SUBNATIONAL PARTICULARISTIC SPENDING AND ELECTORAL RETURNS IN ARGETINA AND BRAZIL

Germán Lodola
Department of Political Science, Universidad Torcuato Di Tella
Department of Political Science, University of Pittsburgh

February 2010

DO NOT QUOTE WITHOUT PERMISSION FROM THE AUTHOR

"Money talks in politics."

V. O. Key

"Politics is done with the power of pen."

Political adagio[1]

INTRODUCTION

This article analyzes the electoral performance of state incumbent parties in Argentine and Brazilian gubernatorial elections during the post-authoritarian period. It focuses on the impact of particularistic strategies of electoral mobilization upon aggregate incumbent vote share. There is a long-lasting debate among social science researchers about how, if at all, distributive politics affects voters' electoral calculus and the enduring creation of power machines. Political scientists have devoted a great deal of attention to analyze the link between particularized benefits and electoral results across national institutions and actors.[2] Sociological and anthropological studies have mostly investigated the logic of particularistic exchanges in small political settings of single countries.[3] But systematic efforts to examine these issues using geographic subdivisions (states) as units of analysis are rare and almost exclusively based on the U.S. experience. Indeed, no temporally-broad comparative study has yet uncovered the electoral returns and ultimate

[1] Surprisingly, this adagio exists with almost no variation in both Spanish and Portuguese. Pens, of course, serve to sign checks and therefore to distribute money and favors.

[2] Much effort in the field has been dedicated to explore the relation between legislative pork-barreling and the ability of congressional legislators to retain office. For evidence of a positive connection, see for example Ames (1995a, 1995b, 2001), Ferejohn (1974), Fiorina (1977), Levitt and Snyder (1997), Mayhew (1974), and Weingast, Shepsle, and Johnson (1981). For evidence that questions the existence of such association, see for instance Bickers and Stein (1996), Samuels (2002), Sellers (1997), and Stein and Bickers (1994). There is also a rich cross-national literature on the relation between central government spending and national executives' electoral success. See, for example, Alesina, Perotti, and Tavares (1998), Ames (1987), Brender and Drazen (2003), Persson and Tabellini (2002), Schuknecht (1994), and Shi and Svensson (2000).

[3] With regards to the countries studied in this dissertation, the few often-cited essays on the topic are Auyero (2000), Diniz (1982), Gay (1994), and Lamounier (1978).

efficiency of particularistic politics for territorial power-building across states of different federalized nations.

Conventional accounts for variations in regional election outcomes and incumbent political survival include sociological factors such as preexisting societal cleavages and local identities (Chandra 2004; De Winter and Türsan 1988; Hearl 1996; Jeffrey and Hough 2003; Rice and Van Cott 2006; Rokkan and Urvin 1982), institutional factors such as electoral rules (Calvo and Micozzi 2005; De Luca, Tula, and Jones 2006; Diaz-Cayeros and Magaloni 2001; Moraski 2003; Stolt 2004), the sequencing of elections and presidential coattails effects (Alesina and Rosenthal 1989; Born 1990; Mebane and Sekhorn 2002; Van der Eijk 1987), economic factors stemming from national and/or subnational swings (see below), and formal or informal political linkages between federal and state-level authorities (Bernick 1979; Dometrius 1987; Gibson 2005; Key 1953; Mueller 1985; Snyder 1999). I contend that one important –and typically overlooked-factor affecting subnational vote choice and the stability of regional political elites is the strategic manipulation of government resources that comes from controlling the state apparatus.

This article studies the ultimate effect of government spending choices by investigating the electoral returns associated with different particularistic mechanisms of mobilization. It provides systematic empirical evidence supporting the claim that particularistic inducements renders gubernatorial incumbents in two prominent Latin American federations with different electoral payoffs. The statistical analysis indicates that patronage allocations provide net electoral returns to Argentine but not to Brazilian provincial incumbent parties, while pork-barrel benefits Brazilian but not Argentine subnational in-party candidates. The article also indicates that the link between particularistic spending and electoral premiums is mediated by the structure of political competition. Using aggregate level data, it demonstrates that spending electoral effects decrease significantly with the number of parties competing in elections. The central argument discussed below contends that apart from voter loyalties, organizational components of support (i.e., the degree to which partisan networks are enmeshed in society) and voting technologies (i.e., party balloting versus electronic voting) help explain why subnational incumbent governors/parties in Argentina and Brazil benefit differently from the strategic manipulation of public moneys.

The article begins with a critical review of the scholarly literature on subnational elections. After discussing the relative merits and drawbacks of current explanations, it puts the issues of particularistic electoral strategies and political competitiveness at center stage. Then, it moves to the empirical analysis, which investigates the effect of these and other political, economic, and societal factors on the vote shares of Argentine and Brazilian gubernatorial incumbent parties between 1983-2003 and 1982-2006 respectively. Finally, the it concludes by discussing the implications of my findings for the maintenance of subnational leadership

EXPLAINING SUBNATIONAL ELECTORAL OUTCOMES

Two alternative approaches have guided the discussion about subnational elections in federal systems. Built mostly on the U.S. experience, these perspectives share a concern about the role of retrospective economic voting in shaping the electoral prospects of regional incumbents. A first group of studies considers subnational elections as national referenda in which local voters evaluate the presidential performance in order to cast their ballots for state-level officials. Thus, gubernatorial, senatorial, and state legislative contests are simple projections of national-level phenomena as they are assumed to be closely tied to the public standing of the incumbent president. It is argued that strong presidential approval rates reward national in-party candidates (both incumbents and challengers) at all levels of governance. Conversely, if voters are not satisfied with how the federal administration is doing, candidates from the president's party are penalized and those from opposite parties are rewarded. A second school, in contrast, suggests that state executives are held accountable for the economic health of their districts regardless of fluctuations in national economic conditions and approval of the sitting president. For this view, the level of government at which an election is held is what ultimately determines the content of voter considerations and the fortunes of running candidates. Citizens are able to discriminate between jurisdictional responsibilities and acknowledge that incumbent governors of *either* political party have little capacity to influence national economic outcomes. Whereas the general shape of the economy is a national matter that falls under the responsibility of federal officials, subnational economic performance entails important electoral effects for regional incumbents and aspirants.

By far, efforts to test the *national referendum* and *economic voting* hypotheses have focused on the American states. Drawing upon different samples, statistical techniques and time-periods, extant analyses have reached somewhat inconsistent empirical results. Although it has been well established that national economic conditions influence presidential approval and elections, the relationship between assessments of the president's job, patterns of variation in macroeconomic performance, and gubernatorial electoral results is still a matter of debate.[4]

[4] On the positive relation between national economic expectations and presidential contests in the U.S., see Kramer (1971), Tufte (1978), Fair (1978), Kiewit and Rivers (1985), Erikson (1989), and Holbrook (1991). Some research has found empirical evidence supporting this claim in Western Europe (Lewis-Beck 1988; Powell and Witten 1993), and developing countries (Remmer 1991; Pacek and Radcliff 1995; and Echegaray 2005). Nonetheless, Tucker (2006) finds little evidence for the standard predictions of the referendum and economic voting models in national legislative and presidential races across regions of five post-communist countries. An impressive amount of literature in the American politics field also points to the connection between congressional legislators' electoral fates, the approval rates of the sitting president, and the evolution of economic indicators. See, for instance, Abramowitz (1988), Abramowitz and Segal (1986), Lewis-Beck and Rice (1992), and Carsey and Wright (1998).

A number of works has lent credit to the national referendum model. In effect, both macro and micro level analyses have documented that presidential performance and national –but not state economic conditions affect subnational voters' expectations and gubernatorial vote choice (Chubb 1988; Crew and Weiher 1996; Holbrook-Provow 1987; Kenney 1983; Kone and Winters 1993; Peltzman 1987; Piereson 1975; Simon 1989; Simon, Ostrom, and Marra 1991; Stein 1990). Several scholars, however, have emphasized that regional voters reward or punish gubernatorial incumbents based on the shape of the state economy rather than on considerations about raw national macroeconomic aggregates and the functioning of the presidential office (Adams and Kenny 1989; Atkeson and Partin 1995; Carsey and Wright 1998; Hansen 1999; Howell and Squire and Fastnow 1994; Howell and Vanderleeuw 1990; Lowry, Alt, and Ferree 1998; Niemi, Stanley, and Vogel 1995; Orth 2001; Partin 1995; Tompkins 1988).

Within this second line of thought, some analysts linking gubernatorial races to incumbent taxing decisions and fiscal performance have indicated that American governors appear to suffer from electoral retribution if local taxes are raised (Kone and Winters 1993; Niemi, Stanley, and Vogel 1995) and fiscal deficits increase (Peltzman 1992), whereas they seem to be rewarded if taxes are kept lower than in neighboring states (Besley and Case 1995a). It has also been argued that subnational voting reactions to tax policies, fiscal deterioration, and local economic swings are contingent on what political party controls the statehouse (Lowry, Alt, and Ferree 1998), the structure of the state economy (Ebeid and Rodden 2006), the possibility of incumbent reelection (Alt and Lowry 1994), and whether responsibility for government performance is unified or divided (Leyden and Borrelli 1995). Finally, contrary to "either-or" explanations, a few students have underscored that gubernatorial elections are indeed influenced by both national and state economic conditions (Squire and Fastnow 1994; Svoboda 1995; King 2001).[5]

In recent years, a novel literature on comparative decentralization and federalism has drawn heavily on these theoretical models to move the study of subnational elections beyond the U.S. context. As in that scholarship, students have paid special attention to the effect of national and state macroeconomic conditions, presidential popularity, and intergovernmental co-partisanship upon subnational vote choice. If anything, researchers find that regional voters tend to cast their ballots after evaluating national macroeconomic swings and how well (or poorly) the federal administration is doing. Such a national-regional link appears to characterize *Länd* elections in Germany (Gaines and Combez 2004), and provincial contests in Russia (Konitzer 2005) and Canada (Gélineau and Bélanger 2006) where state parameters also affect federal voting behavior (Cutler 2002). Relying upon aggregate level data for six federal countries, one of the few comparative pieces existing on subnational contests reports no systematic evidence whatsoever of state economic issues in shaping gubernatorial election outcomes, while it indicates that the impact of national changes is relatively small and conditional upon other factors (Rodden and Wibbels 2005). Political parties in control of the governorship that share the president's party label usually receive lower vote shares than out-party incumbents in Australia, Canada, Mexico, Germany, and the U.S. (with Argentina being the only exception). The gap between presidential in-party and out-party candidates, however, decreases considerably with the strength of the national economy. Comparative accounts also suggest that the way in which national and state

[5] In general, statistical analyses using individual-level data find that state rather than national economic factors affect gubernatorial approval and voting. Aggregate-level studies, on the other hand, commonly report that state economic conditions do not seem to matter, but there is inconclusive evidence regarding whether or not national expectations influence gubernatorial electoral results.

elections are linked together varies across countries and through time, being more tightly connected in fiscally centralized than in fiscally decentralized polities.

With regards to the countries examined in this dissertation, research on subnational elections is underdeveloped. Biographical chronicles of local bosses are legion, and descriptive studies of specific electoral events abound. But theoretically-driven multivariate models are nearly absent. Actually, there is no systematic analysis that incorporates a wide range of Brazilian states while only a small number of recent works deal with the Argentine provinces.[6] Remmer and Gélineau (2003) and Gélineau and Remmer (2005), for example, use aggregate and individual level data to test the referendum voting hypothesis in gubernatorial and provincial deputy elections held in Argentina between 1983 and 2001. The authors claim that the vote share of national in-party candidates (their dependent variable) fluctuates in accordance with the rise and fall of the presidential administration, the performance of the national but not the state economy, the midterm punishment phenomenon, and the amount of federal transfers received by provinces (without considering whether or not these grants remain at the president's political discretion). According to these analysts, electoral support for the president's co-religionists also varies with provincial political control as provinces governed by opposite parties return a lower vote share than those ruled by the sitting president's party. Scholars interested in Argentina have also applied a partisan bias model of patronage spending to four congressional races finding that the PJ benefits more from investment in public employment than does the UCR/Alianza (Calvo and Murillo 2004). Some other observers have found no empirical evidence of a negative impact of divisive gubernatorial primaries upon provincial executive elections (De Luca, Jones, and Tula

[6] For instance, Souza (2007) studies the impact of regional fiscal adjustment policies on gubernatorial elections in the Brazilian states of Bahia, Ceará, and Paraná between 1994 and 2002. Some research has also asked whether the political fortunes of federal politicians in the country are influenced by the popularity of their municipal copartisans in a phenomenon known as "reverse" coattails effects (Ames 1994), or by gubernatorial coattails (Samuels 2000a, 2000b). For analyses on the later topic in Argentina, see Cabrera (1998), and Jones (1997).

2006). And still others have emphasized that the widespread adoption of provincial electoral reforms allowed governing elites in most Argentine provinces to secure control of their respective local legislatures and, at the same time, avoid the potentially hurtful consequences of competitive national contests (Calvo and Micozzi 2005).

Although compelling, most of the literature discussed in this section faces a number of shortcomings that limit our understanding of how territorial power is built and retained *within* and *across* federations through time. First, both referendum and economic voting models see regional politics through the undifferentiated lenses of nationwide politics. The main concern of these approaches is to single out the degree of "nationalization" of subnational elections rather than to uncover the dynamics of voting behavior, party competition, and power-building in the states. Hence, the effect of looking at how far voters make different judgments for different elected offices is to characterize regional politics as significant only for what it tells us about the fate of national governments. Second, and related to that, prior studies are typically built upon an unrealistic "bottom-up" model of democratic accountability that involves an apolitical view of incumbency. Most extant explanations assumed that voters are sophisticated users of information able to obtain and connect complex data with incumbent performance. But even if we assume that voters have access to these data, apportioning political responsibility in multi-tiered systems is a difficult task because many policy areas are shared among different levels of government, which claim credit for success and blame competitors for failure. What is missing in most extant accounts is an assessment of the role played by politicians' strategic manipulation of the resources and perks of office.[7] Subnational elections, like politics, encompass much more than coattails effects and cold evaluations of office-holders. Critically, they encompass the strategic

[7] Several students recognize that referendum and economic voting models overlook questions involving incumbents' strategies (Jacobson 1989; Gerber 1998; Marra and Ostrom 1989), and their expenditure calculations (Bickers and Stein 1996; Stein and Bickers 1994).

distributive mechanisms through which state political elites assemble voters' interests and craft coalitions of support.

Distributive taxation theorists, as we have seen, well understood the connection between budgetary politics and election outcomes in the American states. But they have drawn inferences based almost exclusively on aggregate fiscal data (either surpluses or deficits, or the differences between them). Perhaps more important, studies in this tradition impute politicians operating in quite different institutional settings essentially the same incentives for manipulating the public money. In addition to these theoretical limitations, empirical analyses in the area have remained confined to national or regional patterns observed in single countries. We therefore are far from being able to assess the validity of existing claims on voter reactions to fiscal spending and to elaborate broad causal inferences about the importance of particularistc electoral investments choices and political reward networks for both short-term electoral outcomes and the durable construction of territorial power.

The distributive approach I propose here stresses that over and above intergovernmental co-partisanship, macroeconomic swings, and ideological predispositions, subnational vote choice is influenced by efforts of state executives to harness government resources with the purpose of shaping individual perceptions, shoring up their political support, and enhancing incumbents' electoral performance. Government spending is a potent instrument politicians use to preserve and expand their political dominance. Properly targeted, public expenditures benefit party elites, reward activists, finance electoral campaigns, and "buy-off" potential voters. One can argue that the electoral impact of particularistic politics is secondary in contexts where voters react to more programmatic appeals and the provision of public goods –some of the usual determinants of electoral results in advanced industrial democracies. But particularistic activities and political machines lead electoral politics in systems with non-programmatic parties and citizen-politicians "clientelistic" ties like those prevailing in most underdeveloped countries.

Several authors have underscored that territorial political control in Argentina (Auyero 2000; Brusco, Nazareno, and Stokes 2004, 2006; Calvo and Murillo 2004; Gibson 2006; Jones and Hwang 2005; Levitsky 2003; Powers 2001; Remmer 2007; Stokes 2005) and Brazil (Abrucio 1998; Ames 2001; Desposato 2002; Graham 1990; Hagopian 1996; Mainwaring 1997; Samuels 2002) is based on the extensive use of resources gained from patronage and pork-ridden politics. Nevertheless, no study has measured the relative priority and electoral returns placed on different particularistic mechanisms of electoral mobilization both *within* and *between* these –or any other- federations. In assessing spending electoral effects from a subnational comparative perspective, the present article fills a significant gap in the literature on distributive politics and makes a novel contribution to the study of regional voting and territorial power-building in politically decentralized regimes.

WHAT AND HOW PARTICULARISTIC SPENDING MATTERS?

The shift in placing particularistic politics at the forefront of subnational studies requires a discussion of the alternative goods that gubernatorial incumbents deliver with coalition-building ends. It is worth opening such a discussion by emphasizing what is *not* this article about. The arguments developed and empirically tested here do not concern the incentives influencing rational politicians' expenditure priorities and their ultimate investment choices. Rather, I assess the electoral returns state incumbents reaped from their particularistic spending allocations. Focusing on the logic of vote trading (Kitschelt 2000; Schedler 2007), the subsequent analysis is designed to explore whether and how gubernatorial incumbents who strategically allocate public resources to their political backers are rewarded for their efforts at the ballot box. The presumption is twofold: particularistic allocations are strategic decisions made by rational-minded politicians, and electoral results are somewhat caused by the public moneys spent prior to the elections.

As I have discussed elsewhere (Lodola 2010), strategic expenditures entailing material inducements can be categorized into non-particularistic and particularistic. These notions are distinguished based upon the nature or degree of *publicness* of the goods featured by politicians to construct a base of support. Non-particularistic spending refers to the delivery of extensive goods that cannot be denied to anyone who qualifies according to some previously defined criteria. These goods are typically comprised in the notions of social welfare benefits, universal education and health. As defined here, however, they also include projects that span beyond a single political jurisdiction (in this dissertation, states) such as interregional highways and hospitals.[8] Particularistic spending, on the other hand, alludes to the supply of goods that entail distributive bias. While almost everything can potentially become an exchangeable good, I concentrate on two categories of particularism which I refer to as *pork-barrel* and *patronage*. Pork-barrel spending alludes to divisible, semi-public goods that are narrowly –either geographically or sectorally- targeted thus involving some degree of credit claiming. Divisible goods, commonly known as local *club* goods, provide benefits to subsets of individuals and impose costs to others. Obvious examples of spatially targeted goods include public works such as electricity, sewage, drinking water, bridges, roads, and the like. Sectoral pork-barreling

[8] Strictly speaking, non-particularistic goods also include "valence" issues (e.g., national security, clean air, low inflation, full employment) that are desired by anyone in society and from whose enjoyment no one can be excluded. I do not consider this type of goods because, by definition, they are not subject to political competition and rivalry. That is, politicians do not offer different packages of public goods but they claim being capable of delivering these goods if elected to office.

comprises government subsidies, credits, and protective legislation for specific economic sectors, groups or industries. Patronage spending, in contrast, refers to the delivery of private goods that are excludable in nature and only reward specific individuals. These goods include selective scholarships, discriminatory job creation, direct transfers of money and/or other material benefits, and public employment. In the empirical analysis that follows, pork-barrel is measured as state government expenditures in public work or infrastructure projects circumscribed to local jurisdictions within state boundaries. Patronage is operationalized as state government expenditures devoted to public sector employment (see also Mainwaring 1999; Robinson and Verdier 2003).[9]

The virtue of thinking about these particularistic strategies in the way proposed above is that we capture two pivotal instruments of territorial power-building in federalized polities. Almost no political individual I interviewed failed to mention that political networks in subnational Argentina and Brazil dominate electoral interactions based on the control that gubernatorial incumbents exercise over administrative appointments and the execution of public works. Filling bureaucratic jobs with political supporters and dispensing targeted goods to specific electoral districts and cohorts constitute the fundamental mechanisms of vote assembling within the states in both federations.

There is, however, an intrinsic problem in using both categories of spending simultaneously. On the one hand, expenditures in public work projects commonly produce a second beneficial

---

[9] Fortunately, the ministries of finance of all provinces/states in Argentina and Brazil classify their expenditures following a similar protocol. Although these protocols have changed through time thus affecting the identification of some budgetary items in the historical series, the question of comparing regional data collected in different countries is not a major concern in this dissertation. In measuring patronage spending, I explicitly exclude administrative expenditures associated with the delivery of goods and services (including social security services). In measuring pork-barrel, I deliberately exclude state spending on financial investments and capital projects. Whereas the former include expenditures directed toward debt interest payments, the latter constitute sectorally –rather than geographically- specific spending. When capital transfers were included in the statistical estimations, coefficients for the spending variables of interest always performed in accordance with my theoretical expectations.

effect because they allow politicians to provide temporary jobs to their cohorts through contracts for the construction and maintenance of infrastructure. They also infuse money into the party coffers, which in turn can be employed to create and maintain political machines. Thus, when engaging into pork-like spending incumbents often value the direct appeal to voters and the private goods that can be used for exercising patronage. Unfortunately, these indirect transfers to individual voters are difficult (if not impossible) to sort out. A second potential problem refers to the incremental and sticky nature of budgetary spending. Incrementalism and stickiness would condition the ability of politicians to manipulate public outlays so as to enhance their personal and/or party ambitions. Correlations for the spending variables of interest across the four years of each gubernatorial term reveal the presence of certain continuity in the level of expenditures (see Appendix 5, Table A.1). But they also show enough variation allowing for an assessment of the distinctiveness of patronage and pork.

Having defined what types of government expenditures matter, it remains the question of how they actually matter. A novel line of research in political science has recently moved to examining the impact of political parties on spending patterns and the supply of public outlays (Bueno de Mesquita, Morrow, Siverson, and Smith 2003; Chibber and Nooruddin 2003; Magaloni 2005; Magaloni, Diaz-Cayeros, and Estévez 2007; Persson and Tabelini 1999). This research program suggests that reelection-minded parties make their strategic investment choices in response to the actions taken by other parties competing in the electoral arena, while strategic voters force parties to respond to the competitive pressures of their opponents. Critical to this theoretical framework is the number of competing parties in the system because variations in the structure of political competition are likely to influence the provision of public versus private goods. More than the ideology of a particular party (Alesina 1987; Alesina and Roubini 1997;

Boix 1998; Hibs 1977), it is the party system what affects policy outcomes and the delivery of government resources. The general argument runs as follows. The larger the electoral coalition on which political leaders depend to remain in office, the more important public good provision is. In contrast, politicians who depend on a small coalition can reserve resources on public goods to distribute as private benefits to their supporters. This logic indicates that in highly fragmented electoral contexts political leaders are more likely to rely on club goods in order to maintain a small but unified coalition. In moderately competitive settings, they will provide public goods to cobble together a large coalition. While under low levels of political competition, politicians have strong incentives to spend resources without any public regardedness because they can placate their backers with private goods.

Drawing on this tradition, I argue that the competitive political climate in which incumbents operate also need to be considered in examining the electoral returns –that is, the expected number of votes from a unit of transfer- of different distributive strategies. Unquestionably, it is difficult to measure the electoral effects of government spending because voters' behavior responds to various factors, not just to the allocation of public moneys. I show, however, that regional patterns of competition affect what subnational officials reap from investing public funds in patronage and pork-barrel activities. I reason that incumbents' electoral payoffs are inversely related with the number of alternative choices (political parties) available to voters. The intuition behind this reasoning is straightforward: competitive political settings expand electoral bids and generate the image of vote trading discontinuity thus making vote more volatile. Therefore, the same level of electoral investment –a unit of patronage or pork-barrel transfer- would *ceteris paribus* yield lower electoral returns in districts where multiple parties compete for office than in non-competitive electoral turfs. In other words, as competition (the number of running parties) increases, the winning candidate's vote share will on average decline.[10]

DATA AND METHODS

To assess whether distributive politics does have an impact on subnational vote choice and the electoral fortunes of state incumbent parties or candidates, I collected data on each election held in the twenty-four Argentine provinces and the twenty-seven Brazilian states during the 1983-2003 and 1982-2006 periods respectively. Taking as my baselines the 1983 and 1982 gubernatorial contests, which marked the restoration of democracy in both nations, the statistical analysis investigates the determinants of gubernatorial incumbent party (candidate) share of the vote over eleven state executive elections (five races in Argentina and six races in Brazil).

It should be mentioned that the Argentine district of Ciudad de Buenos Aires held the first contest to determine governor in 1996, while the former national territory of Tierra del Fuego did it in 1991 after acquiring provincial status. In addition, the Brazilian states of Amapá, Roraima, Tocantins, and the Distrito Federal began to popularly elect governors after their creation in 1990, whereas Rôndonia began to do it in after its foundation in 1986. All this leaves a total of 115 gubernatorial elections in Argentina and 154 in Brazil.[11]

Following prior research on the topic, I estimate models on a continuous variable measuring the percentage of the vote received by the state incumbent party or candidate in each

[10] This raises a potential problem of endogeneity as incumbent vote share and the effective number of competing parties may be reciprocally (and negatively) related. Indeed, they are but correlation is reasonably low: -6.8 and -5.3 in Argentina and Brazil respectively.

[11] I exclude the 1994 gubernatorial succession in Rôndonia because the incumbent governor, Oswaldo Piana (PTR), and his closest political allies were forced to abandon politics after a special committee of the Chamber of Deputies found evidence of their involvement in the assassination of Olavo Pires (PDS), Piana's most serious competitor to the governorship in the 1990 election.

gubernatorial election. The incumbent share of the vote for Argentine provinces ranges from a value of 19.2 percent in San Juan (2003) to 90.1 percent in San Luis (2003), with a mean of 48.7 and a standard deviation of 12.2. For the Brazilian states, these values range from a very marginal 0.2 percent of the vote in Espirito Santo (2002) to 81 percent in Maranhão (1986), with a mean of 41.2 and a standard deviation of 17.1.[12]

Defining incumbency in the relative stable atmosphere of Argentine provincial elections is a fairly simple task. The incumbent party is the party of the person who holds the governorship.[13] Without exceptions, regional incumbent parties in Argentina always presented and backed their own candidates to the gubernatorial house. But things work markedly different in Brazil. First, if the incumbent party does neither run for reelection nor take part in a gubernatorial electoral coalition but supports an out-party runner to the governorship, I relied on the vote share received by the out-party candidate in question. These instances included the gubernatorial candidacies of Wall Ferraz (PSDB-PI, 1990), Lavoisier Maia (PDT-RN, 1994), Amazonino Mendes (PPB-AM, 1994), Jose Ferreira (PSDB-ES, 1998), Alvaro Dias (PP-PR, 1994), and Teotino Vilela (PSDB-AL, 2006). Second, if the incumbent party runs for reelection or becomes member of an electoral coalition but the sitting governor her/himself sponsors an out-party candidate in a process of political grooming known as *apadrinhamento* (or "godfatherism"), I estimated separate models using the vote share obtained by the regional in-party candidates and that received by the

[12] The main reason for such an insignificant vote share obtained by the gubernatorial incumbent party in Espirito Santo is related to the several acts of corruption that involved governor Jose Ignacio Ferreira (PSDB, 1998-2002). Pressed by his own party and an impeachment attempt, Ferreira abandoned the PSDB in 2001. Along with other politicians who had been expurgated from politics, such as senator Luiz Estevão (forced to resign by the Sao Paulo's TRE) and federal deputy *suplente* Talvane Albuquerque (accused of orchestrating the assassination of federal deputy Ceci Cunha to capture her seat), Ferreira affiliated to the small PTN. In the 2002 election, Ferreira's political support zigzagged between the candidates of the PSDB and the PTN, Paulo Ruy and Walter Maciel, who obtained 1.5 and 0.2 percent of the vote respectively.

[13] The provincial incumbent party in gubernatorial elections held at the end of federal interventions (i.e., Catamarca 1991, Corrientes 1992 and 2001, and Tucumán 1991) is that removed from office by the intervention in question. Models coding the provincial incumbent as the party of the sitting president reached identical results.

governors' personally elected successors.[14] The latter cases included the candidacies of Geraldo Bulhões (PSC-AL, 1990), Helio Garcia (PRS-MG, 1990), Said Xerfán (PTB-PA, 1990), Ronaldo da Cunha (PMDB-PB, 1990), Paulo Ruy (PSDB-ES, 2002), Aecio Neves (PSDB-MG, 2002), and Eduardo Dutra (PT-SE, 2002). Finally, if the party in control of the governorship changes during a given gubernatorial term, several coding rules may apply.[15] Recall that incumbent party changes can occur either because the sitting governor switches party while in office, because he/she stands down to run for other elected post leaving executive office to a vice-governor from a different political party, or because the sitting governor is forced to resign. In the first case, incumbency is coded based on the governor's new party affiliation. In the second scenario, I relied on the vice-governor's party affiliation if he/she acts as governor for more than one year or runs for reelection against his/her predecessor's candidate. In the third case, I simply drew upon the party affiliation of the new governor.[16]

The basic research design employed to measure spending effects on regional incumbent vote share approximates the statistical models used by aggregate level economic voting literature in the U.S. and other federal nations. My approach is then based on a pooled cross-sectional time-series analysis, which allows me to compare the effect of national and subnational factors across

---

[14] Statistical results proved to be highly robust remaining virtually unchanged.

[15] Party switching is a common practice among Brazilian politicians. See Nicoloau (1996) and Desposato (2006) on the determinants of party switching in the Chamber of Deputies. See Appendix D, Table A.2 for detailed information about gubernatorial party switching throughout the period under consideration.

[16] The only case of a vice-governor from a different party than that of the governor who acted as such for more than one year is Manuel Barros (PTB-AL, 1997-1998), whereas acting governor Benedita da Silva (PT-RJ, 2002) ran for reelection against his predecessor's candidate (and wife) Rosinha Garotinho (PSB). There were three cases in which the incumbent governors were forced to resign. In all of them, the outcoming governor was replaced by the runner-off candidate in the previous election. First, governor Mao Santa (PI-PMDB, 1994-2001) was separated (*cassado*) from the governorship by the TSE charged with illegal use of public resources while campaigning for his reelection. The governorship went to Hugo Napoleão (PFL). Second, governor Neudo Campos (PPB-RR, 1994-2001) resigned pressed by several cases of corruption. Later on, he was imprisoned charged with leading the *mafia dos gafanhotos*, a corruption scheme through which Campos and other state-level politicians and bureaucrats took the salaries of "ghost" public employees. The governorship was occupied by Francisco Flamarion Portela (PSL). Reelected two years later, Portela was also *cassado* by the TSE under charges of using the state machine to promote his reelection. Paradoxically enough, the state executive went to former governor Ottomar Pinto (PTB), who had been accused of committing the same crime during his 1990-1994 mandate.

geographic subunits. I rely on ordinary least squares (OLS) with panel corrected standard errors to address potential problems of heteroskedasticity. I also use the unit-fixed effects technique, which is a common approach for analyses of panel or cross-sectionally dominant pooled data.[17] Yet contrary to research that treats these unit (i.e., state) effects as mere control variables, I argue that they are of great analytical interest precisely because state dummies encompass information about how the explanatory variables work in specific historical cases. Considering the current state of the debate among methodologists and the lack of clear statistical conventions involving panel data, I have cross-checked my results using a random effects model. Results obtained through this alternative approach remained almost identical to those reported below.[18]

All electoral results are from the first round, even if second round elections were held to determine the gubernatorial winner.[19] An issue of concern with comparative cross-state analysis stems from the fact that the size of the datasets from different countries may not be perfectly identical (Tucker 2006). All things being equal, countries with larger number of regions and elections would generate estimations with higher confidence levels simply because more data reduce uncertainty. From a mathematical viewpoint, however, variation in the size of the datasets

[17] As mentioned earlier, the mean of the incumbent party vote share variable in Argentina and Brazil is 48.7 and 41.2 percent respectively. I exclude as baselines in the fixed effects models the states of Cordoba (48.1 percent) and Espirito Santo (41.7 percent). Coefficients for the fixed-effects thus indicate the effect of patronage and pork-barrel over a province/state compared with the effect over their respective baselines.

[18] In all the regressions, a Hausman specification test rejects the suitability of using random effects (chi2 > .05). Arguably, random effect models are more suitable to analyze data where the units are chosen randomly from a population. This assumption, however, does not apply here since my data encompass the entire universe of cases. See Appendix D for specification tests including Hausman results and models with random effects. All models using this technique are available upon request.

[19] Second round elections took place in Ciudad de Buenos Aires (2003*), Chaco (1995*), Chubut (1991), Corrientes (1997, 2001*), Tierra del Fuego (1991, 1999*, 2003*), Acre (1990, 1994), Amapá (1990, 1994, 1998, 2002), Bahia (1994), Ceará (2002), Distrito Federal (1994*, 1998*, 2002), Espirito Santo (1990, 1994), Goiás (1994, 1998, 2006), Maranhão (1990*, 1994, 2006), Mato Groso do Sul (1998*, 2002), Minas Gerais (1990, 1994*, 1998), Pará (1990, 1994*, 1998, 2002, 2006), Paraiba (1990*, 1994, 2002), Paraná (1990*, 2002*, 2006), Pernambuco (2006), Piaui (1990, 1994*, 1998*), Rio de Janeiro (1994, 1998, 2006), Rio Grande do Norte (1990, 2002, 2006), Rio Grande do Sul (1990, 1994, 1998*, 2002, 2006), Rôndonia (1990*, 1994, 1998, 2002), Roraima (1990, 1994, 1998, 2002*), Santa Catarina (1994*, 2002*, 2006), São Paulo (1990*, 1994, 1998*, 2002), Sergipe (1994, 1998, 2002), and Tocantins (1990). Elections marked with an asterisk indicate those contests in which the final winner had lost in the first run.

used in this dissertation is not sufficiently great so as to affect the empirical results. Indeed, having smaller number of observations Argentina does not generate less or poorer support for the central hypotheses explored below. From a research design stance, my analysis does not employ a potentially biased sample of cases but rather the entire universe. In sum, while there certainly is some discrepancy in the amount of observations contained in the two datasets, by no means this fact precludes the elaboration of substantive comparisons between cross-state dynamics and patterns observed in both federations.[20]

The crucial independent variables measure state government distributive spending, regional political competitiveness, intergovernmental fiscal transfers, incumbency, political scandals, and national and state macroeconomic conditions. My models also include a battery of societal and demographic variables that are thought paramount in explaining patterns of electoral support for political parties. When data for these indicators are not available for a given year, I use the linear interpolation between the two most recent years for which official figures do exist. The operationalization of the explanatory variables included in the analyses is described below. Data sources are as detailed in the Appendix D, Table A.3.

All models estimate regional incumbents' strategic efforts to harness public expenditures with the purpose of influencing voters' behavior and affecting electoral results by means of two variables. The first variable is patronage spending, measured on the basis of state expenditures on public sector employment as described above. The second variable is pork-barrel spending, measured as state expenditures on geographically targeted infrastructure projects as explained

[20] Variation in measurement error by country can also affect our confidence in the model estimations by introducing inefficiency into the analysis (King, Keohane, and Verba 1994). Nonetheless, I do not have good reasons to expect more measurement error in Argentina than in Brazil or vice-versa. Although the latter country has probably a more efficient bureaucracy, clearer fiscal legislation, and a longer tradition in recording information on financial matters, official data on state macroeconomic issues is more developed in Argentina. I do think, however, that measurement error was decreasing in the two countries as time passed. Unfortunately, there is no remedy to solve this problem because any attempt designed to ameliorate such a difficulty (including pooling the data between countries) will still generate results on the basis of time-based measurement error.

earlier in this article.[21] Both variables are measured in per elector (adult 18 or older) constant values. I use the natural log to reduce skewness. By expressing values in per elector terms, my models account for patronage and pork-barrel spending relative to their potential level of demand. This measure has therefore an important theoretical advantage over absolute and share indicators since it integrates politicians' incentives to spend (supply-side) with voters' latent dependence on public largesse (demand-side). In order to capture differing dimensions of distributive politics I estimated four different models using alternative measures of patronage and pork expenditures: (a) spending during the year of the gubernatorial election (Model 1); (b) spending averaged over the electoral and pre-election years (Model 2); (c) spending averaged over the four years of each gubernatorial term (Model 3); and (d) spending as percentage of budgetary expenditures net of interest payments of the state debt (Model 4).[22] The first three indicators capture the timing of patronage and pork-barrel whereas the forth indicator captures the relative priority placed to patronage and pork within the state budget.[23]

Figures 5.1 and 5.2 map the averaged percentage of government spending that Argentine and Brazilian states devoted to public employment and infrastructure projects throughout the period under study. The figures clearly exhibit large variation across states in both federal countries. On average, the metropolitan provinces in Argentina (Buenos Aires, Cordoba, Mendoza, and Santa Fe) spent almost 10 percent of their budgets on pork-barrel, while San Luis assigned close to 30

[21] Ideally, one would draw upon municipally allocated expenditures within states and across diverse governmental agencies. This information would allow me to disaggregate the major spending categories in the state budgets, select individual items and programs, and track budgetary trade-offs. But such a data are simply not available unless you travel to each state and pray for it. I collected municipal-level data for a reduced number of states, though.

[22] I also explored the possibility that stream flows of government resources might impact gubernatorial electoral outcomes. To do so, I measured expenditure allocations as yearly differences. In no specification, however, did these coefficients approach statistical significance. For that reason, I decided not to report them.

[23] Moreover, Model 2 accounts for the potential impact of Brazilian electoral and fiscal rules that limit the expansion of state personnel spending in election years and ban incumbent governors from participating in the inauguration of infrastructure works. Although in the four models the personnel and infrastructure spending variables are correlated at the 5 percent level (r = .733, .745, .727, -.483; and .318, .444, .475, -.354 for Argentina and Brazil respectively) statistical results are robust to specifications including each of these variables separately.

percent to similar activities. Considerable differences are also evident with regards to public employment, with provinces such as Tierra del Fuego using an average of nearly 67 percent of its budget and La Pampa devoting 41 percent to that area. Brazilian states also show significant variation. For instance, Tocantins dedicated an average of nearly 37 percent of its budget to infrastructure projects, while Alagoas only devoted 5 percent. As for public employment, Acre dedicated approximately 55 percent to finance the state bureaucracy while Roraima used 25 percent of its budget. As it can be appreciated in Figures 5.3 and 5.4, subnational variation in patronage and pork-barrel spending is not a function of state size given that these expenditures also vary in per elector terms.

Figure 5.1: Averaged Percentage Spending in Patronage and Pork-Barrel. Argentine Provinces, 1985-2003.

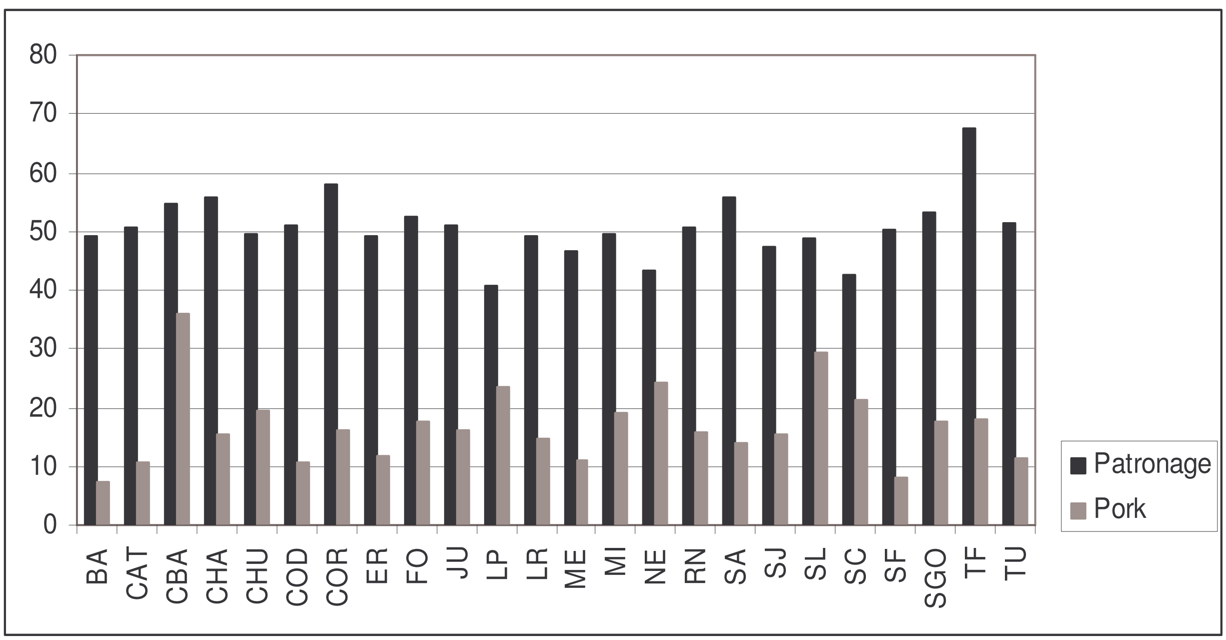


Figure 5.2: Averaged Percentage Spending in Patronage and Pork-Barrel. Brazilian States, 1985-2006.

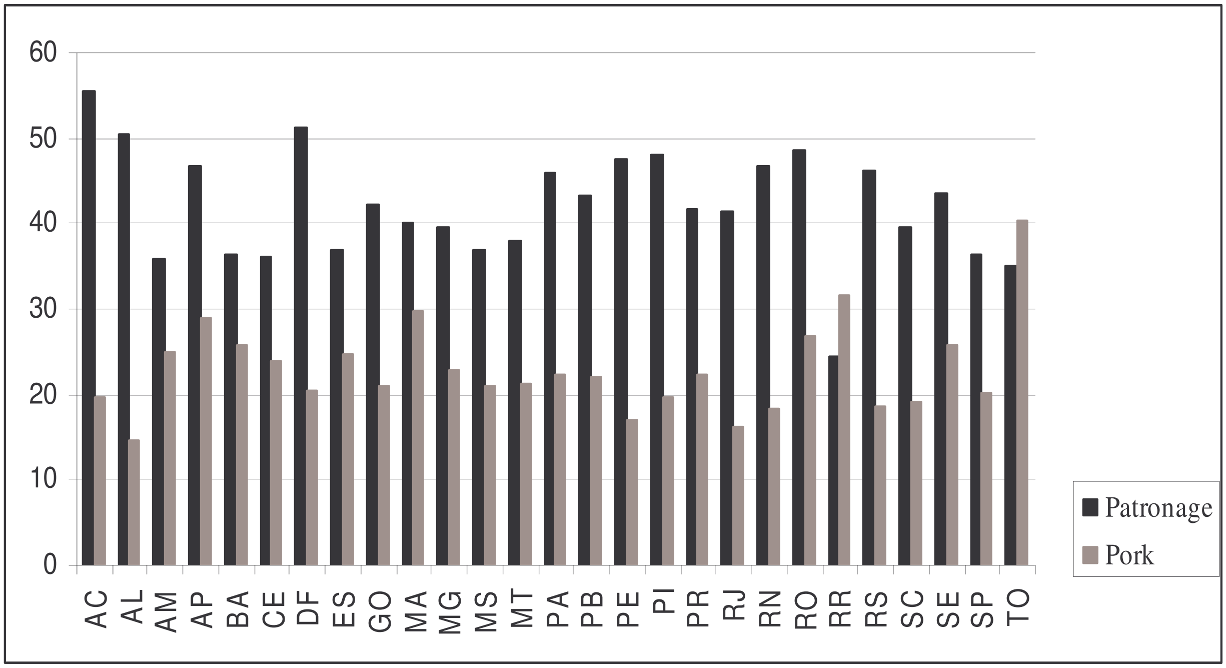
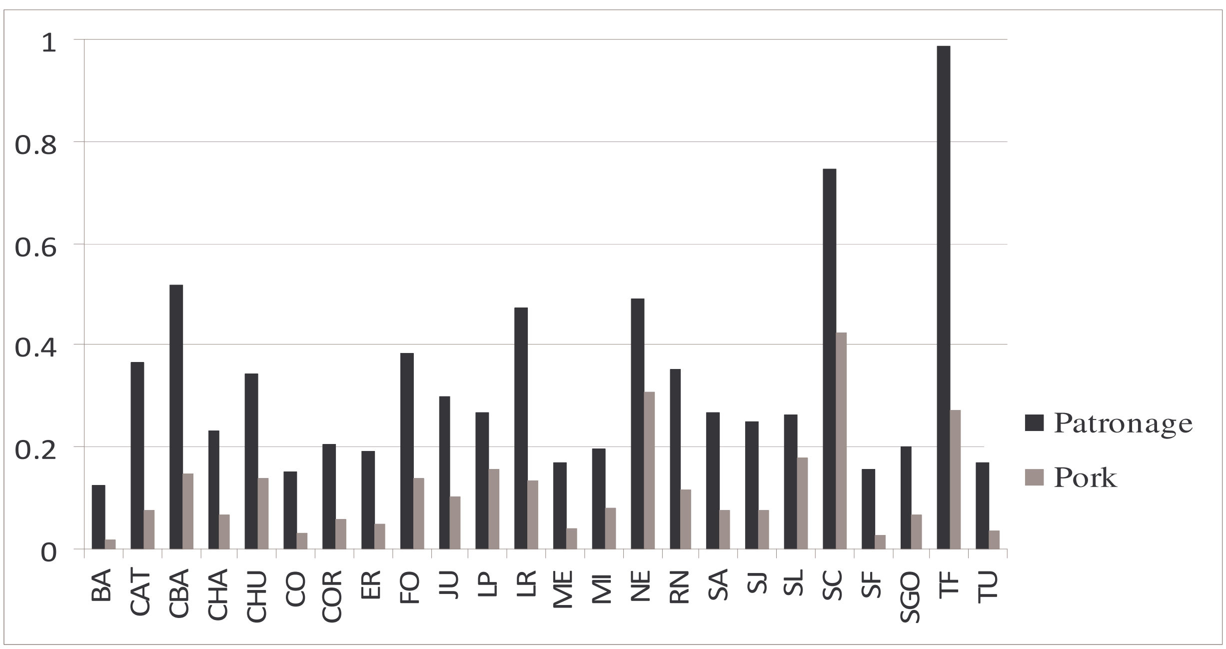
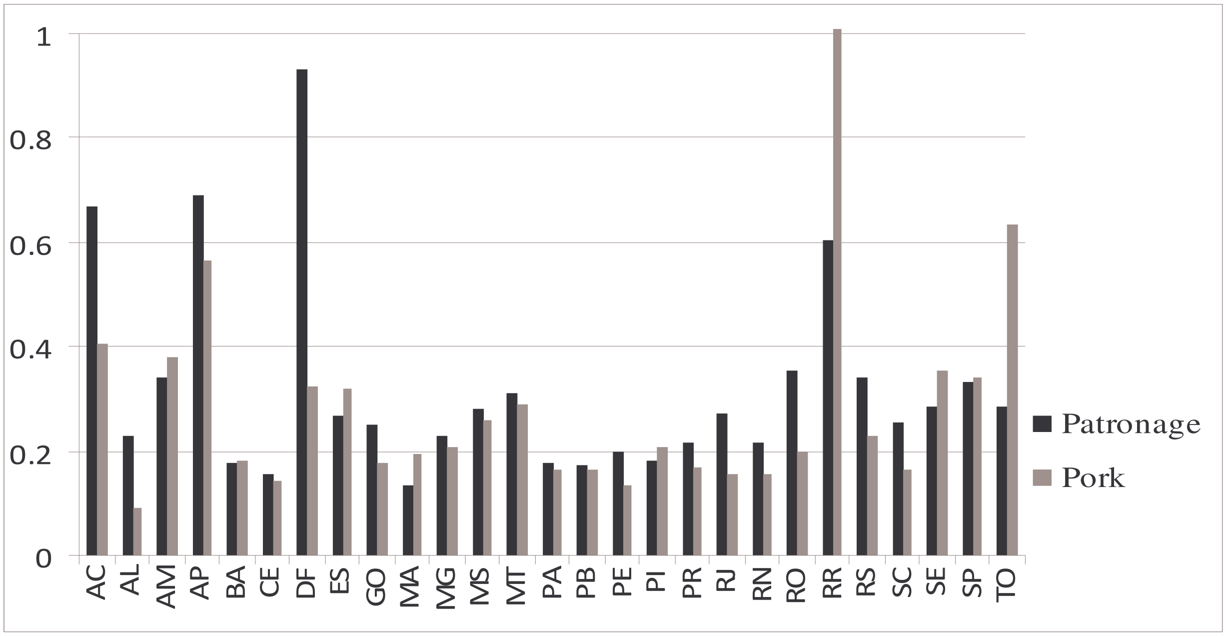


Figure 5.3: Per Elector Spending in Patronage and Pork-Barrel. Argentine Provinces, 1985-2003.



Note: Per elector data is standardized from 0 to 1 to facilitate comparability across both measures.

Figure 5.4: Per Elector Spending in Patronage and Pork-Barrel. Brazilian States, 1985-2006.



Note: Per elector data is standardized from 0 to 1 to facilitate comparability across both measures.

The impact of electoral competition at the state-level is measured on the basis of the effective number of competing parties (or electoral coalitions) in each gubernatorial contest. I estimate this variable using the Laakso and Taagepera (1979) index of $1 / \Sigma \upsilon^2_{(i)}$, where $\upsilon_{(i)}$ is the share of votes for every party *i*. Although this index has become the standard measure for the comparative analysis of party systems (Caulier and Dumont 2003), it has been argued that it does not apply well to some empirical situations because it over-counts the larger party (Molinar 1991) and increases consistently with greater atomization. I tested the robustness of my findings employing the Molinar alternative index of $1 + ENP (\Sigma \upsilon^2_{(i)}) - \upsilon^2_{(1)} / \Sigma \upsilon^2_{(i)}$, where ENP is the Laakso and Taagepera index, and $\upsilon^2_{(1)}$ is the proportion of the votes of the winning party squared. In contrast to Laakso and Taagepera, Molinar counts the winning party as one and weights ENP by the contribution of the smaller parties. Conceptually, it focuses on the gap between the winning party and other parties. Small/large gaps mean more/less political competitiveness. In dominant party systems like those prevailing in many Argentine and a few Brazilian states, the Molinar index therefore yields fewer party numbers than Laakso and Taagepera. These indexes are positively correlated in our two countries (r = .663 and .868, p >.05), and despite some minor differences discussed below they produce highly consistent results.

In Argentina and Brazil, the effective number of parties competing in gubernatorial elections varies across states and within a state over time. Values for this variable in the former country range from 1.2 in the province of San Luis (1999 and 2003 elections) to 4.9 in Ciudad de Buenos Aires (2003), with a median of 2.5 and a standard deviation of 0.64. Values for Brazilian states range from 1.5 in Alagoas (1994), Maranhão (1986), and Paraiba (1998) to 5.1 in Rôndonia (2002), with a median of 2.5 and a standard deviation of 0.63. The similarity of these values may obscure sharp differences between the nature of political competition for state executive office in Argentina's and Brazil's subnational polities. As we have mentioned, gubernatorial candidates in both countries lead a state based party branch and attempt to incorporate other politicians to their camps. But while Argentine candidates command strong and well-organized parties, their Brazilian colleges represent changing multiparty alliances. Indeed, competition for subnational leadership in Argentina has traditionally taken place between the PJ, the UCR, and several provincial parties with expressiveness in only one province thus making most subnational party systems in the country either dominant or hegemonic (Malamud and De Luca 2005). Party life in this context is typically controlled by a single leader, who allows and sometimes fosters the possibility of intra-party competition among different factions and second-tier politicians, or by a small group of influential individuals. Most Brazilian states, in stark contrast, are plagued by varied mosaics of small and weakly organized parties with low capacity to win the governorship (Lima Júnior 1983, 1997). The local bosses of these parties line up behind favorite gubernatorial candidates to survive politically. They "sell-off" their electoral support in exchange for cabinet positions, administrative appointments, and slots for federal and/or state deputy slates (Samuels 2000a, 2000b). In short, political competition for territorial power is basically partisan and factional in Argentina, and coalitional and personalized in Brazil. We will see in next pages that the presence (lack) of dominant parties with dense organizational networks affects the electoral gains obtained from patronage and pork-barrel spending by either facilitating or impeding politicians to screen between true voter loyalists and opponents.

For theoretical reasons explained in the previous section, I expect that the electoral effect of patronage and pork will be conditional upon variations in the structure of regional political competition at the time of election. While based on rational choice accounts scholars have predicted that past levels of political competitiveness shape self-interested politicians' willingness to target public funds, I expect here a contemporaneous effect of party competition on the electoral returns reaped from different distributive strategies. Furthermore, I anticipate that patronage and pork will provide distinctive premiums for Argentine and Brazilian incumbents in the electoral market. Specifically, I hypothesize that the impact of spending in public sector employment will be higher across Argentine provinces. In contrast, the impact of government spending in local infrastructure projects will be more important across Brazilian states. The positive effect of budgetary allocations, I argue, decreases with increasing levels of competition for subnational elected office. In order to test these propositions, I introduce two multiplicative interaction terms to each model specification. State government spending on both personnel and pork-barrel activities are therefore interacted with the effective number of parties competing in gubernatorial elections.

Differences between subnational party systems aside, we may expect regional voters in both Argentina and Brazil to associate distributive politics, economic outcomes, policy choices, and contingent political events not simply with the particular incumbent governor but with his/her party as well. Thus, when an incumbent retires from politics (i.e., when he/she does not run for an elected position immediately after the end of his/her state executive mandate), we can assume that his/her party or candidate shoulders responsibility for the governor's performance over the prior office term. But when an incumbent does run for office, he/she typically enjoys the benefits associated with the manipulation of public resources and other well-known advantages to protect their turfs. These electoral assets make elections with an incumbent notably different from open races. To account for this fact, I include in my estimations a dummy variable indicating the presence of an incumbent governor running for reelection. Alternatively, I also estimate models with dummy variables indicating whether the incumbent governor runs for an elected (lower or higher) position other than the governorship. Although I expect state executive incumbents to fare better than open-seat candidates, whether and to what extent state governors running for reelection perform better than those running for other office is an open question. In my datasets, Argentine and Brazilian incumbents choose to run for an elected position 77.4 (89 cases) and 59.7 percent (92 cases) of the time respectively, whereas 50 (45 cases) and 58 percent (54 cases) of them decided to run for reelection.[24]

In order to deal with the effect of regional features that are relatively stable through time, I include a measure of the gubernatorial incumbent party's "normal vote" within each state. This variable serves as an indicator of the partisan predisposition of the states, and the degree of

[24] Note that these numbers only refer to incumbent governors running and not running for office at the end of each gubernatorial term. Therefore, incumbents who ran for an elected position sometime after the completion of their executive mandates are not considered. The same applies to those who died in office, resigned, or were impeached.

electoral support a given candidate is expected to receive.[25] In addition, it partially controls for the endogeneity problem of electoral results being affected by government spending and that spending being itself dependent from the expected electoral results (see below). Prior research has measured the normal vote in very different ways: the lagged vote for a given office (Erikson 1971; Remmer and Gélineau 2003; Gélineau and Remmer 2005; Gélineau and Bélanger 2006), the lagged vote corrected with lagged party control (Gelman and King 1990), unit and/or time fixed effects (Levitt and Wolfram 1997; Rodden and Wibbels 2005; Ansolabehere and Snyder 2002a, 2002b), and survey-based data of party identification (Erikson, Wright, and McIver 1993). Even in stable democracies, scholars have shown that the lagged vote for a single office is a poor proxy for the normal vote because it contains both the effect of incumbency advantage plus any idiosyncratic factor that may affect the results of an election. Presidential vote alone is also biased because it reflects national rather than subnational party divisions (Gelman and Huang 2004). Of course, state-level surveys solve these problems but they are only available for a very limited group of states in a reduced number of years.

In spite of the inherent error associated with this variable, I operationalize the normal vote as a running average from multiple prior elections. Concretely, I draw upon the average share of the vote obtained by the state incumbent party in the previous gubernatorial, congressional (national deputy), and presidential contests. Using presidential elections as an indicator of the normal vote, however, is highly problematic in the case of Brazil. First, the Brazilian president was not popularly elected until 1989. Second, former mitigate president Fernando Collor de Mello (1990-1992) created a minuscule party with virtually no political expression in the states, the PRN, to

[25] Arguably, the decision to include a variable accounting for previous party vote mitigates the ecological problem associated with the use of aggregate level data because it constitutes a proxy of voters' partisan identification and policy preferences. In addition, it serves to mitigate a potential problem of endogeneity in the statistical models (see discussion below).

run for the presidency. And third, vice-president Itamar Franco (1992-1994) did not formally belong to any political party when he assumed the presidential office after Collor's forced resignation. Consequently, estimates for Brazilian states rely on a variable measuring the average vote of the previous gubernatorial and national deputy elections. Results were cross-checked by including the presidential vote for state executive elections held between 1994 and 2006, when presidents had an explicit party identification. A second difficulty that raises the question of how one would determine the correct normal vote in Brazil is the fact that parties appear and disappear between elections. When the gubernatorial incumbent party had not previously run for the governorship (either because it did not present candidates or did not exist), I rely on the vote share received by the party of the sitting governor at that time.[26] In line with dominant literature on party systems in Argentina (Cantón and Jorrat 2002; Lupu and Stokes 2009; Torre 2003) and Brazil (Ames 1995a, 1995b, 2001; Ames and Power 2006; Dix 1992; Mainwaring 1991, 1997; Mainwaring and Scully 1995; Rennó 2000; Samuels 2006; Schneider 1973), I expect the normal vote variable to be a strong predictor of voting behavior across states of the former polity but not across territorial subunits of the latter. Although there is some controversy among Brazilianists about the degree to which parties are truly institutionalized actors, both party affiliation and organization have traditionally meant much more and played a higher role in Argentine than in Brazilian politics.

Along with somehow invariant political dynamics, contingency may impact electoral results. Mostly due to practical data constraints, extant research on subnational voting has been silent regarding the effect of a key contingent factor: political scandals.[27] Based on qualitative data

[26] This rule applies to the gubernatorial contests held in Acre (1990, 1998), Amazonas (1994, 2002), Alagoas (1990, 2006), Espirito Santo (1990, 1994, 2002) Minas Gerais (1990), and Rio Grande do Norte (1990).
[27] Some American scholars (see Chappel and Keech 1985) have included in their time-series analysis of economic voting a variable to test for the effect of the Watergate.

collection, I coded political scandals directly or indirectly involving incumbent governors and vice-governors.[28] Following Pérez-Liñán (2007: 65), who has convincingly shown that political scandals were a common denominator in all six cases of presidential impeachments occurred in Latin America, I operationalize "scandal" as an event disclosing an act of corruption or abuse of power performed by (these) politicians. My measure is then a dummy variable coded 1 if the governor or vice-governor were involved in a political scandal during their terms in office and 0 if they were not. I expect a negative and significant coefficient on the scandal variable suggesting that the state electorate does indeed punish incumbents for getting involved in political wrongdoing.

A critical insight of this dissertation is that a focus on either national or state politics alone is inappropriate for explaining the nature of power-building along territorial lines. In all federalized political systems, subnational office-holders derive their resources and preferences from a pattern of influences involving the national and regional levels. In the former level, governors articulate with the national government, the federal bureaucracy, and congressional legislators. In the latter, they deal with state legislatures, mayors, and ordinary voters. Building territorial power thus requires subnational political leaders to play out across vertical and horizontal axes of intergovernmental relations. In this two-level game, national executives can help or undermine state incumbents' efforts to advance their party and/or personal aspirations by reallocating material resources to the states. I test for this possibility by including alternative measures of federal grant allocations that reflect gubernatorial and presidential discretion over the use of

[28] For Argentina, I used the national newspapers *Clarín* and *La Nación*, and several on-line provincial newspapers. For Brazil, I relied on the *Dicionário Histórico-Biográfico Brasileiro Pós-1930*, and folders archived at the Senate library that contain information published by the national newspapers *O Globo, O Estado do Sao Paulo*, *Folha de Sao Paulo, Jornal de Brasilia, Jornal do Brasil,* and *Correio Braziliense*. Needless to say, systematic data collection on subnational political scandals is particularly difficult (if not impossible) for a single researcher. My inventory is therefore necessarily incomplete. But it has two virtues. First, it includes the most serious acts of corruption and misuse of power since they cannot pass unnoticed for national news stories. Second, it constitutes the only treatment of political scandals at the subnational level.

transfer funds. Accounting for the separate effect of governors' and presidents' federal fiscal discretion constitute a significant improvement over previous research (Gibson and Calvo 2001; Gordin 2004; Jones 2001; Gélineau and Remmer 2005; Remmer and Gélineau 2003; Remmer and Wibbels 2000), which has repeatedly failed to assess how national and subnational executives can actually manage the federal money with coalition-building goals. To the extent that higher amounts of federal transfers entail lower local taxes, I expect the fiscal transfer variables to carry a positive sign.

Finally, to empirically test whether and how regional voters' assessments of the economy affect gubernatorial election outcomes, I include a series of aggregate variables that accounts for national and state macroeconomic conditions. Adopting a familiar pattern from the referendum and economic voting models, I stress aggregate level hypotheses with plausible assumptions about individual level behavior.[29] My assumption is that citizens who are satisfied with the condition of the economy are more likely to vote for incumbent parties/candidates than economically dissatisfied voters. I do not make any assumption about the likelihood of finding citizens more inclined to evaluate the performance of the national or the regional economy when casting their votes. Thus, if the national economic measures prove to be statistically significant, state executive elections are affected by national trends. If the state economic variables reach significance, voters factor regional performance and hold incumbents responsible for the health of their districts. And if variables measuring the difference between state and national indicators are statistically significant, electoral constituents evaluate the performance of regional officials by considering whether the local economy is doing better or worse than the national economy. Note that these simple statements are essentially different from the standard retrospective voting

[29] Of course, this does not mean that such variables can function as a test for micro-level propositions or for the individual level behavior itself.

hypotheses discussed earlier in this article. The argument tested here is *not* that voters compare changes in the economy between the existing and previous government in order to evaluate incumbents' political competence. Rather, the prediction is that incumbents enjoy greater (lower) electoral strength where the economy is stronger (weaker).

I measure national macroeconomic performance by relying on three conventional indicators: the monthly change in the consumer price index lagged one month with respect to the date in which a specific gubernatorial race occurred, the annual rate of national unemployment, and the annual change in national GDP both weighted for the electoral month.[30] State macroeconomic performance is captured by means of the weighted annual rate of state unemployment (limited to a reduced number of years for the Brazilian states due to data inconsistency), and the annual change in provincial GDP.[31] Because inflation, unemployment, and declines of GDP affect the purchasing and income power of voters, I expect that these factors will be hurtful for incumbents regardless of their political affiliation.

Tables 5.1 and 5.2 present the correlation values for national and state economic indicators in Argentina and Brazil respectively. As we can appreciate, there is a considerable deal of correlation between national and subnational trends in the two countries. This fact of course limits our ability to rely exclusively on econometric models including both types of indicators at the same time. To avoid multicollinearity, I estimated separate models for national and state-level economic variables. I introduced each national and state indicator individually so as to assess its separate effect, and simultaneously to capture their combined impact. Furthermore, in

[30] I use the following formula of the natural logarithm of the inflation rate: ln $[1 + i]$ for any case of $i \geq 0$, and – ln $[1 + |i|]$ if $i \leq 0$ (i.e. deflation), where i is the annual percent change in the consumer price index (see Mainwaring and Pérez-Liñán 2005). As in prior studies, the weighted macroeconomic indicators are calculated on the basis of the following formula: $\rho = [\rho_{(t-1)} * (12-\sigma_{(t)}) / 12] + [\rho_{(t)} * (\sigma_{(t)} / 12)]$.

[31] Official data on state unemployment in Brazil is limited to six metropolitan areas. I calculated unemployment rates for the remaining states based on their economic active population as it is reported by the *Pesquisa Nacional por Amostra de Domicílios*, PNAD-IBGE and the national periodical censuses. Unfortunately, data to compute this variable are not available for the 1983-1991 period.

order to test the referendum voting hypothesis that the president's management of the economy affects subnational electoral results, I interacted the national economic indicators with dummy variables denoting whether a regional incumbent candidate belongs to the presidential party (Argentina) or to the presidential cabinet coalition (Brazil). For Argentina, I coded provincial incumbency as belonging to the PJ or to the UCR/Alianza. For Brazil, I draw upon Amorin Neto's (2002) data on presidential cabinet coalitions (see Appendix D, Table A.4).

Table 5.1: Correlation between National and State Macroeconomic Conditions at the Time of Argentine Gubernatorial Elections, 1983-2003

	Une (N)	Une (S)	Une (R)	CPI	GDP (N)	GDP (S)	GDP (R)
Une (N)	1.000						
Une (S)	.718*	1.000					
Une (R)	-.366*	.385*	1.000				
CPI	-.813*	-.615*	.254*	1.000			
GDP (N)	-.613*	-.524*	.118	.341*	1.000		
GDP (S)	-.301*	-.288*	.012	.118	.567*	1.000	
GDP (R)	0.109	-.054	-.079	-.121	-.085	.773*	1.000

Note: Entries are Pearson's R correlation coefficients with significance at $p < .05$ level. (N)= national; (S)=state; (R)=relative.

Table 5.2: Correlation between National and State Macroeconomic Conditions at the Time of Brazilian Gubernatorial Elections, 1982-2006

	Une (N)	Une (S)	Une (R)	CPI	GDP (N)	GDP (S)	GDP (R)
Une (N)	1.000						
Une (S)	.394*	1.000					
Une (R)	-.078	.885*	1.000				
CPI	-.351*	.047	.130	1.000			
GDP (N)	-.515*	-.335*	.127	-.365*	1.000		
GDP (S)	-.122	-.186	.020	-.383*	.605*	1.000	
GDP (R)	.116	-.045	-.045	-.289*	.232*	.915*	1.000

.

Considering that an important explanation for variation in patterns of electoral support for political parties and citizens' vulnerability to particularistic appeals emphasizes the role of demographic and societal factors, I include a battery of variables that tap into this question. A large literature on the topic that comes from studies of Western European countries points to the importance of labor patterns, rural-urban splits, and ethnic cleavages (see Lipset and Rokkan 1967 and the voluminous work that followed it). The variables chosen in this study to tackle the effect of these factors on vote share are the state population density (log), the state median voter's income (log), the percentage of the workforce employed in agriculture and industry, and the percentage of the population living in rural areas. Along with societal voting patterns, I finally test for regional distinctions in the efficacy of patronage and pork. Region is crucial in the particularistic equation. Specifically, the absence of alternative sources of employment, social mobility, and infrastructure is expected to generate greater societal dependence from government largesse. This dependence is likely to be stronger in underdeveloped and less industrialized states. Consequently, I estimated models with dummy variables for Argentine and Brazilian peripheral regions.[32] Summary statistics for the economic and societal variables used in this analysis are presented in Tables 5.3 and 5.4. The generic version of the model is specified as follows:

Incumbent Vote Share = $\alpha + \beta_1$ *Personnel Spending* + β_2 *Infrastructure Spending* + β_3 *Effective Number of Parties* + β_4 *Personnel Spending * Effective Number of Parties* + β_5 *Investment Spending * Effective Number of Competing Parties* + β_6 *Federal Fiscal Transfers* + β_7 *Political Scandals* + β_8 *Incumbency* + β_9 *Normal Vote* + β_{10} *National / State Economic Conditions* + β_{11} *Societal and Demographic Conditions* + β_{12} *Regions* + ε

Table 5.3: Descriptive Statistics for Macroeconomic, Societal and Demographic Variables, Argentina 1983-2003

Variable	Mean	Standard Deviation	Minimum	Maximum
National Unemployment (%)	.117	.047	.054	.190
State Unemployment (%)	.106	.048	.018	.204
Relative Unemployment (%)	-.011	.036	-.148	.063
CPI (ln)	.697	1.06	-.4	2.69
National GDP (%)	.028	.039	-.092	.106
State GDP (%)	.028	.062	-.24	.151

[32] In Argentina, the peripheral region comprises all provinces but the metropolitan Buenos Aires, Ciudad de Buenos Aires, Córdoba, and Santa Fe. I also estimated models coding Mendoza as metropolitan. In Brazil, it is composed of the poor states located in the North (Acre, Amapá, Amazonas, Pará, Rondônia, Roraima, and Tocantins) and Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraiba, Piauí, Pernambuco, Rio Grande do Norte, and Sergipe).

Relative GDP (%)	-.000	.051	-.295	.131
Median Voter's Income (ln)	6.13	.295	5.53	6.99
Population Density (ln)	2.18	1.83	-.030	9.63
Rural Population (%)	.199	.109	0	.513
Labor Agriculture (%)	.025	.028	.002	.172
Labor Industry (%)	.193	.047	.114	.329

Table 5.4: Descriptive Statistics for Macroeconomic, Societal and Demographic Variables, Brazil 1982-2006

Variable	Mean	Standard Deviation	Minimum	Maximum
National Unemployment (%)	.060	.018	.032	.083
State Unemployment (%)	.075	.030	.025	.2
Relative Unemployment (%)	.003	.028	-.048	.117
CPI (ln)	.946	.823	-.02	2.54
National GDP (%)	.029	.030	-.014	.075
State GDP (%)	.042	.072	-.129	.247
Relative GDP (%)	1.34	5.89	-11.47	18.12
Median Voter's Income (ln)	6.13	.410	5.2	7.06
Population Density (ln)	2.95	1.55	-.105	5.87
Rural Population (%)	.265	.121	.04	.63
Labor Agriculture (%)	.038	.028	.003	.143
Labor Industry (%)	.210	.084	.069	.469

EMPIRICAL ANALYSIS

The estimates of four different specifications of my basic model measuring the electoral returns of patronage and pork-barrel allocations in the Argentine and Brazilian provinces/states are reported in Tables 5.5 and 5.6 respectively. Quite simply, I found strong empirical evidence supporting the claim that public sector employment (patronage) works in favor of Argentine –but not of Brazilian- provincial in-party candidates while targeted infrastructure projects (pork-barrel) benefit Brazilian –but not Argentine- gubernatorial incumbent candidates. As expected, the electoral premiums reaped from these different distributive mechanisms of mobilization are conditioned by the structure of regional political competition: spending effects are highest in monopolistic electoral turfs and gradually decrease until become null in highly competitive electoral markets.

In Argentina, the point estimates for the personnel spending variable measured in the gubernatorial election year (Model 1) and its interaction with the effective number of competing parties in gubernatorial races are .302 and -.100 respectively. These coefficients are statistically significant, both alone and jointly, and can be interpreted as follows. For every point increase in the number of competing parties, the slope of personnel spending on gubernatorial incumbent party vote share decreases by .100. Similarly, the magnitude of the infrastructure investment variable in Brazil indicates that for every point increase in political competition, the slope of infrastructure spending on state incumbent electoral performance decreases by .052.[33]

[33] In all estimations, the effective number of competing parties has a negative and statistically significant effect on subnational incumbent vote share. Conditional coefficients for this variable indicate that such an effect is significant at all relevant values of the personal (Argentina) and infrastructure (Brazil) spending variables. Thus, a higher level of political competition is a sufficient condition to reduce incumbent vote share.

The conditional effect of patronage and pork-barrel on incumbent vote share for Argentina and Brazil are displayed visually in Figures 5.3 and 5.4.[34] The horizontal axis in each figure plots the effective number of competing parties through their sample range. The vertical axis plots the marginal effect on vote share of spending in public employment (Argentina) and infrastructure (Brazil). The middle line in each figure is the estimated conditional effect, while lines above and below the middle line depict lower and upper bounds of the 95 percent confidence interval.

[34] Note that these figures display government expenditures measured in the election year (Model 1) for Argentine provinces and averaged over election and pre-election years (Model 2) for Brazilian states. I opted for reporting these displays because they represent the most comprehensive models inasmuch as both fiscal and electoral rules set important limits to the way in which Brazilian executive incumbents can manipulate budgetary expenditures in their last year in office. All other displays are quite similar and are available upon request.

Table 5.5: Distributive Spending and Electoral Returns in Gubernatorial Elections, Argentina (1983-2003)

	Model 1	Model 2	Model 3	Model 4
Personnel Spending (ln)	.302 *** (.115)	.289 ** (.116)	.260 ** (.125)	.679 *** (.157)
Investment Spending (ln)	-.016 (.045)	.001 (.040)	.045 (.048)	.099 (.064)
Competing Parties	-.058 ** (.029)	-.061 ** (.030)	-.082 *** (.029)	-.385 *** (.069)
Personnel*Competing Parties	-.100 ** (.045)	-.117 *** (.045)	-.091 * (.049)	-.269 *** (.068)
Investment*Competing Parties	.012 (.017)	.010 (.016)	.009 (.016)	-.037 * (.020)
Party Normal Vote	.236 ** (.113)	.237 ** (.109)	.189 ** (.106)	.230 ** (.097)
Incumbent Governor	.036 *** (.012)	.028 ** (.013)	.034 *** (.011)	.046 *** (.012)
Political Scandals	-.010 (.010)	-.003 (.012)	-.002 (.012)	-.011 (.011)
Federal Transfers (ln)	.220 *** (.024)	.204 *** (.023)	.201 *** (.025)	.220 *** (.017)
Provincial Unemployment	-.441 ** (.181)	-.428 ** (.183)	-.420 ** (.177)	-.607 *** .189
Median Voter's Income (ln)	-.004 (.033)	-.011 (.032)	-.013 (.038)	-.015 (.027)
Population Density (ln)	-.264 *** (.078)	-.243 *** (.054)	-.318 *** (.083)	-.184 ** (.085)
Constant	-.102 (.279)	-.126 (.229)	-.073 (.252)	.793 ** (.273)
R^2 Wald Test	.76 4994.61 ***	.76 1153.45 ***	.77 5518.86 ***	.76 359.86 ***

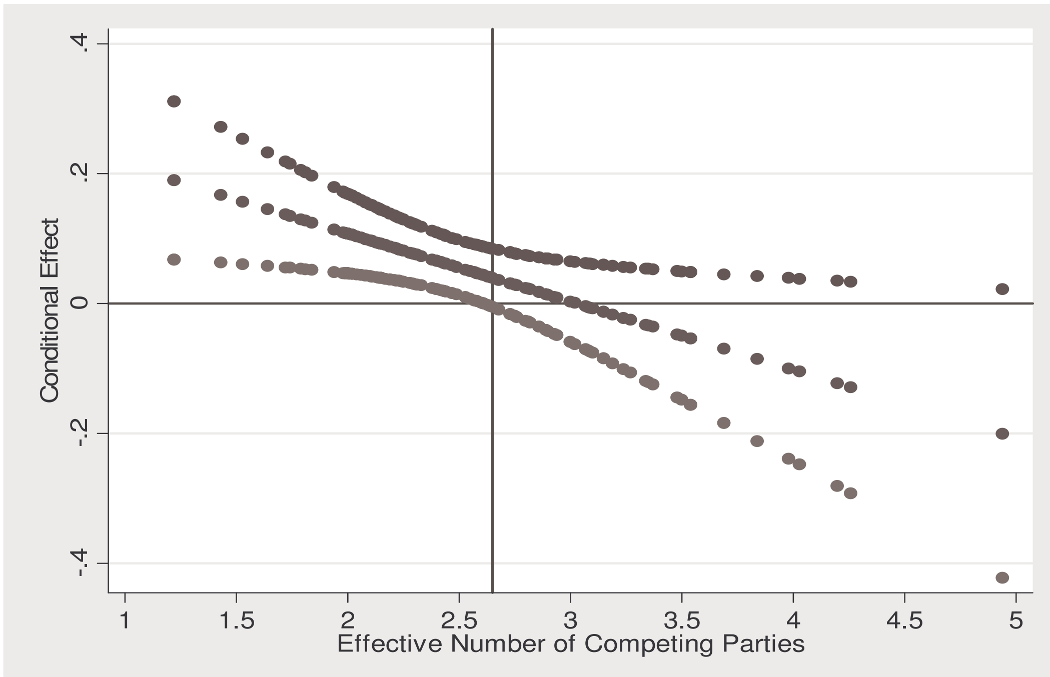
Note: ***p ≤ .01, **p ≤ .05, *p ≤ .1. Dependent variable: Provincial Incumbent Party Vote Share. N=115

Table 5.6: Distributive Spending and Electoral Returns in Gubernatorial Elections, Brazil (1982-2007)

	Model 1	Model 2	Model 3	Model 4
Personnel Spending (ln)	-.197 (.153)	-.201 (.171)	-.020 (.145)	-.161 (.251)
Investment Spending (ln)	.143 ** (.048)	.154 ** (.061)	.080 * (.049)	.141 *** (.039)
Competing Parties	-.236 *** (.041)	-.217 *** (.046)	-.202 *** (.037)	-.208 *** (.058)
Personnel*Competing Parties	.028 (.051)	.028 (.058)	-.039 (.049)	.036 (.091)
Investment*Competing Parties	-.052 * (.018)	-.050 ** (.022)	-.011 (.018)	-.049 *** (.014)
Party Normal Vote	.019 (.129)	.062 (.117)	.035 (.120)	.042 (.130)
Incumbent Governor	.101 *** (.028)	.101 *** (.027)	.119 *** (.028)	.106 *** (.026)
Political Scandals	-.098 *** (.025)	-.091 *** (.025)	-.091 *** (.025)	-.100 *** (.026)
Federal Transfers (ln)	.052 ** (.017)	.040 ** (.019)	.032 * (.018)	.063 * (.036)
National Unemployment	-2.55 ** (1.03)	-.1.95* (1.18)	-2.05 ** (.894)	-2.42 ** (.955)
Median Voter's Income (ln)	.106 ** (.047)	.086 ** (.041)	.073 * (.042)	.015 (.031)
Population Density (ln)	-.011 ** (.006)	-.006 (.004)	-.009 (.004)	-.012 ** (.004)
Constant	.423 (.371)	.473 (.364)	.619 * (.342)	.939 ** (.293)
R^2 Wald Test	.63 188.98 ***	.64 551.91 ***	.64 284.91 ***	.61 155.14 ***

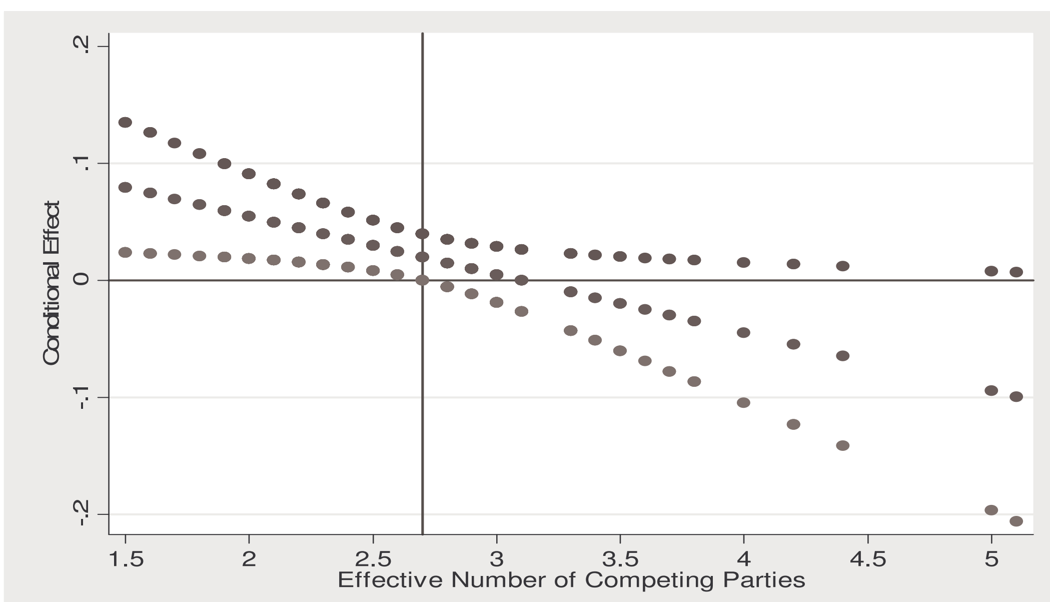
Note: ***p ≤ .01, **p ≤.05, *p ≤ .1. Dependent variable: State Incumbent Party Vote Share. N=153

Figure 5.3: Conditional Effect of Personnel Spending on Gubernatorial Incumbent Party Vote, Argentina (1983-2003).



Note: Personnel spending variable measured in gubernatorial electoral year.

Figure 5.4: Conditional Effect of Investment Spending on Gubernatorial Incumbent Party Vote, Brazil (1982-2007)



Note: Investment spending variable averaged gubernatorial electoral and pre-electoral years.

Figure 5.3 shows that patronage spending in Argentina has a statistically distinguishable (at the 5 percent level) positive effect on the percentage of votes received by incumbent parties' candidates whenever competition for provincial executive office is approximately 2.6 political parties or lower. Beyond that level of competition, like in the provinces of Buenos Aires and Mendoza during most of the period under analysis, the conditional coefficient cannot longer be distinguishable from zero. This finding parallels a rich base of prior research that has documented the centrality of support networks build around the distribution of public jobs in Argentine politics. With very notable exceptions, however, this literature has conspicuously overlooked to explore the full electoral impact of patronage allocations.[35] My results serve to fill this critical gap by identifying the electoral markets where public sector employment prevails, and demonstrating its relative electoral importance *vis-à-vis* other vote trading strategies based on the provision of semi-public or club goods.

Figure 5.4 tells a similar story for pork-barrel spending across Brazilian territorial subunits. Expenditures on public infrastructure projects provide positive electoral returns for gubernatorial candidates whenever political competition for controlling the governorship is equal or lower than 2.7 parties. Far from marginal, such a level of competitiveness characterized nearly 65 percent of all gubernatorial races held in the country. Important exceptions to this pattern are contest to

[35] In what constitutes the most notable exception to this trend, Calvo and Murillo (2004) argue that the rules of Argentine fiscal federalism introduce a partisan bias in the distribution of federal fiscal revenues that encourages investment in provincial public employment. Given the geographic concentration of the Peronist vote in the most favored provinces, such an allocative bias in turn encourages the PJ –but not the UCR/Alianza- congressional vote. My estimates do not reveal any consistent evidence that patronage rewards vary with partisanship. Indeed, dummy variables indicating whether or not the provincial incumbent party is the PJ or the UCR/Alianza regularly failed to achieve statistical significance. Other methodological differences aside, a possible explanation for this discrepancy is that my dependent variable captures gubernatorial (not congressional) electoral patterns for a longer period of time. A second possibility would be that Calvo and Murillo rely on a different indicator of patronage spending: the number of provincial public employees per 1000 inhabitants. I reestimated models using this variable and dummy variables indicating a Peronist and an UCR/Alianza provincial incumbent government. I found no meaningful effects of partisanship, while the impact of patronage and pork remained unchanged.

determine governor held in the states of Amapá, Pará, Rio de Janeiro, Rio Grande do Sul, Rôndonia, and Sao Paulo.

Having established both cross- and intra-national variation in the way distributive politics matters for territorial power-building, the question remains whether or not this electoral impact is substantively significant. To appreciate the substantive significance of my results, consider some hypothetical examples based on sample data. Drawing upon my sample, one can define an Argentine province with "high" patronage and "low" gubernatorial competition if its variables of personnel spending per elector in the election year (Model 1) and effective number of competing parties are .99 or higher and 1.9 or lower (i.e., one standard deviation above/below the mean) respectively. In that hypothetical province, as is the case in La Rioja, the overall impact of patronage on gubernatorial incumbent vote share is calculated as (.302*.99) + (-.100*.99*1.9) = .110. In other words, the candidate backed by the provincial incumbent party can expect to obtain an additional 11 percent of the vote in this scenario. Similarly, one can define a Brazilian state with "high" pork-barrel spending and "low" political competition if its variables measuring infrastructure spending per elector and the effective number of parties are 1.34 or higher and 1.9 or lower respectively. Under these hypothetical circumstances, like those present in the state of Bahia in 1998, the model specification predicts that the governing candidate can expect to receive an additional 8 percent of the vote.[36] Such considerable advantages of 11 and 8 percent are high enough to swing a relatively close gubernatorial election in favor of the incumbent. Close races with those margins of incumbent victory occurred almost 36 percent of the time in Argentina and 22 percent of the time in Brazil**.**

To test whether mobilization through patronage and pork-barrel allocations has a *timing effect* that fluctuates in accordance with the electoral cycle, I reestimated separate models for

[36] The calculation for this hypothetical example is (.154 * 1.34) + (-.05 * 1.34 * 1.9) = .079

each of the four years of a gubernatorial term. Estimations yield a positive but statistically insignificant effect for spending strategies in the election year. Setting to one side the incentives that incumbents have to spend the most just before elections (Nordhaus 1975; Persson and Tabellini 2002; Rogoff and Sibert 1988) or to expand spending after them so as to reward supporters and build a new governing coalition (Ames 1987; Remmer 1993, 2007), my findings indicate that electoral cycles do not shape the reliance of Argentine and Brazilian voters upon patronage and pork distributions targeted in the proximity of a gubernatorial race.

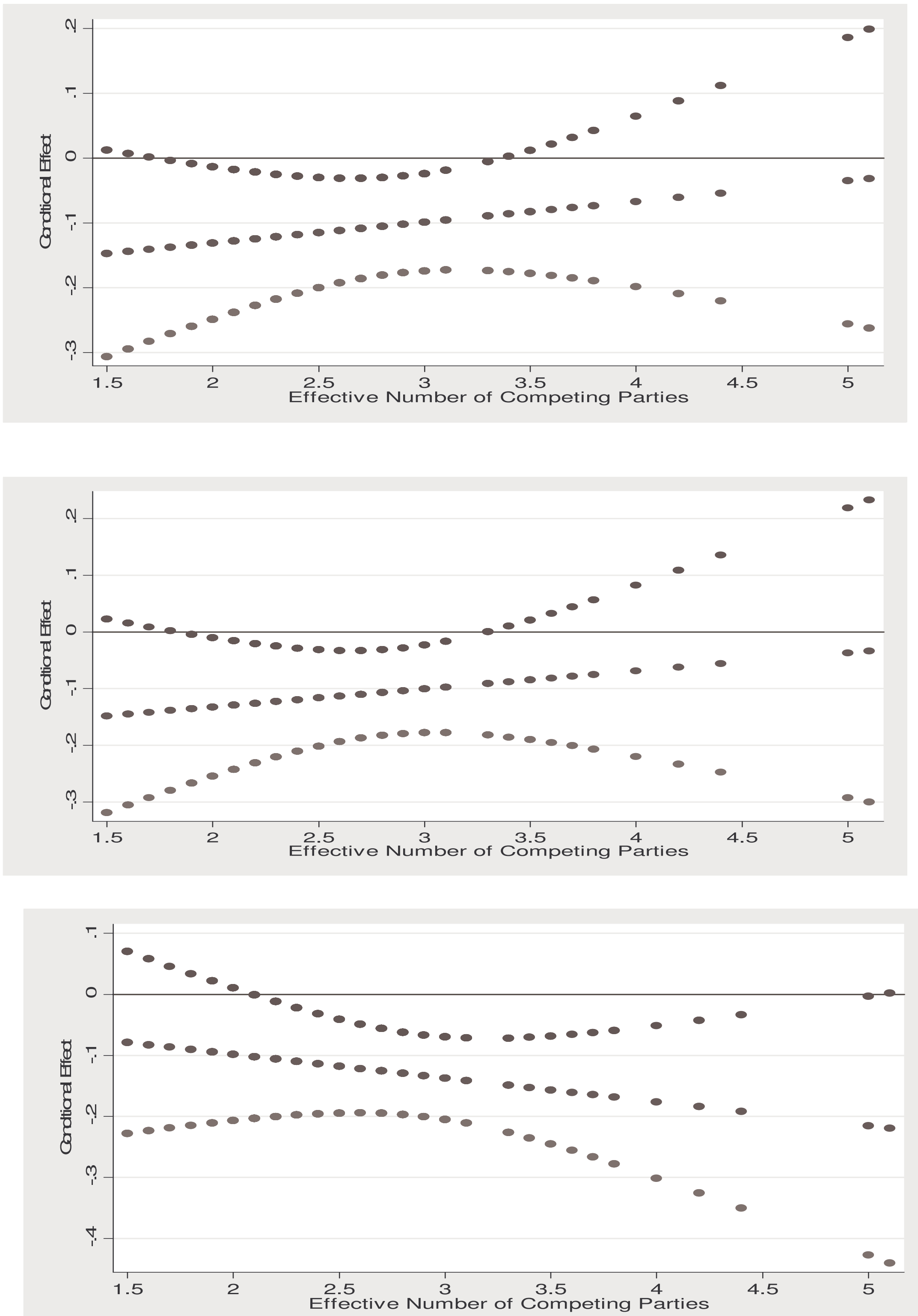
Although there are some minor differences, statistical results are highly consistent across the four specifications. As indicated by the R^2 values, each specification has a considerable overall fit –a fit similar to previous analyses of the subnational vote- which is an assessment of the models' explanatory power. It is first relevant to note that no matter how I estimate the models, spending on public infrastructure projects has no real impact on incumbent party support across Argentine provinces (see Appendix D, Figure B.1). But it clearly has a positive effect in Brazilian states with relatively low and moderate levels of political competition (see Appendix D, Figure B.2). Second, patronage effects in Argentina attain statistical significance in a narrower range of provinces in Models 2, 3, and 4 than in Model 1 (see Appendix D, Figure B.3). In the former specifications, incumbents can expect to gain an additional percentage of the vote whenever a province's level of competitiveness is around 1.8 competing political parties (versus 2.6 parties in Model 1) or lower.

Also relevant to notice is that particularistic politics entail distributive effects that under some conditions may bring about electoral costs –rather than benefits- or "negative mobilization" (Brusco, Nazareno, and Stokes 2006). Because incumbents often trade-off budgetary allocations to reward their cohorts, voters excluded from that benefits and those who bear the costs of redistribution are likely to vote against office-holders (Ames 1987; Dixit and Londregan 1996). Increasing personnel spending implies cutting off expenditures in other areas (in particular, services and investment) as more redundant employees are hired. Pork-barreling benefits one or a few districts while charges the costs across all other districts (especially those located far away), and generates opportunity costs of investments never done or completed. If budgetary tradeoffs reduce support more than they reinforce it, the net electoral effect of distributive spending may be negative. In Argentina, for example, Models 2 and 4 indicate that patronage effects become negative in provinces with extremely high –and notoriously rare- levels of political competition: in fact with more than 3.5 effective parties.[37] But targeting public sector allocations does actually undermine electoral support for incumbent parties in a wide range of Brazilian states. As Figure 5.5 shows, in Models 1, 2, and 3 patronage spending has a statistically significant negative effect on vote share in intermediate and high ranges of political competition.[38]

[37] Twelve percent of the sample cases have that level of competition: Buenos Aires (2003), Ciudad de Buenos Aires (all its five elections), Córdoba (1999), Rio Negro (2003), San Juan (1987, 1991), Tierra del Fuego (1987, 1991, 2003), and Tucumán (1987). The figure is only 5 percent if we exclude Ciudad de Buenos Aires and Tierra del Fuego, the two provinces with highest per capita income and special intergovernmental fiscal regimes.

[38] Specifically, it has a when competitiveness ranges between 1.7 and 3.4 (Models 1 and 2), or more than 2 (Model 3) political parties. This result suggests that patronage lends Brazilian gubernatorial incumbents worst returns when it is used as a systematic rather than as an opportunistic strategy.

Figure 5.5: Conditional Effect of Personnel Spending on Gubernatorial Party Vote, Brazil 1982-2006. Models 1, 2, and 3



Why is patronage an efficient electoral strategy in Argentina and an inefficient tool in Brazil? And why does pork-barrel investment provide no payoffs to Argentine gubernatorial incumbent parties/candidates while it rewards their Brazilian counterparts? My explanation of the electoral efficacy of distributive politics emphasizes both supply-side and demand-side factors and the institutional rules that condition vote trading interactions between politicians and citizens.[39] On the supply-side, the argument highlights incumbents' access to economic resources and their organizational capabilities to screen voters' electoral behavior. On the demand-side, it points to the role of conservative versus expansive fiscal agendas. And on the institutional-side, it underlines the effect of ballot systems and voting technologies.

Recent models of political clientelism emphasize that the efficacy of patronage exchanges are primarily based on the incumbents' access to private goods (Calvo and Murillo 2004), and their capacity to monitor the conduct of voters in response to targeted material incentives (Kitschelt and Williamson 2007; Magaloni, Díaz-Cayeros, and Estevez 2007; Magaloni 2007; Medina and Stokes 2002, 2007; Robinson and Verdier 2001; Stokes 2005).[40] But how can politicians be sure that voters will honor their part of the exchange? The problem is that they can never be sure. Dense organizational networks, however, facilitate screening between true loyalists and opponents allowing incumbents to punish opportunistic defection and enforce the implicit distributive contract. In other words, patronage strategies provide higher electoral returns where incumbent party organizations with extended networks and resources are capable of deterring

[39] A complete answer to this question would require micro-level information of voters' individual predispositions. I acknowledge that problems of ecological inference can mar my approach. But notice that the survey approach to this issue faces the problem of patronage underreporting. That is, respondents may be reluctant to acknowledge having received a job in the public administration as a private reward.

[40] In this discussion that follows, I assume that the more an incumbent can target private goods, the better it can solve the commitment problem of voters reneging on their exchange contract once in the voting booths.

voters from exit to the opposition.[41] Under these conditions, patronage linkages motivate voters to support providers and reinforce a social network in which both of them are embedded. Where political parties that are not enmeshed in society attempt to buy votes through patronage inducements, voters greet these distributive efforts with major skepticism and express a higher propensity to free ride by ignoring the private rewards (or promises) they had received.

On the supply side, I argue that patronage spending is an efficient electoral instrument in many Argentine provinces because relevant parties are able to effectively (although imperfectly) target individual transfers and condition further rewards by using their strong organizational networks. Previous analyses showed that the institutions of fiscal federalism, candidate selection rules, and permissive public sector legislation encourage the use of personnel spending to run state-level party machines (Lodola 2009). These machines have the tools to influence the choice of voters and then help provincial bosses to win office. During the period under analysis, long-standing and bottom-heavy party apparatuses have controlled most provincial governorships in the country. Built around a highly decentralized structure that relies on a territorially concentrated army of grassroots militants and operatives (*punteros*), these subnational party machines became deeply inserted into the constituents' communities. They used their social proximity to voters to gain knowledge about their party predispositions, and to monitor their voting behavior (Alvarez 1999; Auyero 2000; Brusco, Nazareno, and Stokes 2004; Levitsky 2003; Stokes 2005).[42] When interactions between solid party structures and voters became sustained over time and when incumbents garnered richer economic resources than their

[41] Of course, parties do not have to actually punish voters but to make a credible threat of punishment. These threats can also come from intimation and political coercion.

[42] Stokes (2005) reports that nearly 40 percent of the respondents in a survey conducted in 2003 (500 adults in the provinces of Buenos Aires, Córdoba, Misiones, and San Luis) affirmed that party operatives can find out how a person has voted. In marked contrast, less than 10% of the interviewees in a four-wave panel study conducted in the Brazilian cities of Juiz do Fora and Caxias do Sul manifested having had personal contact with party operatives (Barker, Ames, and Rennó 2006).

opponents, patronage is likely to generate a "self-enforcing group equilibrium" (Kitschelt and Williamson 2007) that served the governing elite to endure its political monopoly. At the extreme, patronage-based regimes sustained on a territorially scattered and functionally differentiated troupe of party brokers, intermediaries, and militants who operate at a fine-grained level actually sidestep the voting booth by spying on voters.

Compared with Argentina's traditional parties, Brazil's ones are organizationally weaker, far less enmeshed in society, and have less resources to sponsor activities. Even though parties' commitment to organization varies across states, clientele networks around the country have traditionally been individually dominated rather than party-oriented and controlled.[43] Furthermore, political machines have usually operated at the local or municipal-level facing institutional impediments to expand their territorial influence to entire states. Besides the comparatively weak identification and socialization of Brazilian citizens with political parties, I have contended that three institutional factors are partially responsible for this pattern. First, Brazilian federalism grants *municípios* –and then local elites- significant fiscal and political autonomy. Second, electoral and candidate nomination rules foster individual careerism and campaigning. And third, restrictive legislation limits discretionality over personnel spending and appointments in the public sector. In the absence of tentacle-like organizational structures (with the notable exceptions of the PT and the PC do B) capable of developing strong and stable roots in society, Brazilian parties are less capable of making inferences about how individuals vote and whether or not they are good candidates for patronage vote buying. Monitoring in this scenario is more symmetrical among different competing forces and individual opportunistic defection is

[43] Weak organizational commitment and a small base of partisan identifiers are not attributes of the PT and the PC do B. To a lesser extent and depending on the period under analysis, the PPS, the PSOL, and the PDT also cultivated intra-party organizational networks.

therefore more likely.[44] This structure of politics has constituted a fertile ground for a multitude of regional politicians to compete for popular votes, making enduring subnational leadership in contemporary Brazil the exception rather than the norm. Because organizational penetration is weak and incumbent parties have difficulties to repeatedly win elections, voters have little incentives to back exchanges based on the provision of public jobs as they anticipate that the patronage interaction will not continue in the long future.

My empirical analysis provides cross-state systematic evidence of the extent to which parties in both countries are rooted in society and, consequently, are more or less conducive to durable patronage linkages. Where political parties are deeply enmeshed in social networks, most voters regularly support the same political party in different elections. Conversely, where parties have weak social ties, voters (and parties themselves) are more inclined to shift electoral allegiances over time. Statistical results reflect the underlying difference in the way partisan attachments or loyalties –or even the long-term value of a party's name- in Argentina and Brazil distinctively shape subnational citizens-politicians linkages. Estimates for the normal vote variable indicate that gubernatorial incumbent candidates in the former but not in the latter federation may have a good idea of how they may fare. In all Argentina's model specifications, this variable produces a positive and statistically significant (at the 5 percent level) coefficient of at least .23 suggesting that voting patterns are relatively stable through time. When estimations are run without an intercept (i.e., the regression line is forced through the origin), coefficients are no lower than .19. Thus, a candidate from the provincial incumbent party in Argentina can expect to obtain around

[44] Why do Brazilian politicians resort to patronage strategies if they do not provide net electoral payoffs? The most obvious answer is that they miscalculate patronage effects or fail in designing their strategies. A more promising response points to the fact that different incumbents resort to different distributive strategies. In particular, the use of patronage and pork-barrel resources is conditional upon incumbents' own political ambitions and chances of election. Patronage in Brazil is primarily used by gubernatorial incumbents who do not run for reelection and, consequently, have little incentives to refrain opportunistic and rent-seeking behavior. When state governors decide not to (or cannot) run for a new mandate they are more prone to relentless spend their last time in office granting favors and employment to close supporters.

20 percent of the party's normal vote.[45] In contrast, as anticipated by our previous discussion, coefficients for the normal vote variable across Brazilian states are extremely low and never remotely close to achieve statistical significance.

A second important factor to explain variation in the electoral returns reaped from patronage investment is located at the demand-side of public policies: the electoral fiscal agendas. In Argentina, as several scholars before me have noticed, the federal government of Raúl Alfonsín was unable to implement a fiscal reform program that punished provincial spending profligacy and constrained subnational borrowing, while the administration of Carlos Menem strategically delayed the implementation of fiscal adjustment policies –including the rationalization of the administrative sector- in the provinces in exchange for legislative support (Gibson and Calvo 2001; Wibbels 2005). During the short-lived Alianza government and the years following the devastating economic collapse, provincial governors continued to show remarkable strength and stamina stymieing efforts to reform fiscal policies, especially when it affected financial matters in their fiefdoms. Many provinces even assumed the right of seigniorage by issuing bonds to pay public sector workers. Fueled by week national constraints and strong institutional incentives to overspend, provinces have showed a chronic tendency to structural fiscal deficits. Overspending tended to concentrate in personnel categories at the expense of investments, while fiscal deficits were typically financed through provincial and commercial banks with the tacit guarantee of the Central Bank. Perhaps induced by "systemic" forces that implicitly combated subnational fiscal discipline, voters received no cues that subnational governments were held responsible for their

[45] There is some agreement among observers of Argentine politics that the country's 2001 crisis frayed the national party system by consummating the UCR's debacle and fostering PJ's internecine divisions. I include a dummy variable for the 2003 gubernatorial elections to test whether the political and financial crisis affected gubernatorial incumbent parties at the provincial level. Contrary to conventional wisdom, this variable is positively signed and reaches significance at the 5 percent level. Substantively speaking, its coefficient indicates that incumbents obtained an additional 9/10 percent of the vote in the 2003 provincial executive contests.

provinces' fiscal health. Argentine voters have had the perception, reinforced by some members in Congress, that provincial deficits and debts were not a problem in large part caused by state-level officials. But even when voters could have wrongly attributed responsibility for provincial fiscal outcomes to the federal government, the fact is that electoral agendas were never dominated by the issue of fiscal stabilization.

Throughout the 1980s and most part of the 1990s, the vast majority of Brazilian states also run large fiscal deficits and experienced major debt crises. But once the benefits of the *Plano Real* were stabilized, state governments began to incorporate at a different pace the conservative fiscal agenda designed by the federal administration. Unlike its predecessors, the government of Fernando Henrique Cardoso counted on political support for fiscal reform in the business sector (Kingstone 1999), and among centrist and rightist parties in Congress (Power 1998). Moreover, central monetary institutions and financial regulators gained leverage over states to implement restrictions on subnational spending and borrowing. Under the denominated Program to Support Restructuring and Fiscal Adjustment, the federal government negotiated the terms of state debt workouts, which required privatizing provincially-owned banks, reducing personnel costs, and limiting borrowing activities. These fiscal pressures to the states were progressively enhanced with the enactment of the Camata Law, the Kandir Law, and the Fiscal Responsibility Law. Precisely because the central government was heavily involved in regulating transcendental fiscal decisions of the states, it created expectations among voters and the mass media that governors could not reasonably claim that states' finances were beyond their responsibility. The Brazilian electorate thus became strongly inflation averse and unprepared to support governments favoring unorthodox fiscal practices. Indeed, according to some observers, the adoption of an external (federal) conservative fiscal agenda did not affect –and in some cases increased- gubernatorial incumbents' territorial bases of support (Souza 2007).

My estimates confirm the expected effect of fiscal electoral agendas on incumbent vote share in the two countries. In the absence of survey responses, any measure of voters' fiscal concerns must rely on actual economic outcomes. I therefore include a fiscal policy management variable that measures the ratio of state fiscal deficit (total revenues minus total expenditures) relative to expenditures.[46] Increases in total spending should have a negative effect on vote share because it necessarily entails higher taxes in the future. But, if as suggested above, Argentine voters are fiscal lenient, this variable should be negatively signed indicating that the higher the level of deficit spending (and public employment expenditures), the greater the incumbent share of the vote. If, on the other hand, Brazilian voters are fiscal conservatives, this variable should be positively signed indicating that the higher the fiscal deficit the lower the incumbent vote. In all Argentina's equations, the variable carries a negative and statistically significant (at the 1 or 5 percent level) coefficient suggesting that regional voters do reward provincial governing elites for running unhealthy finances. Although results are more sensitive to econometric specification, the fiscal policy management variable is often positive and significant in most Brazil's models. This results suggests that deficit financing does not matter politically as Brazilian voters punish spending increases regardless of whether they are financed by taxes or borrowing.

In addition to dense organizational networks and expansive fiscal electoral agendas, certain voting technologies and balloting systems facilitate patronage vote buying by helping parties to monitor voters' choices. Argentina uses a system that gives parties great control over individual

[46] Controlling for state debt interest payments did not affect the results discussed below. Because the impact of fiscal performance on the real economy is not immediate, this variable is measured as the averaged value of the election and pre-election years, and the averaged value of the four years of each gubernatorial term. To facilitate discussion, results are not reported in the tables.

voters. Balloting is secret and takes place in enclosed booths but, contrary to the Australian ballot system, ballots are paper-based, produced by political parties, and distributed by party workers well before the election. Each party has therefore a different paper ballot with all candidates for all elected categories included on it. Individual candidates for executive offices and party lists for legislative positions appear on separate tickets in the same party ballot.[47] This ballot structure contributes to vote inducement and monitoring. First, it enhances parties' power to force straight-ticket voting. When many categories are elected on the same day, it is simply "expensive" for voters to split tickets (vote for different parties in different categories) because it requires them to actually cut the ballot by hand. Second, it allows parties to keep track of turnout and voting patterns (*punteo*) through different mechanisms. Local *punteros* distribute ballots in their territorial areas of responsibility weeks before the election day along with other private material goods (bags of food building materials, clothes, or mattresses) sending a clear message that such individualistic favors are expected to be reciprocated with a vote. Although voters can obtain ballots anonymously in the voting booth, many individuals receive them directly from party operatives before going to vote and even in the voting line. Handing out ballots also serves to monitoring voters through more complex forms of vote buying such as the chain-vote (*voto cadena*).

In Brazil, the pioneering adoption in 1996 of a user-friendly electronic voting system known as direct-recording electronic voting (DRE) reduced monitoring and vote trafficking by impeding parties and candidates to violate the secrecy of the ballot (Nicolau 2002). The utilization of these devises raises important questions concerning whether, and if so how, electronic elections can be

[47] In the Australian ballot system, all candidates or lists of candidates for a given office appear listed in the same single format, while government agencies produce and distribute the ballots under controlled conditions on or close to the election day.

audited meaningfully.[48] Questions of electoral fraud aside, the fundamental issue here is why the Brazilian voting system is less amenable to monitoring and then to increasing patronage returns. The DRE system is less opened to patronage because it reduces party activists' involvement into the electoral process. By impeding party brokers to manipulate ballots before the election, it weakens the efficiency of vote inducements through personal gifts/threats and face-to-face interaction. Moreover, because party operatives cannot stuff ballots into the voters' pockets and voters do not return ballots to party operatives (recall that voters never get printed slips of their choices but only saw them behind a window), the system also eliminates monitoring mechanisms such as the chain vote. Brazilian parties undoubtedly compensate these institutional constraints to monitor voting behavior by performing a range of other actions that enhance their ability to make informed guesses. But as several features of the country's political system are inimical to the formation of party organizational structures –at least in comparison with Argentina-, these activities are circumscribed to local territorial domains where autonomous political elites control the scene. Politicians thus need to carve out rather reliable electorates, and pork-barrel appears as a potent instrument to claim credit and fulfill that goal.

With respect to the other independent variables, they mostly perform in conformity with my theoretical expectations. Unsurprisingly, Argentine and Brazilian governors enjoy the benefits of incumbency. An incumbent governor who runs for reelection in Argentina is expected to get a boost of about 2.8 to 4.6 percent of the vote (that is, coefficients for this variable across the four specifications range from .028 to .046), while Brazilian gubernatorial incumbents seeking a second executive mandate are expected to obtain a higher increment of around 10 to 12 percent

[48] The mayor problem is that DREs do not allow for manual recounts of the (digital) votes because they do not emit any material prove that the vote was received by the system and tallied.

of the vote.[49] Replacing the indicator of incumbency for a dummy variable measuring whether or not the sitting governor runs for other elected position but the governorship, yields insignificant results. At least two reasons may explain why departing governors do not enhance their fellow candidates' vote. First, estimates may be biased downward because of an omitted variable problem: unpopular governors tend not run for reelection, which leaves them in the departing category. Second, some outgoing governors plan to return to state executive office after a term out of the governorship. In an attempt to limit the consolidation of future challengers, they may decide not to mobilize significant resources and perks that would facilitate their successors to compete for popular votes and build independent machine structures.

In the context of Argentine subnational politics, internal factionalism in both hegemonic and non-hegemonic parties is a major source of organized challengers. To a larger extent this is so because, as the popular adagio that opens this article states, political structures tend to move behind those leaders who currently control public jobs and government resources. This particularity causes many former governors to desist from any attempt to recapture the governorship. A relatively decent number of them, however, do run for provincial executive office once again although with little electoral success. Specifically, 30 percent of the 105 individuals (reelected excluded) who occupied an Argentine governorship between 1983 and 2003, tried to return to that office. As much as two-third of them failed in their attempts, and close to a half did it against a fellow candidate in a party primary or the *Ley de lemas*. In Brazil, nearly 50% of the 107 governors (reelected and *tampão* excluded) from the 1982-2006 period sought to return, and a similar proportion of them (65%) failed. Consistent with observed party switching in Brazilian politics, 36% of these "returners" switched party to maximize their

[49] This result does not mean that *individual* governors are more successful in Brazil than in Argentina. Actually, they are not. For details see Lodola (2010).

chances of electoral success. Yet there is a negative effect of party switching on returners' election as only 14% of them eventually won the contest in question. In short, considering the low likelihood of regaining executive office, governors who do not run for reelection and plan to return in the near future have little incentives to promote their co-religionist candidates through budgetary allocations.

Interestingly enough, political scandals do not affect the electoral performance of provincial incumbent parties/candidates in Argentina but they do emerge as a statistically significant (at the 1 percent level) determinant of gubernatorial vote losses in Brazil.[50] It is estimated that if a Brazilian governor or vice-governor incurred in irregularities during the four-year term of office, incumbent vote share is reduced by 9/10 percent. An interaction term between the scandal and incumbent reelection variables generates interesting results. In line with scholarly literature that emphasizes the deterrence effect of reelection over incumbent rent-seeking behavior (Besley and Case 1995b; Ferejohn 1986; Persson and Tabelini 2000), scandals only affect candidates backed by governors who do not run for reelection. But in contrast to theoretical expectations, governors seeking a second term do not refrain more than lame ducks from rent extraction and abuse of power. For reasons whose analysis is beyond the focus of this dissertation, both types of governors commit irregularities in almost the same proportion.[51] It rather seems that some incumbents caught engaging in corrupt practices counted on a better protection against popular

[50] Why did political scandals ultimately not sink the electoral performance of Argentine subnational incumbents while they affect the fortunes of Brazilian state-level officials? Perhaps, the reasons have to do with a different development of television networks, corporate media groups, and the professionalization of newsroom that created greater incentives for Brazilian politicians to use scandal as a political weapon. Indeed, although these trends have been common to most Latin American countries, they have been dramatic in the case of Brazil. (Pérez-Liñán 2007: Chapter 4).

[51] These numbers are 31 and 26 percent respectively. For a compelling framework on the corruption-reelection link, see Pereira, Melo, and Figuereido (2008). In a panel of 184 municipalities in the Brazilian state of Pernambuco, the authors do not find evidence on the governance-enhancing role of reelection incentives as first-term mayors are not less likely to commit irregularities than do second-term ones. The effect of corruption over electoral success, on the other hand, indicates that mayors who committed irregularities while in office are less likely to be reelected. Such an effect, however, only occurs if information about mayors' misbehavior is released in the electoral year.

electoral sanctions. Protection, of course, may take many different forms including privileges when responding to criminal charges, control of the judiciary and the mass media, intimidation, and cooptation.

Evidence regarding the impact of national and state macroeconomic conditions offers some empirical insights about how subnational incumbents are punished or rewarded by rational voters. In a nutshell, a variety of tests points toward the importance of provincial influences in Argentina and of national influences in Brazil. The estimates for the former federation suggest that incumbent vote share decreases with provincial unemployment and increases, although less consistently, with provincial economic growth. Estimations including both indicators separately produce coefficients that achieve statistical significance at the 5 percent level.[52] If both variables are included in the analysis, easier coefficients for economic growth are significant at the less stringent 10 percent level. Substantively, a one percent increase in the provincial unemployment rate undermines incumbent electoral support by about 0.4 to 0.6 percent. A similar increment in provincial economic growth fosters incumbent support in Argentine provinces by almost 0.2 percent. Despite multicollinearity, coefficients for provincial unemployment remain statistically significant if national economic factors are included (either individually or simultaneously) in the estimates. Yet if we replace the indicators of provincial unemployment with those of provincial economic growth, results are weaker. The coefficients for GDP growth remain significant across the four models if national economic indicators are included individually but not if there are included simultaneously.

Unlike provincial conditions, national performance as measured by unemployment, GDP growth, and inflation do not have any discernible effect on subnational vote choice. Models

[52] To make the presentation simpler, I only report results for specifications including the provincial (Argentina) and national (Brazil) unemployment rates. All other models are available upon request.

including these variables routinely produce insignificant coefficients, suggesting that Argentina's gubernatorial elections are regional contests not driven by national swings. If we include the national economic indicators, a dummy variable for provincial incumbent parties sharing the president's party label, and the interaction of the two terms, results remain unaltered whereas the conditional coefficient for the interaction does not reach statistical significance. In other words, presidential co-partisan candidates are not particularly affected by the overall condition of the economy. This finding is at odds with the referendum voting hypothesis and some prior studies on the matter discussed in this article (Remmer and Gélineau 2003; Gélineau and Remmer 2005). Contrary to this interpretation, my findings stress that although the president's provincial co-partisans do better than candidates from opposition parties (the incumbent vote share variable has a mean of 52 and 44 percent respectively), they do not reveal strong linkages with the economic performance of the national administration.[53] Indeed, national economic factors only seem to be considered as referential points to reward or punish provincial office-holders. Estimations with the "relative" unemployment variable (not reported) show that a one percent increment in the national unemployment rate relative to the provincial rate leads to a boost of around 0.5 percent in the vote of gubernatorial incumbents regardless of their political affiliation. The impact of "relative" GDP, on the other hand, runs in the expected direction but estimates often fail to attain statistical significance. At the aggregate level of analysis, therefore, absolute and relative provincial unemployment constitute the most electorally salient dimensions of

[53] Using a different dependent variable from that employed here (i.e., the vote share received by presidential –not provincial- in-party gubernatorial candidates), Remmer and Gélineau (2003, 2005) contend that that the fortunes of candidates from the presidential party are conditioned by national economic factors, especially unemployment and inflation, and approval rates of the sitting president. Provincial economic conditions also matters but only to credit or blame the presidential party. In contrast, relying on the same dependent variable used in this article, Rodden and Wibbels (2005) find that the impact of the national economy is weak across Argentine provinces and conditional upon intergovernmental co-partisanship. The impact of national economic conditions, however, runs in a perverse way since provincial incumbent candidates who *do not* share the party affiliation of the president actually benefit for good national economic performance. Among Argentine scholars, Meloni (2000), and Porto and Porto (2000) also argue, like me, that national economic assessments do not influence subnational electoral results.

economic performance in Argentina. This finding is not surprising considering that over the past fifteen years unemployment rather than inflation has represented the major source of economic insecurity in the country. A logical implication of these results would be that Argentina's subnational governments reaping the blame or credit for their economic performance confront incentives to perform in accordance with the preferences of local electorates. Inferences, however, should be drawn with caution. Provincial performance matters but aggregate data cannot tell us whether it does in ways that bolster accountability of policy management. Actually, we have seen that voters do not punish but reward provincial governments' reckless fiscal behavior.

Do Brazilian gubernatorial elections revolve around state or national economic performance? First, and in contrast to what we observe across Argentina's provinces, I find consistent evidence indicating that the conditions of the local economy exercise no influence on gubernatorial vote choice. Models reduced in the number of cases due to missing data indicate that no significant relation exists (at the 10 percent level or lower) between state unemployment and incumbent vote. Estimations with state GDP also remain statistically insignificant as do analyses including relative unemployment and relative economic growth. Second, models conducted with national indicators speak to a pattern of moderate influences. In particular, support for gubernatorial incumbents in Brazil appears to fluctuate negatively with national unemployment and inflation, and positively with national GDP. But due to high multicollinearity, the effect of these factors is sensitive to model specifications. Signs of national economic voting are discernible if the national economic variables are included separately in the estimates attaining significance at the 5 or 10 percent level. But if incumbent support is regressed on all tree national indicators, only inflation remains negatively significant at the 10 percent level.

Dividing the sample into time periods helps clarify this issue. If Brazilian voters punish and reward state incumbents for how the national economy works, we should expect the effect of inflation to be particularly significant in the devastating high-inflationary period prior to the introduction of the *Plano Real*. Similarly, we should expect unemployment to negatively affect gubernatorial races in the last decade or so, period in which it almost double from 4 to 8 percent. I find evidence of both patterns. The signs of inflation and unemployment rate are consistently negative only during the 1982-1994 and 1998-2006 periods respectively. Utilizing an interaction term to assess the difference between gubernatorial incumbents belonging to the presidential cabinet coalition and to the opposition, yields a striking result: inflation only harms presidential incumbents while unemployment undermines both.

With the inclusion of societal and demographic variables, the effects of patronage and pork-barrel spending remain unaltered. Argentine subnational incumbent parties/candidates continue to benefit from public employment targeting while Brazilians reap gains from expenditures in infrastructure investment projects. Regarding the socio-demographic factors, some of them produce the expected effects, others do not. First, neither the median income of the economically active population nor the structure of the provincial economy (as measured by the percentage of the workforce formally employed in agriculture and manufacturing activities) affects subnational incumbent performance in Argentina. Estimates for the former variable are often negative while coefficients for the latter (not reported) are positive but in both cases far from attain statistical significance. In Brazil, state incumbents do better in jurisdictions with higher per capita income and worse in areas with more industry as indicated by the negative sign of the manufacturing employment variable (not reported).[54] Second, we observe that in both countries incumbent vote

[54] A possible explanation for this result, as Ebeid and Rodden (2006) explain for the U.S. case, is that the economic well-being of the population in agriculture regions is driven by factors that are beyond the control of state officials

share tend to decrease in less urbanized states. Given the spatial distribution of Argentine and Brazilian populations, measures of urbanization tend to correlate with those of total population (.63 and .59 respectively). Indeed, replacing the population density variable by the natural log of the state population generates identical results.

Why do incumbents do better in less urbanized and less populated areas? The reason lies in the greater ease of vote monitoring in small communities. Actually, community size and geographic dispersion are proxies for *observability* of residents' votes. In small towns and cities where social relations are multifaceted, voters are less anonymous, politicians are more present, and partisan predispositions are more a matter of public knowledge. Party organizations are therefore more able to credibly commit to helping (or excluding) individuals who vote (or don't vote) for them. Moreover, sparsely populated communities –which are typically small constituencies-, are small markets where political monopolies and patronage-like activities are more likely to exist (Media and Stokes 2007). In large cities, voter heterogeneity, urban mass media, easy transportation to the ballot, alternative sources of employment and social mobility, and a greater menu of electoral choices make monitoring and patronage relations more difficult to develop. The inclusion of regional dummy variables appears to confirm this argument. In the four Argentina's models, a variable indicating the metropolitan provinces is often negative and significant at the .1 or .05 level, while a variable denoting the provinces located at the very poor Northwest and Northeast attain positive coefficients that are consistently significant at the more stringent .01 level. In Brazil, on other hand, regional variables where politics has long been dominated by conservative politicians –the Northern and Northeastern states- are positively

such as the value of fixed assets and commodities in international markets. In a more diversified and modern economy, state governments have more influence over local welfare as it is linked to investment capital, the presence of propitious investment environments, and a skilled workforce.

signed but statistically insignificant.[55] Furthermore and in line with some of my findings, regions where the bulk of Brazilian industry and left-centrist electorates exist –the Southern states- are less prone to support incumbents as suggesting by the negative and significant coefficient (at the .05 level) routinely attained by that variable. An obvious implication of this analysis is that although in certain areas patronage and traditional styles of politics may still prevail, reforms that shrank the scope and resource base for state patronage have diminished its prevalence.

Having reported my statistical results and offered substantive explanations, it is important to consider whether the whole analysis is subject to question because of a potential endogeneity problem. The fundamental issue here is that incumbent vote share and government spending may be reciprocally related. Candidates spend in reaction to their anticipated electoral chances and other candidates' spending priorities. In particular, candidates who appear to have a better chance of winning should have an easier time spending money. If incumbents face no serious competition, they may win by large margins without spending much. If they find in a dogfight against a well-qualified challenger, they spend *reactively* and, although they win more often than not, their vote shares are lower than those of their unchallenged colleagues. As candidates who knew they were in trouble heading into an election will spend more even if the extra spending do not enhance their vote share, spending would appear, misleadingly, to depress the incumbent's support (Ansolabehere and Snyder 1996). This creates an endogeneity problem: anticipated poor electoral performance might cause more spending, rather than spending cause poor electoral performance.

I provide two answers, one analytical and the other methodological, to this potential problem. First, there are lots of factors identified as affecting anticipated electoral performance (such as

[55] A triple interaction among patronage spending, competitiveness, and the North-Northeast variable also generated insignificant results.

challenger quality, and ideological proximity with the constituency) that are often poorly measured or not measured at all. Second, there are no conventions regarding how to deal with endogeneity in interactive models. The question is whether or not interaction terms should be instrumented as well. An additional problem is that in models with fixed effects the endogenous variables X_{t-1} or X_{t-2} cannot be used as instruments because they are related to the error term $\square_{t-1}$ and $\square_{t-2}$ of the fixed effect equation respectively.[56] In the absence of outside exogenous variables available to add as an instrument set, I decided to estimate an augmented regression or Durbin-Wu-Hausman test for endogeneity (Davidson and MacKinnon 1993). I obtained a high *p* value which indicates that OLS estimates were consistent. Since I do not find evidence of a reverse impact of spending on incumbent vote share in my data, we can be confident that patronage and pork-barrel investment play an important role in explaining gubernatorial elections and territorial power building in both Argentina and Brazil.

CONCLUSION

Building upon distributive approaches to electoral politics, this article has demonstrated that gubernatorial incumbents in Argentina and Brazil manipulate budgetary resources in ways that enhance the electoral fortunes of their parties or candidates. Perhaps most important, it has shown that state incumbents in these prominent Latin American federations garner electoral rewards from different distributive mechanisms of mobilization. Patronage investment benefits subnational incumbents in Argentina but not in Brazil, while pork-barrel spending provides net electoral premiums in Brazil but not in Argentina. I argued that, along with incumbents' latitude

[56] Actually, all the values of the lagged X are related to some past value of the error term. In other words, in fixed and random effect models all instrumental variables must be strictly exogenous or unrelated to past, current, or future values of the error term.

to manage patronage and pork-barrel resources, three factors help explain variation in the effect of particularistic spending in both countries: organizational tools, electoral fiscal agendas, and voting technologies. Where dense party networks are enmeshed in society, electoral agendas do not punish fiscal profligacy, and the balloting system undermines the anonymity of the vote, voters are more likely to reward incumbents for private good allocations. In contrast, where party structures have weak social ties, electoral agendas incorporate fiscal conservative principles, and voting technologies make it difficult for parties/candidates to monitor individual choices, credit claiming prevails and voters are then more likely to reward incumbents for semi-public (local or club) good allocations.

In addition to uncovering the electoral impact of budgetary policy manipulation, this article offered several pieces of empirical evidence for our understanding of subnational elections in federalized regimes. First, my statistical findings provide partial support for the established literature on economic voting, which suggests that the electoral fortune of the incumbent party revolves around its economic performance in office. Provincial economic performance, whether measured in absolute or relative terms to national economic performance, exercises a significant influence on gubernatorial election outcomes in Argentina but not in Brazil. My results also confronts to the traditional literature on referendum voting in showing that national economic swings affect the vote share of regional incumbents that belong to the presidential party coalition in Brazil but not in Argentina. Second, the evidence discussed here suggests that incumbency redound consistently to the advantage of the sitting governors as those who run for reelection obtain higher vote shares than do new-comers. Third, consistent with scholarly work on party systems, the party's normal vote gives incumbents across Argentine provinces –but not across their Brazilian counterparts- a good idea of how they may fare. Forth, because of reasons that go beyond the scope of this article, political scandals only affect subnational incumbents' electoral performance in Brazil. Fifth, the relative magnitude of federal transfers discretionally controlled by the sitting governor appears to affect electoral support for the incumbent party/candidate while the impact of presidential discretion over federal grants is observed across Brazilian states. Finally, when societal and demographic factors are considered into the analysis, it indicates that community structure and size rather than voters' income levels ultimately shape the electoral efficiency of vote buying strategies.