiny (despite their considerable consideration in the majority elections) and show very low vote results. This selection allows us to center the analysis on the relevant parties that are competitive and that win the majority of elected offices.

Table 1- Political parties in majority municipal elections. Average votes in the capitals (1996 to 2008).

	Party	1996	2000	2004	2008	Period	
Acronym	Name	Electoral Number	Average Vote (%)				
PT	Worker's Party [Partido dos Trabalhadores]	13	26.0	29.8	31.5	30.0	29.3
PSDB	Brazilian Social Democracy Party [Partido da Social Democracia Brasileira]	45	26.3	25.3	29.3	29.6	27.6
PMDB	Brazilian Democratic Movement Party [Partido do Movimento Democrático Brasileiro]	15	25.4	23.3	19.8	30.4	24.7
PSB	Brazilian Socialist Party [Partido Socialista Brasileiro]	40	15.5	24.3	20.3	34.5	23.6
PFL/DEM	Liberal Front Party/Democrats [Partido da Frente Liberal/Democrata]	25	26.6	23.4	17.6	16.2	20.9
PTB	Brazilian Labor Party [Partido Trabalhista Brasileiro]	14	11.3	19.5	22.8	23.8	19.4
PP/PPB/ PP(1)	Reform Progressive Party/Progressive Party of Brazil/Progressive Party [Partido Progressista Reformador/ Partido Progressista Brasileiro/ Partido Progressista]	11	20.1	15.8	16.7	24.3	19.2
PDT	Democratic Labor Party [Partido Democrático Trabalhista]	12	21.6	17.9	16.6	11.3	16.8
PSD	Social Democratic Party [Partido Social Democrático]	41	2.9	30.2			16.5
PC do B	Communist Party of Brazil [Partido Comunista do Brasil]	65	5.0	16.0	11.1	17.7	12.4
PL/PR (2)	Liberal Party [Partido Liberal]	22	1.0	10.3	15.2	22.9	12.3
PPS	Popular Socialist Party [Partido Popular Socialista]	43	1.6	16.3	21.6	9.9	12.3
PRB	Brazilian Republican Party [Partido Republicano Brasileiro]	10				11.5	11.5
PV	Green Party [Partido Verde]	43	0.9	2.9	3.1	25.8	8.2
PMN	National Mobilization Party [Partido da Mobilização Nacional]	33	2.0	0.0	0.5	9.6	3.0
PRONA	Party of the Reconstruction of the National Order [Partido de Reedificação da Ordem Nacional]	56		1.4	3.8		2.6
PSL	Social Liberal Party [Partido Social Liberal]	17	0.2	6.4		0.5	2.3
PSOL	Socialism and Freedom Party [Partido Socialismo e Liberdade]	50				2.2	2.2
PRN/PTC (3)	National Reconstruction Party/Christian Labor Party [Partido da Reconstrução Nacional/Partido Trabalhista Cristão]	36	0.7	0.1	2.5	1.3	1.9
PSC	Social Christian Party [Partido Social Cristão]	20	1.5	0.3	1.5	2.7	1.5
PRP	Progressive Republican Party [Partido Republicano Progressista]	44	1.7	0.9	1.4		1.3

PSDC	Christian Social Democratic Party [Partido Social Democrata Cristão]	27	1.1	0.2	0.4	2.6	1.1
PTN	National Labor Party [Partido Trabalhista Nacional]	19	0.0	0.4	1.8	1.8	1.0
PST	Social Labor Party [Partido Social Trabalhista]	52/18	0.8				0.8
PSTU	United Socialist Workers' Party [Partido Socialista dos Trabalhadores Unificado]	16	0.5	0.7	0.8	0.9	0.7
PAN (4)	Party of the Nation's Retirees [Partido dos Aposentados da Nação]	26	1.1	0.1	0.7		0.6
PRTB	Brazilian Labor Renewal Party [Partido Renovador Trabalhista Brasileiro]	28	0.5	0.3	0.8	0.8	0.6
PSN/PHS (5)	Party of National Solidarity/Humanist Party of Solidarity [Partido Solidarista Nacional/Partido Humanista da Solidariedade]	31	0.2	0.8	0.6	0.3	0.6
PCB	Brazilian Communist Party [Partido Comunista Brasileiro]	21	0.2		0.1	1.2	0.5
PT do B	Labor Party of Brazil [Partido Trabalhista do Brasil]	70	0.4	0.6	0.6	0.3	0.4
PCO	Workers' Cause Party [Partido da Causa Operária]	29	0.1	0.4	0.4	0.4	0.3
PGT	General Party of the Workers [Partido Geral dos Trabalhadores]	30	0.1	0.2			0.1

Data sources: STE (2012); Nicolau, Jairo (2006); Dados Eleitorais do Brasil [Electoral Data of Brazil] (1982-2006).

Notes:

- (1) The PPR joined with the PP in 1995 and became the Progressive Party of Brazil (Partido Progressista Brasileiro—PPB). The PPB changed its name to the Progressive Party (Partido Progressista—PP) in 2003.
- (2) The PL joined with the PRONA to create the PR in 2006.
- (3) The PRN changed its name to the Christian Labor Party (Partido Trabalhista Cristão—PTC) in 2001.
- (4) The PAN was incorporated into the PTB in 2007.
- (5) The PSN, founded in 1995, became the Humanist Party of Solidarity (Partido Humanista da Solidariedade—PHS) in 1997.

Table 2 shows the average vote of the parties for mayor, governor, and president in the 26 state capitals. Chart 1 illustrates the situation of the parties in these three elections. We observe that only the PT and the PSDB garnered significant votes in the majority elections at the three levels of government. Furthermore, parties such as the PMDB, the PSB, and the PFL/DEM, which focused their campaigns on the subnational arena, entered into alliances for the national elections¹².

¹² The PMDB had its own candidate for president in 1994. It supported the PSDB in 1998 and the PT in both 2002 and 2006. The PFL/DEM allied itself with the PSDB in all of the presidential elections during the period. The PSB supported the PT in the 1994 and 1998 presidential elections, mounted its own candidate in 2002, and supported the PT in 2006.

The PDT did not make the same choice: it ran its own candidates for president in 1994, 2002, and 2006, but with worse electoral results. The other parties' votes were concentrated in the municipal majority elections. What seems to be a good average performance for governor on the part of the PTB, the PP, and the PSD actually applies only to isolated situations in the state capitals, according to Table 2.

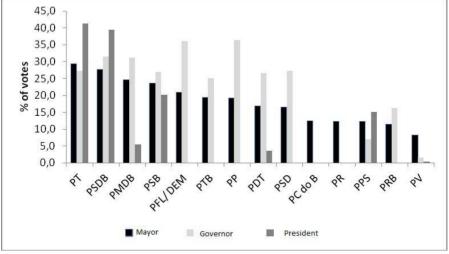
Table 2 – Average total vote for parties in the majority offices in the capitals, 1994-2008

Party	Mayor		(Governor	President		
Acronym	N*	% of votes	N*	% of votes	N*	% of votes	
PT	80	29.3	53	27.3	80	41.2	
PSDB	58	27.6	30	31.4	58	39.5	
PMDB	54	24.7	36	31.2	17	5.5	
PSB	40	23.6	16	26.9	12	20.1	
PFL/DEM	44	20.9	13	36.0	0	-	
PTB	28	19.4	6	25.1	0	-	
PP	35	19.2	2	36.4	0	-	
PDT	40	16.8	21	26.5	19	3.6	
PSD	5	16.5	1	27.3	0	-	
PC do B	18	12.4	0	1	0	-	
PR	15	12.3	0	-	0	-	
PPS	29	12.3	5	7.0	21	15.0	
PRB	2	11.5	1	16.3	0	-	
PV	22	8.2	6	1.6	6	0.3	

^{*} N corresponds to the number of capitals with voting data about the parties for the offices in question. However, N does not correspond to the number of capitals in which the party competed in elections for those offices but offers a good approximation of this situation.



Chart 1 – Vote for Mayor, Governor, and President in the Capitals by



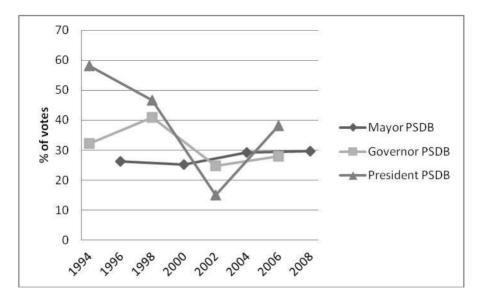
Source: Author's preparation from data of the Superior Electoral Court [Tribunal Superior Eleitoral] (TSE, 2012).

Better refining the above data, the charts below demonstrate the performances of the PT and the PSDB in the three contests and of the PMDB, the PSB, and the PFL/DEM in the subnational contests, respectively.

Charts 2 and 3 show the variations in the vote for the two main parties that contested and occupied the presidency during the period. We observed that the behaviors of the PSDB and the PT were different The PSDB demonstrated a more regular and slightly growing vote for mayor in the capitals and irregular and discrepant performance in the competitions for president and governor. The PT has a more regular pattern in voting, in an ascendant sense. However, there is also a more regular and less volatile pattern for mayor and a more irregular pattern for president and governor. The latter two competitions exhibit quite similar patterns with respect to the evolution of the votes.

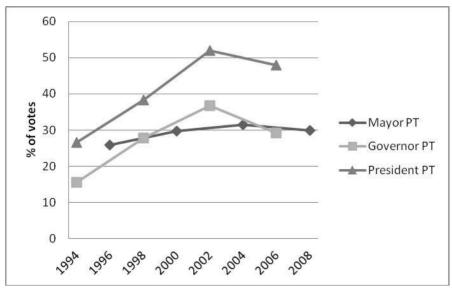
The PMDB, the PSB, and the PFL/DEM also show different behavior in the subnational competitions. The PMDB shows very similar voting patterns for mayor and for governors, along with a variation of 20-35% in the contests, indicating a possible link between the two electoral competitions. The PFL/DEM showed a descending tendency in the votes for mayor and governor, inverse to that which occurred with the PSB, which shows a positive trend in the votes for governor and mayor.

Chart 2 –PSDB Vote for Mayor, Governor, and President (1994-2008)



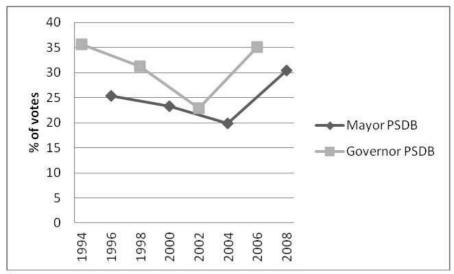
Source: Author's preparation from data of the Superior Electoral Court [Tribunal Superior Eleitoral] (TSE, 2012).

Chart 3 – PT Vote for Mayor, Governor, and President (1994-2008)



Source: Author's preparation from data of the Superior Electoral Court [Tribunal Superior Eleitoral] (TSE, 2012).

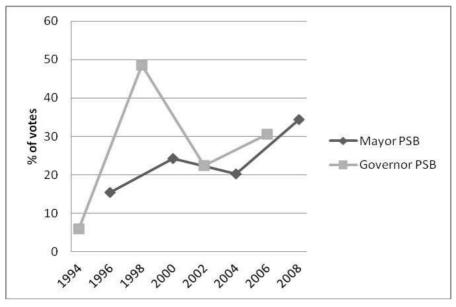
Chart 4 –PMDB Vote for Mayor and Governor (1994-2008)



Source: Author's preparation from data of the Superior Electoral Court [Tribunal Superior Eleitoral] (TSE, 2012).

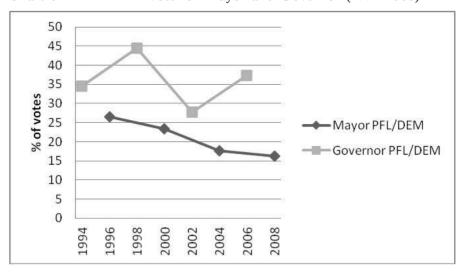
Conexão Política, Teresina, Vol. 2, No. 1: 75-104, jan.-jul. 2013

Chart 5 -PSB Vote for Mayor and Governor (1994-2008)



Source: Author's preparation from data of the Superior Electoral Court [Tribunal Superior Eleitoral] (TSE, 2012).

Chart 6 -PFL/DEM Vote for Mayor and Governor (1994-2008)



Source: Author's preparation from data of the Superior Electoral Court [Tribunal Superior Eleitoral] (TSE, 2012).

5 National and state influences in the elections of mayors in the Brazilian capitals

This section uses econometric analysis to infer national and state influences on the elections for mayors of the Brazilian state capitals in the period 1994-2008. The database for this analysis contains predominantly electoral information available from the website of the Superior Electoral Court [Tribunal Superior Eleitoral] (TSE, 2012). Population and gross domestic product (GDP) data were obtained from the website of the Brazilian Institute of Geography and Statistics [Instituto Brasileiro de Geografia e Estatística] (IBGE, 2012). Information about the Municipal Human Development Index in Education (Índice de Desenvolvimento Humano Municipal na Educação—HDI Education) was obtained from the webpage of the United Nations Development Programme (PNUD, 2012).

5.1 Variables and hypotheses

The dependent variable of our analytical models is the vote received by the political party for the office of mayor (mayoral vote) in the 26 Brazilian capitals in each of the last four elections (1996, 2000, 2004, and 2008). The metric used is the percentage of votes received by the party for mayor in the capital in the first round in relation to the total valid votes distributed among the various parties in that majority election. This variable is expected to be affected by the following set of independent variables:

- 1) Vote for the party for president in the previous election (Presidential Vote). The good performance of the party in the presidential elections in the capital can drive the vote of the same party in the next mayoral election.
- 2) Vote for the party for governor in the previous election (Gubernatorial Vote). The good performance of a party in the gubernatorial elections in the capital can also be a catalyst for the party's vote for mayor.
- 3) The party controls the mayoralty and the mayor runs for reelection (Incumbent Mayor). The fact of having a sitting mayor

- who seeks re-election can mean access to important government resources (offices, public funds, and implementation of public policies) and positively impact the parties' vote for mayor.
- 4) Vote of the party in the mayoral election immediately prior (Previous Mayoral Vote). The previous vote of the party for mayor in the capital can be a predictor of its vote in the current election. This variable shows an electoral capital that can be perpetuated over time in the municipal majority elections, independent of the elections at other levels.
- 5) Per-capita GDP of the municipality (Municipal Per-Capita GDP). Even working with capitals—municipalities that stand out on the national scene in terms of economic development—there are differences among these municipalities with respect to wealth produced and population. It is worth determining whether greater economic development has an impact on the party's share of the mayoral vote.
- 6) Municipal Human Development Index in Education (HDI Education). HDI, elaborated in terms of two education indicators (literacy and rate of school attendance) can have an impact on the parties' vote. Various studies and electoral research, Kinzo and Carreirão's (2004) among them, show schooling as a factor that impacts party preferences.
- From these variables, the working hypotheses hold that the political party's share of the mayoral vote increases if:
- H1: the party's share of the presidential vote (Presidential Vote) increases;
- H2: the party's share of the gubernatorial vote (Gubernatorial Vote) increases;
- H3: the party has a mayor who is seeking re-election (Incumbent Mayor);
- H4: the party's share of the mayoral vote in the previous election (Previous Mayoral Vote) increases;
- H5: per-capita income (Municipal Per-Capita GDP) increases;
- H6: the Municipal Human Development Index in Education (HDI Education) increases

5.2 Analytical models

To test the above hypotheses, a statistical regression analysis was performed. The measurement scale of the main variables and the number of independent variables, as along with the association observed between these and the dependent variable, led to the adoption of the multivariate linear regression model.

Six models of regression were defined. The first model included all of the independent variables with the exception of "Incumbent Mayor" and "HDI Education," which showed high correlation with "Previous Mayoral Vote" and "Municipal Per-Capita GDP," respectively. Models 2 and 3 are similar to model 1, but "Presidential Vote" and "Gubernatorial Vote" are interspersed. Models 4, 5, and 6 differ from the three first models by replacing "Previous Mayoral Vote" with "Incumbent Mayor" and GDP with HDI Education.

5.3 Results

Table 3 shows the results obtained by the six adopted models. In the first model, which includes "Presidential Vote" and "Gubernatorial Vote," only the variable referring to the party's previous share of the mayoral vote presents statistical significance, with a high coefficient. In the second and third models, which intersperse national and state votes, we observe that in addition to the previous vote obtained by the party, the variables "Presidential Vote" and "Gubernatorial Vote" also impact the vote for mayor, with the gubernatorial effect being greater than the presidential effect. In the other three models, when we replace "Incumbent Mayor" with "Previous Mayoral Vote" and HDI Education with GDP, we observe in model 4, which includes the "Presidential Vote" and "Gubernatorial Vote" variables, only the impact of the gubernatorial vote. Of models 5 and 6, which intersperse the two variables, only model 5 shows the effect of "Presidential Vote," and only model 6 shows the effect of "Gubernatorial Vote." Thus, whether a party had a mayor running for re-election was not statistically significant in explaining the vote received by the party for mayor. In the six models, GDP and HDI Education do not demonstrate an impact on the dependent variable, perhaps because the capitals have greater economic and social homogeneity. We should also consider that the period is short and it is difficult to obtain certain, less-sharp influences.

The results are in accordance with the intention of this section. which was to determine whether the parties' share of the presidential and/or gubernatorial votes have an impact on the partisan vote for mayor. The findings prove the hypotheses that the growth of the party's vote for president and governor has a positive impact on the party's performance in mayoral elections. The results emphasize the importance of the federal dimension for properly understanding electoral behavior. Nevertheless, the best predictor of a party's mayoral vote is the vote that it received in the immediately preceding election for the same office. This means that partisan and electoral dynamics in the municipalities operate principally according to internal variables independent of political competition at the other levels of government. Thus, the models presented here show that the gubernatorial vote has a greater effect than the presidential vote on the mayoral vote. These findings are congruent with the descriptive analysis of section 3, in which we observed a certain consistency for the majority offices of the PT but an irregular pattern for the PSDB, along with more congruence in the gubernatorial and mayoral vote for the PMDB, the PSB, and the PFL/ DEM, which, as observed in the previous section, concentrated their candidates in state and local elections and led to their alliances with parties that had greater chances of success in the presidential elections.

(0.0931)

-0.0163

(0.160)

105

0.397

-33.40

(29.15)

134

0.108

-20.45

(23.00)

226

0.060

-38.16

(23.99)

211

0.152

Table 3—Federal Effects in Mayoral Elections (1994-2008)

Dependent Variable: Partisan Vote for Mayor

(0.113)

0.0327

(0.176)

75

0.370

Model 6 Model 1 Model 2 Model 3 Model 4 Model 5 3.649 6.926* 3.637 44 15* 36.78* 47.70** Constant (5.676)(4.767)(25.61)(19.98)(21.35)(4.012)Independent Variables 0.0285 0.155** 0.0940 0.231*** Presidential Vote (0.0558)(0.0852)(0.0731)(0.0785)0 229*** 0.286*** 0 374*** 0.148 Gubernatorial Vote (0.101)(0.0844)(0.0821)(0.0634)2.313 -1.019 2.559 Incumbent Mayor (3.615)(2.651)(2.667)0.577*** 0.521*** 0.562***

(0.0854)

0.0822

(0.129)

121

0.291

Source: Author's preparation from data of the Superior Electoral Court [Tribunal Superior Eleitoral] (TSE, 2012). Standard error in parentheses. *** p<0.01, ** p<0.05, * p<0.1

6 Final considerations

Previous Mayoral Vote

Municipal Per-Capita

HDI Education

Observations

Adjusted R²

GDP

The intention of this article was to show the importance of the federal dimension in the understanding of electoral behavior. We understand that it succeeded. The first section was dedicated to a literature review of electoral behavior, examining the major schools of thought that explain the voting decision: psychological, sociological, and rational choice. These schools continue to orient studies and research on elections around the world; however, they have been subject to criticism, innovations, and amendments. We believe that among these additions, it is worth introducing the geographical dimension of the vote. Individuals vote in localities, regions, and countries for different political offices, which is an important factor in shaping electoral performance. In particular, this perspective applies to federalist countries in which political power is divided into more than one autonomous sphere of government. This is the case in Brazil.

In the second section, we addressed the literature that incorporates the federal dimension into its analysis. We analyzed the literature that addresses the Brazilian case in a more detailed fashion, and we verified, among the Brazilianists, the negative nature of the impact of federalism on the decision to vote. In relation to that focus, there are works that center their analysis on the federal electoral linkages between the different territorial levels and the contested offices. Those works examine the effects of presidential and gubernatorial elections on elections for federal deputies (SAMUEL, 2005; SOARES, 2012), federal conflicts in municipal elections (TELLES et al., 2011), and the different partisan and electoral linkages between the local political arena and the state and national political arenas (ALMEIDA; CARNEIRO, 2008).

Section 3 utilized descriptive statistics to show data about majority elections in the Brazilian state capitals in the period 1994-2008. We found that fourteen parties were more significant in the mayoral elections in the period, highlighting the PT, the PSDB, the PMDB, the PSB, and the PFL/DEM. Observation and comparison of the development of these parties in the polls for the majority seats show some indications of correlation. If the presidential vote seems to impact the vote for mayor, which is clearer in the case of the PT, the gubernatorial vote nevertheless is the one that seems to have the most impact on the party's mayoral vote, as we observed with the PMDB, the PSB, and the PFL/DEM. Therefore, an important and undeveloped aspect in this work, but suggestive of more and better research, is that parties have very different strategies and results in majority electoral linkages.

Section 4 uses econometric analysis to test whether the parties' performance in presidential and/or gubernatorial elections has an impact on the parties' share of the mayoral vote. The results emphasize assumptions already outlined in section 3. The presidential vote has an effect on the party's mayoral vote, but in a less significant form than the gubernatorial vote. This is also an area that merits more exploration that would help in understanding how citizens' voting choices at the different levels of the federation are articulated in both partisan and electoral terms.

In summary, we can affirm that there is not only partisan but also national and state electoral influence on the parties and the voting decision in municipal elections. Nevertheless, this influence does not alter the fact that the townspeople—and this is true at least for the capitals—engage in autonomous decision making when choosing their political representatives.

REFERENCES

ALMEIDA, Maria Hermínia Tavares de; CARNEIRO, Leandro Piquet. 2008. Definindo a arena política local: sistemas partidários municipais na federação brasileira [The local political arena defined: municipal party systems in the Brazilian federation]. *DADOS – Revista de Ciências Sociais*, 51(2) p. 403-432. Rio de Janeiro.

AMES, Barry. 2003. Os Entraves da democracia no Brasil [The Barriers of democracy in Brazil]. Rio de Janeiro: FGV Editora.

BALBACHEVSKY, Elizabeth; HOLZHACKER, Denilde Oliveira. 2007. Classe, ideologia e política: uma interpretação dos resultados das eleições de 2002 e 2006 [Class, ideology, and politics: an interpretation of the results of the 2002 and 2006 elections]. *Opinião Pública*, 13(2), p. 283-306. Campinas.

BARRETO, Alvaro Augusto de Borba. 2012. Eleições municipais comparadas: a escolha do chefe do executivo no Brasil e no Uruguai e o impacto sobre os sistemas partidários locais (2000-2005) [Municipal elections compared: the choice of chief executive in Brazil and in Uruguay and the impact on the local party systems (2000-2005)]. *Revista Brasileira de Ciência Política* n. 7, p. 285-318. Brasília.

BERELSON, Bernard R.; LAZARSFELD, Paul F.; MCPHEE, William N. 1954. *Voting*: a study of opinion formation in a presidential campaign. Chicago: University of Chicago Press.

BORBA, Julian. 2005. Cultura política, ideologia e comportamento eleitoral: alguns apontamentos teóricos sobre o caso brasileiro [Political culture, ideology, and electoral behavior: some theoretical notes on the Brazilian case]. *Opinião Pública*, XI(1), p. 147-168. Campinas.

BORGES, André; SANCHEZ FILHO, Alvino; ROCHA, Carlos. 2011. La conexión subnacional: geografía del voto y coaliciones electorales en el federalismo brasileño [The subnational connection: geography of voting and electoral coalitions in Brazilian federalism]. *Revista SAAP*, 5(2), p. 323-357. Ciudad Autónoma de Buenos Aires.

CARREIRÃO, Yan de Souza; KINZO, Maria D'Alva G. 2004. Partidos políticos, preferência partidária e decisão eleitoral no Brasil [Political parties, partisan preference, and electoral decision in Brazil] (1989/2002). *DADOS – Revista de Ciências Sociais*, 47(1), p. 131-168. Rio de Janeiro.

DOWNS, Anthony. 1957. *An economic theory of democracy*. Harper: University of Michigan 310 p.

FERNANDES, António Teixeira. 2002. Modelos do comportamento eleitoral: uma breve introdução crítica [Models of electoral behavior: a brief critical introduction]. *Sociologia, Problemas e Prática*, n. 39, p. 209-212.

FIGUEIREDO, Marcus. 2001. *A decisão do voto*: democracia e racionalidade [*The voting decision*: democracy and rationality]. Belo Horizonte: Editora UFMG.

FLEISCHER, David. 2002. As eleições municipais no Brasil: uma análise comparativa (1982-2000) [The municipal elections in Brazil: a comparative analysis (1982-2000)]. *Opinião Pública*, VIII(1), p. 80-105. Campinas.

FREIRE, André. 2001. *Modelos do comportamento eleitoral*: uma breve introdução crítica [*Models of electoral behavior*: a brief critical introduction]. Oeiras: Celta Editora

HAMMAN, Kerstin; POLLOCK, Philip H. 2012. Does the type of federalism make a difference for electoral behavior? Comparing Spain and Germany. Prepared for presentation at the *Annual Meeting of the American Political Science Association*, September 2-5, 2010. Washingtion D.C.

IBGE. Instituto Brasileiro de Geografia e Estatística. 2009. Diretoria de Pesquisas, Coordenação de População e Indicadores Sociais [Directorate of Research, Coordination of Population and Social Indicators], *Pesquisa de Informações Básicas Municipais* (MUNIC).

_____. Produto interno bruto dos municípios [Municipal GDP]. Available at: www.ibge.gov.br/home/estatistica/economia/pibmunicipios. Accessed in Aug. 2012.

LAMOUNIER, Bolívar, *CARDOSO*, *Fernando H.* (Org.). 1975. *Os partidos e as eleições no Brasil* [*Parties and elections in Brazil*], Rio de Janeiro: Paz e Terra.

LAVAREDA, Antonio; TELLES, Helcimara. 2011. *Como o eleitor escolhe o seu prefeito:* voto e campanha em eleições municipais [*How the voter chooses his or her mayor*: voting and campaigning in municipal elections]. Rio de Janeiro: Editora FGV.

MAINWARING, Scott P. 2001. *Sistemas partidários em novas democracias*: o caso do Brasil [*Party systems in new democracies*: the case of Brazil]. Porto Alegre: Mercado Aberto/Rio de Janeiro: FGV.

MANIN, Bernard. 1995. As metamorfoses do governo representativo [The metamorphosis of representative government]. *Revista Brasileira de Ciências Sociais*, n. 29

/www.pnud.org.br/atlas/ranking IDH_Municipios_Brasil_2000.aspx?indice Accordion=1&li=li_Ranking2003>. Accessed in Aug. 2012.

REIS, Fabio Wanderley. 1978. *Classe social e opção partidária:* as eleições de 1976 em Juiz de Fora [*Social class and party option*: the elections of 1976 in Juiz de Fora]. In: REIS, Fabio Wanderley. *Os partidos e o regime, a lógica do processo eleitoral brasileiro*. São Paulo: Edições Símbolo.

SAMUELS, David J. 2003. *Ambition, federalism, and legislative politics in Brazil.* Cambridge University Press.

SIMÃO, Azis. 1955. O voto operário em São Paulo [The blue-collar worker vote in São Paulo]. In: Anais do I Congresso Brasileiro de Sociologia. São Paulo.

SOARES, Gláucio Ary Dillon. 1973. Sociedade e política no Brasil [Society and polítics in Brazil]. São Paulo: Difusão Européia do Livro.

SOARES, Márcia M. 2013. Influência majoritária em eleições proporcionais: os efeitos presidenciais e governatoriais sobre as eleições para a Câmara dos Deputados Brasileira (1994-2010) [Majority influence in proportional elections: the presidential and gubernatorial effects on elections for the Brazilian Chamber of Deputies (1994-2010)]. *DADOS – Revista de Ciências Sociais*, 56(2) p. 413-437. Rio de Janeiro.

TELLES, Helcimara; LOURENÇO, Luiz C.; STORNI, Tiago Prata L. 2011. Eleições sem oposição, alianças sem partidos: o voto para prefeito em Belo Horizonte [Elections without opposition, alliances without parties: the vote for mayor in Belo Horizonte]. In: LAVAREDA, Antonio; TELLES, Helcimara (Org.). Como o eleitor escolhe seu prefeito: campanha e voto nas eleições municipais, 404 p.. Rio de Janeiro: FGV.

TSE. Estatísticas do TSE [Statistics of the TSE]. Eleições 2008. Available at: http://www.tse.jus.br/hotSites/estatistica2008/est_result/candidatosVaga.htm. Accessed on Sept. 9, 2012.