CHAPTER 2

Societal Variables

2.1 Introduction

This chapter explores the different impacts of Brazil's institutional rules across different societal settings. Specifically, I compare legislative parties and behavior in five Brazilian states: Rio Grande do Sul, São Paulo, Bahia, Piauí, and the Federal District. While each of these states has a different social, political, and economic setting, they share nearly identical institutional settings, providing a nearly ideal environment for my test.

I explore how legislative politics and political parties are shaped by societal variables, especially voting behavior. Across diverse states, voters' demands vary from requests for immediate and urgently-needed divisible goods - food, medical care, employment - to public goods, like environmental, educational, and fiscal policies. How do rational, career-oriented politicians respond to different kinds of demands? How do these demands shape political party systems?

I find that there are significant differences in legislative behavior across states, corresponding to the nature of electoral exchanges. Where voters' priorities are for local and private goods, political parties are weak, and politics is organized by the main provider of patronage: the executive branch. Increasing voters' valuation of public goods, however, is reflected in increasing party strength. I show these patterns using state assemblies' party cohesion on roll-call votes. I complement my state comparison by applying my theory of voters' preferences and party formation to behavior in the Brazilian Congress. I find the same patterns of behavior in the National Congress in an analysis of roll-call votes and party switching.

The chapter seeks to make several contributions. It provides the first comparative analysis of Brazilian state legislative behavior. This is a useful and important exercise in its own right. States are important political actors in Brazil. Many decisions about the distribution of resources are made at the state level. States mirror the national government in implementing many contentious policies: privatization of state-owned industries and financial institutions, the negotiation of fiscal incentives for foreign investment, and administrative reform. Further, many federal expenditures actually go through the states - federal funds are allocated to projects but eventually administered through state governments. Important political decisions are made at the state-level; state politics deserves scholarly research.

But more broadly, the motivation for this project is to begin to integrate two divergent themes in political science research. Institutional or positivist approaches tend to emphasize the formal rules of the political arena as centrally determinant for explaining politicians' behavior. Constructivist approaches explore the role played by historical developmental paths and social structure. Can political science constructively combine the two approaches - exploring how institutions interact with social structures to shape the political arena? Here I take a small step into this enormous research agenda.

For Brazilianists, the question is especially appropriate. Much of the blame for Brazil's political problems is placed on two formal institutions: the openlist PR electoral system and federalist form of government. But there are easy empirical challenges to these arguments. The United States has a federal form of government. As do Canada, Mexico, Argentina, and many other countries - few of which suffer the extreme party fluidity that scholars have documented in the Brazilian system. Similarly, Chile and Finland have both used the same electoral system, open-list proportional representation. But both differ notably from Brazil in that neither suffers an inchoate party system. Why do these institutions matter in some settings - and not in others?

Brazil's states provide an ideal setting to study this question. Each shares the same national setting and international economic tides. They also have nearly identical institutions. But socially, historically, and economically they are very different.

2.1.1 Roadmap

The chapter proceeds in three steps. First, I introduce the Brazilian political arena and discuss research on state politics. Second, I present an argument to link politicians' behavior to different characteristics of the electorate. Third, I introduce and compare the states used for testing my theory: Rio Grande do Sul, São Paulo, Bahia, Piauí, and Brasília, the Federal District. Fourth, I test the impact societal effects using multiple indicators of party system development. Finally, I offer some preliminary conclusions and discuss the theoretical implications and their limits.

2.2 National and state institutions

The literature on Brazilian politics identifies two institutions as centrally responsible for that country's weak party system. The first is the electoral system, open-list proportional representation (henceforth OLPR). The second is Brazil's strong federalist form of government that gives substantial power to state governments - especially governors.

The effects of each in the National Congress are well-documented. The electoral system rewards deputies that cultivate a personal following in the electorate. Cultivating a personal following may require voting against the party's position or even switching party.¹ Federalism - or "state presidentialism" [1] - interacts with the electoral system to further weaken national parties. State governors' control of patronage resources give them substantial influence over their states' legislative delegations to the National Congress. When states or state governors have different political positions, their pressure on deputies can divide the congress on state lines - instead of party lines - with repercussions through the party system, policy-making, and legislative-executive relations.² I provide a thorough discussion of the impact of the electoral system in Chapter 3, and of federalism in Chapter 4.

Institutionally, the states and state legislatures mirror the national government, with some important differences. As at the national level, the states have three branches of government: the executive, legislative, and judiciary. The legislatures are unicameral, and use the same OLPR electoral system as the national Chamber of Deputies. Most of the basic structure of state government is determined by the federal constitution or federal legislation, down to the number of state deputies in each assembly (the figure varies from 24 to 94 based on population).³

¹See [109], [5], [54], and [3].

 $^{^{2}}$ See [174], [109], and [158].

³Specifically, all states receive 3 state deputies for each federal deputy up to 36, then one additional state deputy for each additional federal deputy. Since there is a guaranteed minimum of eight federal deputies per state and a maximum of 70, there is a minimum of 24 state deputies and a maximum of 94.

Like federal deputies, state deputies are elected to four-year terms via OLPR. Like federal deputies, incumbent state deputies are guaranteed placement on their party's ballot in subsequent years' elections (the "candidato nato" or birthright candidate rule). There are some minor differences in the internal rules that assemblies use - but as all of the states' *Regimentos Internos* are based on those used by the Chamber of Deputies and Senate, they are all remarkably similar.⁴

There are two important differences between the federal and state arenas. First, governors are absolutely weaker than the national executive, but relatively stronger vis-à-vis legislators. Governors' lack some of the President's prerogatives - especially the ability to write "medidas provisórias" or decree-laws. Their advantage, however, is their lack of competition in state arenas. The state governor effectively has a monopoly on state resources and their distribution.

While Presidents have to compete with governors for legislative influence in the national congress, governors have no such constraints. Their only potential within-state competition - mayors - are generally dependent on the governor's good will to accomplish any projects during their mandates. Many municipalities, especially smaller interior cities with little economic activity, border on financial ruin and must rely on state help to remain solvent.⁵

One of the key mechanisms that strengthens governors is their control of state resources through the state budget process. Brazilian budgets make authorizations but not outlays.⁶ The state legislature authorizes the executive's

⁴Apparently, one of the reasons for the similarity of internal rules was the pattern of democratization. After the new national constitution was passed in 1988, the states also wrote new constitutions and new internal rules. Legislative staff told me that during the military regime, the state assemblies had "atrophied" for lack of activity - the state executives had made most policy decisions. For lack of experience or staff, I was told, state legislatures relied heavily on either the National Chamber of Deputies' or Senate's Internal Rules as a model.

 $^{{}^{5}}See [94] and [1].$

 $^{^{6}}$ See [154].

expenditures - but the executive is not required to spend all allocations. In fact, executives in Brazil have traditionally had broad leeway to adjust expenditures as they see fit. There is typically wide variation between the legislatures appropriations to any particular budget category and the actual expenditures in that category - often as much as 100%! This enables executives to implement their policy and political programs with little interference from other branches of government.

Consequently, the governor has great flexibility to increase or decrease funding to specific sectors or programs. More importantly for this thesis, the governor has the authority to advance or delay specific public works projects - paving a particular road, providing electricity to an isolated municipality, or building a health clinic in a neighborhood. Finally, while the state legislature often has a significant number of political jobs that deputies can deliver to their supports, the executive branch controls many, many more positions.

As a result, deputies who wish to deliver public works projects to their constituencies, provide lucrative construction contracts to campaign contributors, or reward supporters with cushy government jobs have only one place to go for these goods - the state executive. These deliverables enable deputies to meet constituents' demands both directly and indirectly. Directly, they provide local public goods that voters may seek - bridges, paved roads, and other public works projects. Indirectly, they may provide kickbacks and generate campaign contributions from the beneficiaries of these contracts; such payments become private goods that candidates can deliver to voters.

Deputies, then, must trade support for the governor's legislative agenda in order to secure projects for their constituencies, or to earn control of a political job. The legislature has several oversight powers for dealing with the executive branch - it approves the budget, accepts or rejects an annual audit of the state's books, and of course, must approve all legislation.

The result is that the executive branch can play a very powerful role in state politics. There is a growing literature on state politics in Brazil that shows how these institutions shape state politics. Abrúcio (1998) calls the Brazilian form of state government "ultra-presidential", arguing that governors dominate state legislatures and circumvent regular checks and balances to govern with almost free rein[1].

Previous scholarship on state legislatures generally finds that the executive branch dominates the legislative agenda. Moraes [117] shows that in the state assembly of Ceará, most significant policy legislation comes from executive. Deputies activities are largely symbolic and target specific audiences: over 70% of legislation from deputies deal either with granting individual organizations nonprofit status, or other administrative acts[117, pages 29-30]. Domingues [55] finds a similar pattern in Espírito Santo, finding that in the area of legislative production,"...ALES seems to have opted to delegate to the Executive the majority of this assignment." [55, page 17]. For the period he examined, the majority of policy legislation was authored by the executive, and the majority of 'clientelistic' laws came from the state assembly. Over 80% of economic and finance legislation came from the governor, while 99% of clientelistic legislation was authored by deputies. Anastasia [7] explores the same questions in Minas Gerais, finding that two-thirds of bills authored by deputies are not relevant (granting nonprofit status to organizations or titles to individuals), and that deputies' relevant bills have low passage rates.

Grohman[76] and Santos[150] have somewhat different findings regarding the role of the executive and legislative. Grohman, studying Rio Grande do Sul's assembly, does find that bills written by deputies are largely symbolic or clientelistic. Two thirds of all deputies' bills in the period 1995-1998 are for the creation of new municipalities - and with them, new political jobs and guaranteed federal transfers to new local elites. However, Grohman also notes that Rio Grande do Sul has tended to be ideological, and predicts that in a setting of divided government, the legislature might engage the executive in significant political conflict. Since January of 1999, Rio Grande has had a divided government, and Grohman's predictions appear to be correct. Santos shows that in Rio de Janeiro, the state executive plays a role similar to that in other states. Over 40%of deputy-authored bills are for nonprofit status or tributes to individuals. Another 40% are bills revoking outdated laws, bills authorizing the executive branch to carry out administrative tasks, and bills of an unknown nature [150, page 16]. In contrast, 70% of the governor's initiatives are related to state finances, budget, administration, or taxes. Santos, however, also suggests that the Rio Assembly does "...seek to capture a significant role in political life." [150, page 25] Specifically, he notes the large volume of legislative activity in the areas of regulation, as opposed to predominantly clientelistic or irrelevant legislation.⁷

How does this institutional framework affect state political parties? Previous work on state parties is largely descriptive, reporting the number of parties, for example, with little analysis of the nature of the party system, party discipline, or party institutionalization. Comparing state institutions with the heavily-studied national setting does not provide a clear answer. On the one hand, the states use

⁷Santos argument requires two comments. First, the pattern he observes is also apparent in my cases when examining the Brasília legislature, for example. I argue - below - that these differences in activity reflect different kinds of constituent preferences, not electoral competition as Santos suggests. Second, it is not clear that the legislature plays much of a role (in Brasília or in Rio de Janeiro) in the resolution of the great questions of economic development, budgeting, and taxes. At least in Brasília, many of the deputies' proposals are largely ignored, found unconstitutional, or vetoed by the governor. Santos does not explore these dynamics in Rio.

the same open-list proportional representation system that has been identified as decreasing party system institutionalization and lowering party cohesion. Hence state parties should be weak and uncohesive. On the other hand, the states are effectively unitary systems, in contrast with the federalist structure at the national level. Hence state parties should be more disciplined than those in the National Congress.

Consequently, if the electoral system incentives are stronger, state parties should be similar in strength to national parties. If the incentives provided by federalism are stronger, the state parties - in their unitary systems - should be more cohesive. Both of these hypotheses and mechanisms are more fully explored in Chapters 3 and 4.

Whatever the answer, however, these institutional theories offer no insights about differences across states. In fact, since states all share nearly identical institutional frameworks, existing institutional theories about Brazil can only predict that all the states have identical party systems, whatever form they may take.

In the next section, I propose a theory that predicts fundamentally different party systems across the identical institutional settings of the Brazilian states. The theory rests on the idea that legislators' incentives for creating and maintaining strong, cohesive parties varies with voting behavior. The incentives are weakest where voters prefer private goods and strongest where voters prefer public goods.

2.3 Public Goods, Private Goods, and Incentives for Political Party Formation

The states share the common institutional framework discussed above. But they differ in their histories, their economies, and their political cultures. How might these societal variables produce different effects under identical institutional settings? In this section I present a theory of the relationship between voting behavior and the incentives for politicians to form political parties. I present a model that relates the formation of cohesive political parties to voters' preferences for private or public goods.

This approach does not reject existing institutional arguments. Instead, I seek to complement existing research by suggesting that institutional rules interact with societal variables, i.e., institutional rules have different effects in different societal contexts

Overview The basic argument is that voters' valuation of public and private goods fundamentally changes behavioral incentives for legislators, including styles of legislative entrepreneurship, legislative-executive relations, and legislative party formation. When adapted to the Brazilian institutional setting, legislators' efforts to deliver public or private goods can lead to very different kinds of legislative behavior. Delivering private goods requires negotiating with the powerful state governor - trading support for his or her policy proposals for access to state resources that can be delivered as private goods. Delivering public goods requires working to pass a legislative agenda, which may or may not have the governor's support.

I argue that where voters have stronger preferences for private goods, we

should observe (a) executive dominance of the legislature, (b) little policy activity within the legislature and (c) undisciplined or nonexistent political parties. As voters' preferences shift toward public goods, I predict very different kinds of behavior: (a) an independent legislature, (b) extensive policy activity and creditclaiming, and (c) more cohesive political parties.

Prerequisites My argument, like many others, begins with the assumption that voters choose the candidates they expect to maximize their utility by delivering patronage, public works, or desired general policies. Explicit and implicit in many rational choice models is the assumption that voters are fully-informed about candidates' ideal points or likely behavior once in office. I do not make this unreasonable assumption. In fact, one of the key components of my argument rests on the uncertainty that voters often have about what candidates will deliver.

I assume that politicians' choices are primarily driven by their desire to reach political office - either through re-election to their current office, or advancement to some other office.⁸ The policy positions they take, their roll-call votes, the goods they promise and attempt to deliver to constituents are means used to achieve their primary goals in the institutional and social environment that define the political arena.

I treat parties as politicians' creations. Legislative parties and their characteristics are byproducts of politicians' strategies. Parties exist where they are useful career tools for politicians; they are strong where strength serves politicians' purposes, and weak where strength does not. Whether parties play a useful purpose for politicians depends on the structure and incentives of the political

⁸In many countries, legislators' re-election rates are relatively low. See [49] for a discussion of why that is not necessarily a problem for legislative studies, especially in Brazil.

arena, shaped both by institutional rules and by societal variables.⁹

2.3.1 Private or Public Goods?

2.3.1.1 Private and Public Goods, Defined

The central explanatory variable in the model is the extent to which the electoral connection is based on private or public goods. That is, do legislators deliver private or public goods in exchange for votes?

Two characteristics of goods define the difference between public and private goods.¹⁰ Private goods are both *rival* and *exclusive*; public goods are *nonrival* and *nonexclusive*. Rivalness refers to a good whose consumption reduces the amount of that good available to others. Exclusivity refers to the ability of producer or consumer to prevent others from consuming some good. For example, food is a private good - its consumption makes it unavailable for others (rivalness), and its consumer can exclude others from sharing (exclusive). On the other hand, a clean environment (most would say) is a public good. No one can be excluded from the benefits it provides (clean air, clean water, various health benefits), and their consumption (breathing, for example) does not reduce the available quantity[126]. Other examples might include less corruption, lower crime rates, more employment opportunities, low inflation, and so on.

In practice, the goods that politicians deliver can be purely private, purely public, or more often goods that are somewhere between the two. "In-between" goods - those that are neither public or private - do not necessarily fall easily on a scale somewhere between the two. For my study, however, I can distinguish between public goods, private goods, and local public goods. Local public goods

 $^{^{9}}See [3].$

 $^{^{10}\}mathrm{This}$ discussion relies on standard economic concepts. See [126].

are technically public goods but with a decidedly local scope. For example, a new bridge is technically available to all citizens of a state, but practically delivers the most benefit to those that live nearby and will use it. See [126] and [40] for an extended discussion of good types and their affect on market equilibriums.

Some practical examples of politician-delivered private goods include cashpayments, jobs, doctors' referrals, baskets of food, beer, school admission, bicycles, taxi permits, sewing machines, drivers' licenses, and new trash cans. At the other extreme, politicians will promise to deliver public goods: tougher gun control, legalization of the death penalty, a nuclear arms program, stronger environmental protections, and electoral law reforms. Between the two are local public goods - goods that are nonrival, and nonexclusive, but with a decidedly local impact: block parties, concerts, preferential snow plowing, road construction, new schools, a free circus, other public works projects, and even a male stripper show.¹¹

This is not the first time a distinction has been made between the kinds of goods politicians deliver. Other research, including that on machine politics in the United States, has also made some similar distinctions, using different terms. Banfield and Wilson[20] write about machines providing goods that are "specific and material", as opposed to "nonmaterial" payoffs. More recently, Lyne[102] distinguishes between "particularistic" and "collective" goods. One of the key differences in my work is that I conceptualize voters' choice of public or private goods as rational and optimal.¹² Much previous work characterized voters choosing private goods as in some way less fit for democracy.

¹¹The striptease act was promoted by a PRI campaign event in Chimalhuacan, Mexico. See [132]. There is no scarcity of private and local public goods that politicians deliver. For some examples, see [16], [18], [19], [20], [53], [141], [143], and [185].

 $^{^{12}}$ Lyne[102] uses a similar approach.

2.3.2 Explaining the Nature of the Electoral Connection

Why is politics in some areas about providing private goods, while in others it is based on the provision of public goods? Explaining the nature of the electoral connection is not the central question of this thesis, but provides some important and useful insights. This section considers voters' and legislators' electoral decisions and explores explanations for private or public good-based elections.

2.3.2.1 Voters' Demand Calculus

For most voters, the utility of an offered public good is higher than the utility of an offered private good. The primary reason for this is that politicians can offer relatively high-value public goods to voters, but they are only able to offer low-value individualistic payoffs to large numbers of voters, as discussed below in Section 2.3.3.1. Consequently, the utility associated with public goods is usually higher than that associated with private goods.

For example, a basket of food is generally worth less than a permanent safety net or welfare program. A politicians' referral to a doctor worth less than a new public hospital. A tax cut generally increases disposable income more than a small payment. Therefore, for *most* goods that politicians can offer:

U(Public Good) > U(Private Good)

But voters' preference for individualistic or policy goods is based not on the actual utility of goods offered - but the present value of the expected utility of a vote for one or the other. That is, any consideration of the value of public or private goods should include at least two additional considerations: voters' uncertainty regarding the utility of public goods, and voters' uncertainty regarding the timing and delivery of public goods. Depending on voters' risk aversion, uncertainty, and utility curves, they may or may not prefer a low-value certain immediate private good over a higher-value uncertain and future public good.

2.3.2.2 Evaluation Uncertainty

Voters may have significant uncertainty regarding the utility associated with any public good. But for most voters, the utility associated with private goods is easy to measure. A *cesta básica* (a bundle of basic foodstuffs) costs about \$15R in Brazil. A t-shirt or soccer ball has a slightly lower value. The nature and value of the good is well-known and has little uncertainty associated with it.

In contrast, an individual's valuation of a public good is often very difficult to measure. How will a voter benefit from higher-quality public education? Its impact is probably positive and significant, but precise estimates are difficult to provide. Other policy issues are even more difficult. Are fiscal incentives to encourage foreign investment positive or negative? Several states have offered massive tax relief to multinational corporations to encourage these companies to build factories within their state boundaries. What is the value to a voter of a new Ford factory? As opposed to spending the funds on social programs or domestic small business investments? These questions are difficult for economists to evaluate; for many voters, the task is overwhelming.

Consequently, voters are left with substantial uncertainty about the actual utility of public programs. This will lead risk averse voters to discount uncertain public good payoffs relative highly certain private good payoffs.

2.3.2.3 Delivery Uncertainty

Further, even if voters have no uncertainty regarding the nature of specific policy programs and their impact on their own utilities, there remains uncertainty regarding the delivery of the program. This uncertainty is in two areas. First, voters do not know when the policy will be delivered, if ever. Second, the final form of the policy may vary greatly.

Because a single politician may have only limited influence on policy outcomes, he or she may or may not be able to deliver a campaign-promised policy. A significant tax cut might yield an additional \$500 of disposable income for a voter. But the voter has to discount that income by the time it takes for the representative to deliver the policy, which might be years, and the probability that it will happen at all.

Further, the final policy outcome may not correspond to the legislator's campaign promise. A candidate might discuss a 10% tax cut, but the final result of legislative negotiations might be a 3%, 8%, or 20% tax cut. So voters must discount candidates' proposals according to their expectations of what will actually be delivered.

In contrast, there is little uncertainty regarding the timing or nature of the individualistic goods that a legislator may provide to constituents. In many cases there is absolutely no uncertainty or present value discounting - voters often receive payment *before* the election. Further, after the election, legislators' resources for delivering additional goods are often relatively well-known to constituents. Legislators often have institutionalized access to goods that they can distribute to constituents. For example, they may be able to refer voters to the legislature's medical staff for service, or provide meal vouchers. Each legislator can distribute jobs within the legislature, and may bargain for control of addi-

tional positions with the executive. Finally, some assemblies (though none in my study) have set aside social program funds for each legislator to distribute to nonprofit organizations or other causes. Many deputies established their own nonprofit organizations and donated the entire sum to their own new organizations.

2.3.3 Who wants individualistic goods?

This discussion suggests some characteristics of voters who are susceptible to candidates who offer private payoffs. Such voters (1) heavily discount goods delivered sometime in the future and (2) may lack clear conceptions of the utility associated with specific policies. In other words, they have urgent concrete and immediate needs that they cannot meet themselves, but that can be met, or partially met, by a legislator's assistance. They may also be uncertain about the nature of policy goods and have weak opinions about different issue positions.

If we allow that most private goods that legislators offer are of relatively low value, then voters who prefer private goods are the desperately poor and uneducated. Individuals on the margins of society have urgent short-term needs that they may not be able to meet themselves. Simply, it is hard to be concerned with anti-globalization policies when one is hungry or sick, or with the consequences of environmental destruction or corruption when unemployed. For these voters, short-term survival concerns trump the long-term, uncertain payoffs of education reforms, environmental laws, or even tax cuts.

The basic concept here has been acknowledged in other areas of political science, including the extensive work on clientelism and machine politics. These observations are also widely understood by politicians, journalists, and other observers.¹³

Voters without access to education are further disadvantaged. A large body of literature has shown that these citizens have more difficulty processing political information and evaluating policy positions.¹⁴ This increases their uncertainty about the possible benefits or costs associated with a Ford factory, small business loan program, or direct cash payments.

These are confounded by a lack of access to any information. Voters who are geographically isolated, lack radio, television, print media, or internet access are at a further disadvantage in choosing between policy or individualistic goods. Without access to media, voters will have few opportunities to increase their information levels regarding the policy issues at stake in an election. They are limited to candidates' campaign stops and similar activities for information.

Finally, a paradox of voters' calculus is that the more public services voters' have, the more they should want, while voters without access to basic public services should engage in private good-vote exchanges. Voters with access to basic physical infrastructure and a social services network can solve short-term survival problems without a politician's help. The unemployed can collect government assistance and the sick can receive medical treatment, for example. But where no such services exist, voters must more heavily discount future public services. A planned hospital will not cure a current illness, but medicine bought with a candidate's cash payment might. Ironically, the voters that could most benefit from quality public goods provision are also those least likely to prefer them over immediate private goods.

This discussion suggests that low-income, rural, illiterate voters should have

¹³See [157], [156], and [53], for example. Inglehart's 'post-materialist' argument might be projected back to a "pre-materialist" category of voters with similar implications.[80] 14 See [65] and [193]

higher expected utilities for individualistic goods than higher income, urban, and more educated voters. Marginalized citizens are at a disadvantage in information level regarding policy choice and expected outcomes. Their low income levels also may mean that short-term survival trumps long-term policy improvements. A food distribution policy or social security check may be worth much more than a single basket of food - unless a voter is very hungry and has no way to obtain a meal. A health care program may be worth more than a visit to a doctor, unless one is seriously ill and without alternative medical care. A long-term education program may be worth more than a low-paying, low-status political job - unless one has no other short-term employment opportunities.¹⁵

2.3.3.1 Legislators' Supply Calculus

This section discusses legislators' campaign choices - to campaign on individualistic or policy goods. I begin with the proposition that politicians choose an election strategy based on offering a combination of individualistic goods and public goods. Their choice is made to optimize their career utility, a function of the probability of election and time, effort, and resources needed to deliver goods to constituents. To simplify this discussion, I reduce the continuum from private to public goods to a simply dichotomy (private or public) for this section.

Legislators' strategy depends on voters' prices and the amount of available resources. If a private-goods campaign is viable (legislators have sufficient private goods to attract votes), then such an approach will beat a public goods strategy. In such a setting, public-goods campaigns will always lose to private

¹⁵Note that construction contracts and tax loopholes that politicians deliver to campaign contributors can also be conceived of as private goods. The key difference, however, is the terms of the exchange. Such higher-value private goods are not exchanged for single votes, but for large campaign contributions or endorsements that can be turned into many votes.

goods campaigns. Hence wherever affordable, legislators *must* adopt private good campaigns to have a chance at election.

When are private-goods campaigns affordable? This depends on two factors. First, the affordability of a private-goods campaign depends on the price of a vote. This was discussed above as voters' relative expected utility of private vs. public goods. In an impoverished, unpoliticized, rural community, this *might* be \$10R. In a wealthy urban neighborhood, voters' prices might be \$10,000R each.

In addition, the price of a vote should rise with competition. The more deputies competing for private votes, the higher the price one must pay to earn a vote. This would suggest that isolated areas that few candidates can reach, voters have lower private goods prices.¹⁶

Second, this depends on the resources available to legislators. Legislators must have access to sufficient resources to provide said private goods. In most cases, the primary source is the state in one form or another. Politicians may collect a portion of their political appointees' salaries, receive kickbacks from government contracts, or even have access to a guaranteed "social" fund.¹⁷

In addition, legislators face several other challenges. Some or all parts of a private goods strategy may be illegal. Outright buying votes certainly is, and there are other risks to legislators associated with the delivery of pure private goods. Financing such strategies has often involved illegal kickbacks, contributions, and other siphoning off of state resources. This suggests that vocal minority opposition could make private goods strategies difficult to pursue.

¹⁶Interviews with deputies and political observers confirmed this pattern.

¹⁷Political observers described politicians' calculus to me as a follows. Before the election, candidates would estimate how many votes they might need for election, how much those votes would cost, and the value of holding office. When profitable, non-incumbent candidates would borrow or use their own resources to buy votes, knowing they could pay their debts off once elected.

Both access to resources and the costs of enforcement may vary considerably across systems. In particular, in settings where a significant proportion of the electorate is middle class or above, many legislators should have constituencies whose private goods prices are too expensive. These legislators should have to run on public goods platforms, one component of which might be anti-clientelism. That is, where there is a significant number of legislators elected on public goods campaigns, their opposition to illegal vote-buying may increase the risks (and the costs) of such strategies for legislators.

Further, where a majority of the electorate has a relatively high private-goods vote price, the governor will probably be elected on a public goods platform, rather than on private goods delivery. A public goods governor may be unwilling to negotiate with legislators, giving them access to state resources in exchange for their support of her policies. Such a governor might also work aggressively to prosecute vote-buying. These strategies would reduce the available resources for private goods campaigns and raise the risks associated with their use.

A final consideration for candidates is that of enforcement. Since Brazil uses a secret ballot, how can political elites know if individual voters have voted as promised? Several mechanisms help with enforcement.

First, creative politicians have found numerous ways to defeat the secrecy of the ballot. Through 1994, elections were held using paper ballots. Voters marked the ballots with the number of their preferred candidates. Politicians would simply give voters a pre-marked ballot. Voters would deposit the premarked ballot and return the unused official ballot to the politicians' agent, who would mark it for the next voters. More recently, Brazil has adopted an electronic voting system that should make such fraud more difficult.

Voters enter their choices in an electronic machine, eliminating all paper bal-

lots. Specifically, voters enter the number of their preferred candidate. The candidate's picture and number appear on the screen of the machine, and the voter can then confirm that this is her choice.

Observers have noted that this system has greatly reduced vote-buying - but not eliminated it. One strategy politicians have used for enforcement is as follows. Politicians ask voters who are entering a polling place a simple descriptive question about the candidate's picture. For example, "what color shirt is the candidate using?" Voters who enter the candidate's number will see his or her picture, and can report the shirt's color.¹⁸

Finally, elections are a repeated game. So after one election, if voters did not provide the promised (and purchased) support, they can be punished. If the betrayed candidate was elected she will not provide a market for their votes in the future or have any reason to provide constituency services. If the candidate was not elected, voters may still be punished because other candidates will avoid buying their uncredible votes in future elections.

The bargain is further strengthened by a perhaps nonrational characteristic of voters - personal loyalty and affect. Having struck a bargain, the grateful recipient of a cash payment or new bicycle may feel sufficient affect for the candidate to remain loyal. Such loyalty may be strengthened by the participation of community leaders and mayors in campaigns for higher office. Often the legislative candidate is taken to the community and introduced by the mayor or coop leader, lending the familiar personal popularity of the local leader to the potentially less familiar deputy candidate. The candidates in Brazil are often native sons and daughters - born and raised in the community where they run

¹⁸Technically, voters could enter the candidate's number, observe the shirt's color, then cancel that choice and enter a new candidate's number. Political observers told me that less-educated rural voters had not yet mastered the new electronic system. This may change over time.

their campaigns. They know and are known by many of their potential electors, further strengthening any bargain between them. Voters may know these candidates for their constituency service as city council members or mayors. Finally, a voter may simply have a sense of honor in keeping his word. Irrational though it may seem, politicians and observers in Brazil described these as key mechanisms in campaigns and elections.

Cox [42] argues that the size of the constituency is a key variable in predicting the use of clientelism or policy in campaigns. He argues that several factors are at work. The cost of buying enough votes in larger districts become prohibitively high. The risk of prosecution or discovery also increases with the constituency size. And he suggests that a broad policy platform that appeals to a large number of voters would be more effective in such districts.

Cox's observations are well-born out in Brazilian politics as well. In general, the more local the race, the more likely that private-good exchanges are the basis of election. Vote-buying is unheard of in the Presidential race - it is standard practice for many city council candidates.

I largely agree with Cox's analysis, but offer three additional comments. First, his conceptualization ignores the different private-public relative utilities that voters may have as a function of income and information. In his study, he may be confounding district size with urban-rural distinctions that mostly reflect information and income levels. These differences, in my model, would be reflected in voters' discounting of the future and in voters' uncertainty regarding preferred policies. The urban-rural differences may also apply to his observations about prosecution and discovery. Extensive vote-buying activities are simply easier to observe and hence prosecute in urban areas than in isolated rural communities.

Second, there is also a paradox in the idea that larger numbers of constituents

naturally lead to policy platforms. One might counter that the smaller the number of constituents, the easier to find a single policy issue or set of issues that will elect a candidate. The larger and thus more diverse the constituency, the more a politician must scramble to find that winning combination of campaign policy promises. I would then disagree with Cox and argue that large constituencies do not make public goods stances easier - they just make private goods campaigns harder.

Third, district size does not become a concern for my study for two reasons. Within each of my cases, district size is effectively constant. All candidates run in the same, state-wide district, and each party earns seats by the same electoral quotient formula. In addition, I controlled for cross-state differences by selecting my states carefully. Both the public and private goods cases include large and small districts (states), in terms of population and district magnitude.

2.3.3.2 Additional Considerations

The preceding discussion deserves some qualifications. First, this approach differs from previous work on machine politics and clientelism in the conceptualization of voters. Voters who engage in private or club good exchanges are in no way any less-suited for democracy than those who cast votes on broad policy platforms. All voters use the same basic utility function, and the decision to engage in one kind of trade or another is both rational and optimal.

In my model, all voters are making the same basic calculation. This suggests as well that each voter has a private goods price. Policy-oriented voters are not more "qualified" for democratic participation - they just have not found a candidate willing to provide an expensive enough private good. For example, marginalized voters *might* trade their votes for a basket of food, for example. But this same basket of rice and beans has little value for a high-income voter. Their price might be \$10,000, or a new car, for example.

Previous work has characterized private-good voters as in some way inferior to public-good voters. See [20] for some examples. I make no such distinction and differ with those that do. In Brazil, politicians and political observers frequently make statements to the effect that "poor people don't know how to vote." My model suggests that the choice to vote for public or private goods is a optimizing decision, and that 'the people' do know how to vote, and are being very rational.

Second, in my model, low-income voters need not lack policy opinions. They may have well-defined policy preferences and political information, but their low income forces them to discount future utility from policy programs. Consequently, they may value immediate private goods over future public goods.

Third, in my model there is *not* a deterministic relationship between income, education, and one's valuation of individualistic or policy goods. Low-income, uneducated, rural voters are not predestined to trade votes for t-shirts. Higherincome, college-educated, urbanites are not guaranteed to be model policy-voting citizens. Individuals' and societies' values can be shaped by any number of other factors, including social cleavage of any sort; mobilization, either spontaneous or activist-inspired; or values and norms. *Ceterus paribus*, marginalized voters have a higher relative expected utility for individualistic goods than do higher income, higher educated, urban voters. But ceterus is rarely paribus.

2.3.4 Goods and Career Strategies

How do different kinds of electoral goods shape legislative behavior? I argue that under different kinds of voter preferences, legislators will have very different kinds of behavioral incentives. I begin with the notion that legislators face two primary representational challenges - delivering promised goods, and claiming credit for their efforts. I argue that the way legislators address these challenges varies dramatically as a function of voters' expected utility for private and public political goods. Where campaigns are based on the provision of private, or local goods, there are much weaker incentives for the formation of cohesive legislative parties. Parties do not solve legislators' key problems - obtaining private goods for constituents. Instead, legislators turn to the executive branch for assistance. Where campaigns are based on public good platforms, politicians' incentives to form parties are much stronger. Parties help legislators work for the delivery of public goods through a legislative agenda, and party labels give legislators credibility with their constituents. The argument is based on notions of political parties as legislative coalitions and information providers.¹⁹ The following paragraphs elaborate on the mechanisms and predictions of this argument.

The challenges and solutions to the problems of delivery and credit-claiming are fundamentally different under public and private goods systems. Delivering public goods is differs from delivering private goods in at least two ways.

First, voters expect the concrete delivery of promised goods in private good systems, but are more concerned with effort in public goods systems. As discussed in Section 2.3.2.1, voters are aware that public goods delivery is much more uncertain than private goods delivery. In a private goods system, if one candidate is unable to provide a food basket, cash, or tank of gas - some other candidate can probably deliver. But if one candidate runs on a public goods platform, and can't deliver a clean environment, U.S. standard of living, and Western European social programs in a four-year term, voters know that another candidate probably cannot actually do any better. Delivery of public goods is as much about "fighting

 $^{^{19}}$ See [3], [44], and [173].

the good fight" - effort - as about actually delivering the promised outcome, at least in the short run.

In contrast, delivery of private goods requires more than effort - voters should see the bridge, payment, job, or bicycle they were promised. Private goods' key characteristics are their certainty and timely delivery.

Second, private goods delivery is dependent almost exclusively on the governor; public goods delivery faces no such restriction. In the case of Brazil, as described in Section 2.2, the state governor controls nearly all access to private and local public goods. Hence legislators must bargain with the executive branch for such goods, trading support for the governor's legislative agenda for access to state financial resources.

In public goods systems, legislators can "fight the good fight" without the governor's approval. They can propose legislation, work for its passage, and use hearings to expose current policy deficiencies - without gubernatorial support.

There are also fundamental differences in the challenges legislators face when claiming credit for their efforts in private goods and public goods settings. In private goods settings, credit claiming is relatively easy. Voters have no information problem and can quickly and with little effort evaluate their legislators' performance. They need only ask themselves: Was the payment made? Did I get a job? Was the bridge built? Asking and answering these questions is easy; punishment or reward at the ballot box swiftly follows.

In contrast, in public goods systems, voters have to overcome an almost impossible information problem to evaluate their representatives' performance. To adequately monitor and evaluate their legislators' performance, voters would need to fully examine each bill proposed by their deputy, her roll-call votes on other measures, her activity in committee and - here's the hard part - decide if each action were sincere or simply symbolic. That is, did the deputy propose a bill symbolically with no intent to truly improve the environment - or did she sincerely attempt to move legislation through the legislature?

Answering these questions and evaluating the quality of public goods representation is a task that political scientists have not yet fully accomplished. It is even more challenging for voters who do not study politics full-time, and simply unrealistic to expect them to be able to acquire even a small percentage of the information needed to adequately evaluate any individual legislator.²⁰

Implications These two differences should change legislators' incentives to form political parties. Under private goods systems, there are no informational or delivery incentives to form political parties. Political parties provide no additional useful information to voters about candidates' performance - voters are already largely aware of candidate performance. Further, parties do not assist in the delivery of goods, and may hinder a legislator's efforts to provide for constituents' needs. A deputy in a disciplined party that is opposed to the governor will be unable to bargain for state resources for voters - limiting his future career advancement. Consequently, politicians should avoid creating disciplined parties.

In contrast, in public goods systems, there are both informational and delivery incentives to form political parties. Parties solve voters' overwhelming information problem. With cohesive, programmatic parties, voters do not need to know about representatives' proposals, committee action, or attendance records - they need only know that a candidate is a member of the Green Party, for example, or the pro-business party. Party membership in this case provides a brand name

²⁰The Presidential race is clearly different. There is extensive media and debate information. The campaigns are engaging and conflictual. This has implications as well for the nature of this model under an electoral system that makes lower information demands - SMD, for example.

that solves voters' information problem.²¹

Voters' information problems are legislators' credit-claiming problems. In public goods settings, legislators face the challenge of demonstrating their sincere efforts to voters. Disciplined, cohesive parties solve politicians' credibility problems.

Further, political parties aid politicians' efforts at delivery. One of legislative parties' main purposes is to act as legislative coalitions to support the advancement of members' like-minded proposals and agendas. Parties help legislators develop and push their proposals, and coordinate efforts to defeat other measures that their constituents oppose.

As a result, in public goods settings, politicians have more incentives to create disciplined, cohesive political parties than in private goods settings. Parties solve neither credibility nor delivery problems in private goods systems; parties are important solutions to both problems in public goods systems.

2.3.5 Qualifications, Complications, and other Considerations

Many qualifications could be offered to my argument; here I will discuss several especially important considerations. First, the argument here is not that institutions do not matter. In fact, the argument clearly depends on institutions, in particular the Brazilian budget process and personalistic electoral rules. Other sets of institutions could fundamentally change the nature of legislators' behavioral incentives. A parliamentary system would raise the stakes associated with party cohesion. A less-permissive electoral system, like closed-list proportional representation, would give legislators little room to avoid cohesive behavior.²²

 $^{^{21}}$ See [3], [44], and [173].

²²Though politicians are creative and might find a way around closed-list rules.

One might conceptualize this in terms of institutions' permissiveness. Societal effects matter most where there is little institutional framework to create or reinforce strong parties. In a system with closed-list proportional representation, high barriers to entry, and party financing of campaigns, parties are likely to be disciplined and cohesive regardless of voting behavior. Where institutions do not provide strong incentives for party formation and maintenance, voting behavior will have much more influence over politicians' behavior.

Further, voters' preferences might interact with institutional variables. Unfortunately, I cannot test this hypothesis specifically because there are no institutional differences across the states with which voters' preferences can interact.²³

2.3.6 Testable Predictions: Voters' Preferences, Governors, and Party Discipline

I test my argument by examining two indicators of party development: roll-call vote cohesion and party switching frequency. The theory has slightly different implications for each.

Party cohesion scores on roll call votes are the single most common measure of legislative party strength. There are numerous problems with the measure, discussed in Chapter 3. But the scores at least capture legislative parties' behavior on their fundamental responsibility: the approval or rejection of legislation.

In the Brazilian context, the implication of my theory is not that discipline simply rises with the demand for public goods. Instead, we should observe differences in the patterns of cohesion for government coalition parties and opposition coalition parties, depending on voters' preferences for private or public goods.

 $^{^{23}}$ One might be able to explore this by comparing Senators (elected under SMD) with Deputies (elected via OLPR) from private and public goods states.

Where elections require private goods delivery, there are two implications. First, parties in the governor's coalition will be very cohesive. The executive is the only source of patronage and will attract the loyal support of his own coalition. Second, opposition parties will be weak and divided. Some opposition deputies will continue to oppose the governor; many will be drawn into negotiations with the executive, seeking government resources. The size of the resistant opposition should be inversely proportional to the electorate's utility for private campaign goods. In a poor state where voters primarily seek private goods, all deputies will feel pressure to 'adhere' to the executive coalition. There will be little payoff to any ideological opposition to the governor.

Where voters have a higher utility for public goods, the pattern will shift. Both the opposition and government parties will be cohesive. Opposition deputies will not need executive patronage to preserve their careers - or at least a larger portion of them will not need it. Their reelection instead depends on their efforts to advance a legislative agenda that may differ substantially from the governor's.²⁴ The opposition deputies should be cohesive and disciplined, and not succumb to executive pork bargains.

Party switching provides a second window on deputies' incentives. Switching frequencies reveal the importance of the party's credible public image. Deputies who switch parties lose credibility as representing a specific policy basket. When public-goods-seeking constituents use party affiliation as an informational cue, they will avoid party switchers because of the uncertainty associated with their behavior. Consequently, when ideas, ideologies, or programs matter to voters switching will be infrequent. When the provision of pork and patronage are the key responsibilities of legislators, they may switch in search of such goods, and

 $^{^{24}}$ Given the institutional advantages of the governor, they are unlikely to implement much legislation that the governor opposes.

constituents will think nothing of it.

Further, a careful modeling of party switching tells even more about the party system. To the extent that we can identify legislators' motivations for switching parties, these reveal what parties do for politicians - what purposes they serve in politicians careers. Are parties simply vehicles for patronage? Or do they provide access to key committee assignments? Or are switches ideologically motivated? These questions are much more useful than simply asking about party discipline.

In the Brazilian context, party switching should be more frequent - especially into the governors' party - where voters' priorities are for private goods. Increasing preferences for public goods - and the informational role of parties - should make party switching less frequent, and change switchers' motivations.

2.4 Introducing the Cases

To test my argument, I chose five Brazilian states that capture the extreme regional diversity of that country. Specifically, I studied Bahia, Piauí, Rio Grande do Sul, São Paulo, and the Federal District (henceforth Brasília). The first two, Bahia and Piauí, are known for poverty, less-developed economies, and clientelistic politics. Rio Grande do Sul, São Paulo, and Brasília are wealthier, have more diverse and vibrant economies, and are generally accepted as having a much smaller private goods component to elections than Piauí or Bahia.

I suggested above that we should observe different patterns of legislative behavior in systems with different kinds of electorates. Specifically, I distinguished between systems where elections are based on the exchange of private goods, or local public goods, and general public goods. I suggested that we should see very different kinds of legislative behavior across these kinds of systems, even under identical institutional rules.

This within-country test has several advantages. First, this comparison controls for many potential confounding variables. These state legislative systems all share a single national macroeconomic environment, legal structure, and set of key national actors. Further, institutionally, they are virtually identical. All share the same electoral system, are subject to the same federal laws on party formation, and adopted very similar internal rules. Further, the basic structure of state government varies little within Brazil - each has three branches of government (executive, legislative, judiciary), with similar sets of checks and balances.

Finally, the institutional settings are largely exogenous. One criticism of existing approaches to studying institutions is that scholars often treat institutions as exogenous variables in the political arena. In fact, most political institutions are created by the very politicians who will be subject to their rules. Consequently, politicians' own behavior and preferences may be shaping institutions and not vice-versa.

In the case of the Brazilian states, the endogeneity quagmire is generally not a problem. Many of the basic rules come directly from the national legislature or constitution, including the electoral system, term of office, laws controlling political parties, and campaign laws. Local constitutions and local internal rules, moreover, were often based directly on the national constitution and national congress' rules, for lack of time or expertise.²⁵. These similarities across states assure that any differences observed across states are the result of noninstitutional factors.

²⁵This point was explained to me by legislative analysis. They noted that during the military regime (1964 to 1985, the state legislatures had little real role. After the return to democracy as the states drafted new constitutions and rules, they found they lacked the technical expertise (or time) to create their new institutions. Consequently, as was explained to me, they simply adopted constitutions very similar to the national constitution and internal rules similar to the national congress' internal rules

The only institutional differences across states are minor and have no obvious impact on the incentives for party formation. For example, district magnitude varies across states from 24 to 94, as discussed previously. To control for this, I included large and small states in both the clientelistic and public goods states. Among the private goods states, Bahia is relatively large with 63 seats in the state assembly; Piauí is much smaller with only 30. Among the more public goods states, Brasília is the smallest with 24 seats, Rio Grande has 55, and São Paulo has the largest state assembly in Brazil with 94 seats.

Other differences include rules about the Assembly President's participation in roll-call votes, the date for swearing in deputies, and other minor procedures. Brasília's legislature requires two rounds of voting on all laws; most other legislatures allow passage in a single round. All differences I discovered were minor and have no precedent in the literature as shaping incentives for party system development.

One final note deserves mention. This cross-state approach has the powerful advantage of completely controlling for all institutional variables that have been identified in the literature as relevant. But this within-state approach also limits the variance on societal variables. The differences between Piauí and São Paulo *are* significant - but they do not capture all the demographic or historical differences one might observe in a cross-country study.

Most of Brazil's states share very similar histories in terms of major political developments. Scholars have suggested that the expansion of the electorate and incorporation of labor into the political system are defining political events for party systems.²⁶ All Brazilian states share the same basic patterns, though the nature of the electorate and size of the labor movement varied greatly from state

 $^{^{26}}$ See [39] and [98].

to state. 27

Each of the states also has a history of interrupted party development. The Brazilian party system has been remade three times in the last seventy years, first by Vargas, again by the military in 1966, and again during democratization in the 1980's.

The states, however, do differ substantially in their basic demographic profiles and in terms of the relative importance of public and private goods in legislative elections. Of the five states I studied, Bahia and Piauí have elections and campaigns based more heavily on private goods and local public goods exchanges. Rio Grande do Sul, São Paulo, and Brasília have more emphasis on public goods. All states have some elements of both extremes, but there are dramatic differences in the nature of politics as a whole across states. These differences are well-known and accepted largely as fact by Brazilian political observers. But precise data demonstrating the nature of voter-candidate exchanges simply do not exist.

This section introduces the states and explores the nature of voter preferences and campaigns in each state. The first part compares the demographic profile of the states, showing how that electorate in Bahia and Piauí is impoverished and lacks access to education and basic public services, in contrast to voters in São Paulo, Rio Grande do Sul, and Brasília. The second section uses the limited public opinion data that exist to document a relationship between these demographics and voters' preferences. The third section provides a more in depth look at each state, reviewing previous research and summarizing my observations and interviews in each political arena.

²⁷One of my cases, Rio Grande do Sul, does have several historical differences from other parts of Brazil, as discussed below.

2.4.1 Demographic Comparison of the States

In Section 2.3, I suggested that low-income, less-educated voters in less-developed areas should assign lower utility to uncertain public good platforms than do higher-income, more informed voters in developed areas, all other things equal. An examination of demographic data from the five states included in this study shows that the states have dramatic differences in terms of income, education, and development. The following paragraphs illustrate the dramatic differences across these states.

Education Figure 2.1 compares education levels in the five states, and shows dramatic differences in the distribution of education. Each graph shows the distribution of years of education for a different state. The data come from the 1990 Census.²⁸

The states of Rio Grande, São Paulo, and Brasília have modal values of four to seven years of education - the most frequent educational outcome is completing *primeiro grau* - roughly primary school. A respectable percentage of adults went on to high school (35% average) and about 10% went on to college in these three states.

The two northeastern states of Piauí and Bahia stand out in stark contrast. The modal educational achievement is less than a single year of education. In Bahia, 45% of adults have not completed a single year of education. In Piauí, a *majority* of adults have less than one year: 53%. The distribution falls off quickly as education level increases. 75% of adults in Piauí, and 65% in Bahia have three or less years of education; only about 2% go on to college or post graduate in these states.

²⁸At the time of writing (May 2001), data from the 2000 Census had not yet been released.


Figure 2.1: Distribution of Education Across States



Figure 2.2: Distribution of Income Across States **Piaui**

Income Figure 2.2 repeats the analysis, this time comparing the distribution of income. In this case, the differences between the two groups of states are even starker. In both Piauí and Bahia, a significant majority of the voters (65% in Piauí; 54% in Bahia) subsist on less than the minimum wage - currently about \$80US/month. Few voters earn much more than that; the distribution falls off even more quickly than in the case of education. Only 17% in Piauí and 26% in Bahia earn more than 2 times the monthly minimum wage.

São Paulo, Rio Grande, and Brasília all have their share of poverty, but they do not have the stunning inequalities of Bahia or Piauí. Both São Paulo and Brasília have roughly flat distributions of income from 0 to 10 minimum salaries, and their medians are obviously much higher than in Bahia or Piauí.²⁹ Brasília is clearly the most well-off, with almost 20% making more than 10 minimum wages per month (compared with 2% in Piauí and 3% in Bahia). Rio Grande do Sul has lower income levels than in São Paulo or Brasília, but still does not have the high levels of poverty found in Bahia or Piauí.³⁰

Access to Water These differences are also reflected in the type and degree of public service provision in these areas. There is a massive regional redistribution of tax revenue from the developed to the undeveloped areas, but that has not equalized the public services that citizens of each state enjoy.

Figure 2.3 compares access to water in the five states. Specifically, this figures shows the percentage of households with indoor plumbing. The stark regional differences are again apparent. Forty-six percent of Bahian households have direct

²⁹Note that a "flat" distribution in this case does not mean that São Paulo has an equitable distribution of income. The scale of the graph (provided by Census categories) is not linear.

³⁰Note that these comparisons are somewhat biased in exaggerating differences across states because the cost of living varies across region as well. The cost of living is much higher in São Paulo and Brasília than in the other states.



Figure 2.3: Percent of Households with Internal Plumbing

Percent of Households with Internal Plumbing

access to water; only thirty-four percent have such luck in Piauí. In contrast, about 90% of households in São Paulo, Rio Grande do Sul, and Brasília have internal plumbing.

Trash Disposal Finally, Figure 2.4 compares a measure of public sanitation - trash disposal. The graph shows disposal methods by state. The height of each segment in the bars represents the proportion of households disposing of garbage in that manner. In the more developed states, most households are serviced by garbage collection: over 90% in São Paulo and Brasília, and 70% in Rio Grande do Sul. The same figures in Piauí and Bahia are much lower - 24% and 41%, and about 40% of all households in both of these two states simply throw their garbage on the ground with no regular government collection or alternative disposal available.





Summary Basic indicators of income, education, and development all paint the same picture: there are stark regional inequalities across the five states in the study. When compared with Brasília, São Paulo, and Rio Grande do Sul, we see that Bahia and Piauí have massive poverty, little access to education, and lack basic public services.

This suggests, as I argued above, that citizens in Bahia and Piauí should place relatively higher utility on private or local public goods than their counterparts in São Paulo, Brasília, and Rio Grande do Sul. The majority of voters in Piauí and Bahia live in very difficult economic situations with little access to educational opportunities or basic public services. São Paulo, Rio Grande do Sul, and Brasília have much smaller marginalized sectors. These differences should be reflected in the average utility that voters place on private or public goods across states. The next section examines public opinion data supporting this conclusion.

2.4.2 Voters' Preferences - Survey Evidence

Do low-income, low-education voters really assign higher utilities to private goods than do higher income and higher education voters? This relationship makes sense, has been suggested by economic theory, and has been observed in many previous studies of patronage and politics. Here I provide some additional evidence from Brazil that different groups of voters have different kinds of preferences.

Ideally, I would like data from a survey or experiment where voters were asked specifically about the utility they assign to different goods: "Would you vote for a candidate that gave you \$10R? \$20R? \$100R?" "Would you rather have a voucher to see a doctor now, or a 10% chance of a new health clinic in the next five years?" One can imagine numerous questions and experiments that would help us identify voters' utility curves for private, local public, and pure public goods.

Unfortunately, no such study has yet been carried out. As an alternative I use the available data and look at two indicators of voters' preferences.

2.4.2.1 Voters' Priorities

In a survey of 8,256 voters in 150 municipalities, respondents were asked to spontaneously identify "the principal problem facing their state".³¹ Voters' answers were originally placed into 18 categories. I recoded these answers as belonging to one of four categories: public policy and services, economic issues, broad social issues, and other issues.

³¹Voters were asked, "Na sua opinião, qual é o principal problema do estado hoje?". Voters were allowed to provide a single spontaneous response. I dropped voters who did not respond or that answered "Do Not Know".

Public policy and services are those concerns that require or imply collective solutions provided by the state government. Economic issues are any mention of individuals' economic difficulties or broader economic concerns. Social concerns are issues that have no direct implication for collective or state action, but are collective problems. Many might include them with public services - in Brazil, most voters would expect government solutions to these problems - but I conservatively code them separately. Finally, other issues are those that didn't obviously fall into any of the other categories. Table 2.1 lists the original categories and my recodings.

The key comparison to be made is between public policy questions and economic issues. By my argument, lower-income voters' utility for private goods should be higher than higher-income voters' utility, because the lower-income group has immediate and urgent economic survival concerns. Higher income groups do not have the same pressing needs, are hence less risk-averse, and assign higher value to public goods.

These differences should be reflected in voters' priorities. Private-goods oriented voters should be most concerned with economic questions. Higher income groups should be more concerned about collective goods and services. The relationship between voters' private goods prices and overall concerns here is not perfect. The state of the economy certainly can be thought of as a public good that requires government action. This problem reflects the limitations of the original question. Voters were asked what the biggest challenge facing the state as a whole was, not what whether they prefer a cash payment now to a chance for lower unemployment later. However, this is the only survey that even approximates voters' preferences for different kinds of goods.

Figure 2.5 presents the results. The X-axis here is voters' education levels;

Table 2.1: Categorization of Principal Problems Facing State

Public Services

Housing/Construction/Financing

Health/Hospitals/Health Clinics/SUDS

Education/Schools/Day Care/School Lunch/Construction

Transportation/Highways/Roads/ Construction and Maintenance

Provision/distribution of food/food prices

Economic Issues

Cost of Living/Inflation/Low Wages

Unemployment/Job Creation

Social Concerns

Abandoned Children

Security/Violence/Crime

Hunger/Misery/Poverty

Corruption/Morality

Destruction/Preservation of the Environment

Other Issues

Tax Collection/State Budget or Resources/Fiscal Reform/Taxes)

Administration/Planning

Public Employee's Strike/Better Salaries/Careers

Dropped

None

Don't know





the Y-axis is the percentage of respondents. Each of the four lines represents one of the four concerns - Public Services, Economic Concerns, Social Problems, and Other Responses.

The pattern here is obvious and compelling. There is a very strong relationship between education and voters' priorities. Low-education voters' highest concerns are economic issues: wages, unemployment, inflation, etc. Over 60% named these as their top concerns. But as education levels rise, concern for economic issues drops precipitously - down to just 8% for the highest education group. What takes their place are public services. Voters' priority for public services rises inversely with economic issues' decline. Low education respondents only named public services 16% of the time; this category is the top priority for respondents with a junior high or longer education.

Concern with social problems, which are hard to categorize (does concern with hunger reflect the respondent's poverty, or a concern for his or her neighbor?), is

Priority	None	<p.g.< th=""><th>P.G.</th><th><s.g.< th=""><th>S.G.</th><th>S.G.+</th></s.g.<></th></p.g.<>	P.G.	<s.g.< th=""><th>S.G.</th><th>S.G.+</th></s.g.<>	S.G.	S.G.+
Public Services	15.82	26.58	36.93	47.01	48.60	52.76
Econ Probs	61.33	51.16	37.76	28.81	25.15	13.81
Social Problems	21.09	18.71	21.16	17.91	19.03	21.13
Other	1.76	3.55	4.15	6.27	7.22	12.29

 Table 2.2: Respondents' Policy Priorities by Education (percentages)

 Years of Education

P.G.=primary ed.; S.G.=secondary ed.

a roughly constant 20% for all education groups. Other problems - most of which reflect state administration issues - rise with education, from just 2% at lowest to 27% for the highest education group.

2.4.2.2 Partisanship

I also examined voters' partisanship, using the same survey. The patterns should be similar. Voters whose priority is private goods, or local goods, do not need to distinguish between political parties when choosing candidates. Parties provide no additional useful information for their voting decisions. In contrast, voters who place more value on public goods should have higher partisanship. For these voters, political parties are important information providers - representing bundles of public goods that the party will work to provide.

Figure 2.6 presents the data. Voters were asked which party they preferred.



Figure 2.6: Partisanship by Education Level (percentages)

The same basic pattern holds: higher education groups are much more likely to have some partian preference than lower-income groups. Only about 20% of those with no schooling have any party preference; this rises quickly to about 50% for all groups with elementary schooling or higher. As with the priority data, partianship quickly flattens out once voters have access to basic educational opportunities.

The third line of the table, "personal partisanship", further bolsters my argument. This cell represent voters who answered the question, "Which party do you prefer?", with the name of a politician: "Antonio Carlos Magalhães", "Maluf", or someone else, and who upon further prompting ("Which party is he/she in?") - did not know. For these voters, personal ties to politicians are more important than broader platforms or programs.

At the lowest level of education, personal partial par

Priority	None	<p.g.< th=""><th>P.G.</th><th><s.g.< th=""><th>S.G.</th><th>S.G.+</th></s.g.<></th></p.g.<>	P.G.	<s.g.< th=""><th>S.G.</th><th>S.G.+</th></s.g.<>	S.G.	S.G.+
Partisan	22	45	56	61	51	57
Non-partisan	56	42	38	36	45	41
Personal Partisan	22	13	5	3	3	2

Table 2.3: Respondents' Partisanship by Education

Years of Education

P.G.=primary ed.; S.G.=secondary ed.

as likely to place themselves within a personal machine as within a political party. This choice falls quickly with education. Only 5% of respondents completing elementary school or higher express personal partisanship.

2.4.2.3 Preferences and Partisanship

Finally, if my theory holds, there should be a relationship between preference types and partisanship, even after controlling for education. Voters with public goods concerns should find party labels to be useful informational labels for different policies, and should be more likely to identify with one party label or another.

Table 2.4 shows the results of a logistic regression of partial partial particular of a logistic regression of partial partial particular of a concerns, controlling for education. In both models, partial partial is coded "1" for respondents that identified a preferred political party and "0" for those that did not. I coded policy concerns as "1" for respondents that identified public services, social concerns, or other concerns and "0" for respondents that identified

economic or private goods concerns as their top priorities.

In both models, education has a strong and significant relationship with partisanship, as above. But as discussed above, low education, low income voters are not predestined to be private goods voters or less partisan. Other variables shape each voters' private good vote price. Including the policy type variable controls for these other factors, and shows the relationship between voters' preferences and partisanship. Regardless of education level, voters who have public goods concerns are significantly more partian than those with economic or private goods priorities.³²

This dataset is very rich and could be further dissected in many ways. However, for this project, several points in particular are worth focusing on. First, there is a very strong relationship between education and policy priorities, notably the difference between public service and economic concerns. It is also worth nothing that shift from economic to service priorities is not linear on education. The shift is most dramatic from respondents with no education to those that finished elementary school. At higher education levels, few voters are concerned with economic questions. Instead, they begin to shift their concern to "other questions" - quality of state government, tax policies, and other issues.

Second, there is a similar relationship between partisanship and education. Partisanship increases abruptly with basic educational opportunities. Personal partisanship declines to practically nothing as education increases. In addition, even when controlling for education, respondents concerned with public services and goods are more likely to have a partisan affiliation than voters with primarily economic concerns.

³²For simplicity's sake, I included education as a linear predictor. The preference type variable is still significant and positive if one includes categorical variables for each level of educational achievement.

Neither of these relationships is a surprise. The patterns make sense, have been qualitatively observed by many Brazilian scholars and researchers working on other countries, and concur with my interviews with deputies. They further demonstrate the dramatic differences in preference types across social sectors.

Finally, it is worth remembering how income and education are distributed in the states studied here. In Bahia and Piauí, about 70% of voters are in the first two education categories - where economic concerns are clearly the top priority.³³ This is evidence that most Bahian and Piauíense voters are less interested in public goods and more concerned with immediate economic problems. In Rio Grande do Sul, the Federal District, and São Paulo, the reverse holds: more than 70% have 4 or more years of education - where public services are the top priority.³⁴

2.4.3 Research, Interviews, and Observations from Each State

The evidence suggests that the poorer states of Bahia and Piauí should have predominantly private goods elections and politics and that richer São Paulo, Brasília, and Rio Grande do Sul should have more public goods oriented politics. This would come as no surprise to any observer of Brazilian politics - these char-

 $^{^{33}}$ From the 1990 Census, 65% of Bahian and 70% of Piauense adults had completed 3 or fewer years of education. Completing "primeiro grau" (the third category in Table 2.2) requires 8 years of schooling.

³⁴Two methodological notes are required here. First, I would have preferred to show these relationships with an income variable but could not. The dataset did include an income variable, with respondents' income coded into 6 levels. But the actual values associated with those values is not in the codebook - so we cannot know if category '1' is low or high income. I have contacted the responsible institution several times regarding this detail, but have received no clarification.

Second, I would further like to compare these relationships across states. I tried this, and the basic patterns do not change. However, there are several problems with disaggregating the data. The codebook includes no sampling information or explanation of weights needed to properly account for urban/rural differences. So rather than try to adjust the data or risk some bias (if there were too many rural voters in one state, for example), I simply focused on the overall picture of Brazilian voters sampled from all eight states included in this survey.

	Est. Coef.	Std. Error	
Education	.1004911	.0180701	***
Econ Concern	1534672	.0585464	***
Constant	25245	.0782497	***
LL	-3657.61		
n	5316		

Table 2.4: Logit Model of Partisanship

acterizations are widely known and accepted as fact by Brazilian citizens, political actors, and students of Brazilian politics. This section provides some additional evidence of differences across each state. I introduce each state and examine the characterizations of each states' politics provided in literature, interviews with deputies and other political actors, and my own observations.

In each of the states I spent several weeks, sometimes months, working in the state legislature. I interviewed more than 50 politicians and political actors. My battery of questions included discussions of campaign and election style, and voters demands. I asked deputies a battery of questions about elections, legislative-executive relations, their political parties, and other aspects of local political life and culture. Typical questions were "Do any deputies in this state buy votes"? "What is the price of a vote in this state"? "What do constituents ask deputies to provide"? "Does passage of legislation matter for reelection?" "Do constituents ever pay attention or ask about how a deputy voted on a specific bill?"

2.4.3.1 Bahia

Roughly the size of France, Bahia is home to 12 million *Baianos.*³⁵ The Northeast region of Brazil has been characterized as poor, underdeveloped, corrupt, and clientelistic, and Bahia is consistently included in that description.³⁶ The history of the state, like most others in the region, is one of large-land owners, relatively slow industrialization, and extremely inequitable distributions of financial, natural, and informational resources.

Bahian politics has been characterized as largely oligarchical, without any major social movements or cleavages. Political conflict has historically been between personal political groups - not societal interests. As in most of Brazil, scholars have noted differences in urban and rural voting. But the state has no tradition of a large activated rural or urban working class and had little upheaval while other states confronted strikes and protest.³⁷

More recently, the political scene has been dominated by Antonio Carlos Magalhaes, or "ACM". ACM has been a major player in Bahia for 30 years. He gradually built his own machine, eventually dominating most existing oligarchies.³⁸

His success has been attributed to his adaptation of traditional clientelism, dividing government agencies into efficient, technocrat-controlled planning and infrastructure agencies and clientelistic social programs.[176]. His accomplishments include encouraging the development of the petrochemical industry, modernizing

³⁵This section draws heavily on [176]. See Souza's Chapter 6 [174] for a more detailed discussion of current Bahian politics.

 $^{^{36}}$ See [124], [6].

³⁷Historic social conflict is not unknown, especially in other states of the Northeast. See [144] and [93].

³⁸Though his reign may be ending. As I write this (May 2001), he is being investigated for bypassing the Senate's electronic voting system to record a supposedly secret vote on the impeachment of Senator Luiz Estevao. He has announced that he will resign in the next few days.

the state government, and urban redevelopment in the city of Salvador. Bahia today might be characterized as the most developed state of the Northeast.

Scholars have documented a clientelistic complement to ACM's modernizing programs. Stories and allegations of vote-buying and political violence are common. ACM has been widely quoted as saying "I win elections with a bag of money in one hand and a whip in the other."³⁹ The 1990 election in particular was called notoriously corrupt, with neighborhood political bosses reputedly being promised a new Fiat Uno automobile for every 1,000 votes they could deliver.⁴⁰

My own observations and interviews concurred that private goods exchanges were central in Bahian politics. One politician told me how in the interior, votes could be as inexpensive as 1-2 reais each, and could be bought the night before the election or even while voters were in line at polling places. Further, all these resources, she explained, come from the "máquina pública" (public machine) in one way or another.

Other observers noted that the deputies provide all sorts of goods on election day: cestas básicas, radios, televisions, and other such items. Voters will ask a deputy on the street for cash, medical care, and jobs.[122]

A deputy from the interior of the state told me that vote costs were now between 25 and 50 reais per person, and that campaigns could cost as much as \$1 million dollars (US). Another when asked how to be re-elected, immediately answered "asking [the Governor] for public works projects" [142].

I was surprised to learn that the state's only Green Party deputy, Edson Duarte, has a constituency in the rural interior of the state. This would apparently suggest that rural Bahian voters are ideological environmentalists - contrary

 $^{^{39}}$ Cited by [176, page 18].

 $^{^{40}}$ See [171] for details.

to all scholarship on Brazil and my own argument. I asked him if he had a rural environmentalist constituency. He laughed and said that his party membership had nothing to do with his election. He chose the Green Party because he personally had always felt an affinity for the environmentalist movement. But voters didn't care about this at all, and he could not have been elected if he had run on an environmental platform.

He tried to persuade voters not to accept payments from other better-financed deputies. He used the argument that if voters accepted payment from deputies, the deputy would have no further obligation to serve or represent them because their debt was paid in full. He told me how voters agreed with his logic - but many admitted that even so, they preferred the immediate benefit.

He was finally elected (he reported) using the following strategy. He told voters that his denouncing of misery and other problems in their region would get resources from the government. He would never get credit (other deputies would be there for state ribbon-cutting ceremonies and to distribute goods) but his making noise would attract the funds. This, he reported, explains the election of a Green Party deputy from rural Bahia.

The stories and quotes could go on, but the message is consistent: a large majority of the voters are concerned with private or local public goods. Votebuying was and is a common feature of electoral exchanges. Voters were even conscious of their choice between private and public goods candidates, but chose immediate benefits over the uncertain payoffs associated with public goods.

The only exceptions to this general pattern were a few deputies elected from the industrial sector of the state. In particular, these more developed areas have elected several members of the Workers' Party. These deputies have apparently not engaged in traditional vote-buying practices but are pursuing public goods strategies, with some impact on state legislative politics, as we shall see.

2.4.3.2 Piauí

Piauí, demographically, is among the least-developed of all the Brazilian states. It has the highest illiteracy rates, the highest poverty rates, and the lowest level of urbanization. The state occupies 2,378 square kilometers and has 2.5 million *Piauenses*. Its capital, Teresina, is known as the "hottest city in Brazil." Piauí itself covers four geographic regions. The extreme south is *sertão* - the dry rural interior of the northeast. The center-north part of the state marks the beginning of the Amazon basin and rain forest. And the northern tip of the state provides some 60 kilometers of coastline between Ceará and Maranhão.

Piauí was settled by cattle ranchers, and ranching became a central sector of a predominantly agricultural economy. A limited tax base means that federal transfers to the state are an important part of the local budget, and that many municipalities would scarcely survive without such inflows.

Piauíense politics has been characterized as clientelistic and oligarchical. Texeira notes that during the campaign of 1978, the government's gubernatorial candidate bought votes in low-income neighborhoods through direct payments to voters, jobs, and deals with local leaders.⁴¹ He also lists several threats that the candidate made to encourage voters:

Whoever does not vote for our candidate will not drink from my well during the four years of my term. Whoever doesn't vote for our candidate will be fired. If you don't vote for my candidate we'll shut off the water and light to this city. If you doubt me just try it." [180,

 $^{^{41}}$ See [180].

page 128]

Gonçalves' recent work is the best and only serious analytic study of Piauense politics. He characterizes the current system as oligarchical, showing that many of today's major political actors in Piauí come from traditional political families whose roots stretch back nearly two centuries. Further, he explains their continued domination as the result of the agricultural-based economy and extreme poverty.⁴²

As in Bahia, my interviews and observations concurred with a private-goods characterization of Piauí's politics. All deputies confirmed that vote-buying is common, and all describe electoral relations based on the provision of local public or private goods.

One deputy told me that many deputies were directly purchasing votes. As he put it, "he [the impoverished voter] wants a guardian angel that when he is hungry, when the rain is weak, the boss gives food and medicine. The boss resolves his principal problem: dying of hunger, or a child dying from disease." [113].

The same deputy noted that perhaps ten of the thirty state deputies would directly purchase votes with payments. But all deputies provided services to constituents - effectively private goods. For example, the deputy noted that health is a right of everyone guaranteed in the Constitution - but that the health care system does not work properly. Consequently, there are long waiting lists for medical treatment. Politicians, he noted, take advantage of these governmental failures, step in, and obtain the medical exam, the medicine, or whatever the constituent needs.

One of his own major accomplishments was getting a road built, but he noted that this wasn't enough to get elected. He also had to provide transportation for

 $^{^{42}}$ See [69], [70], and [71].

voters, medical care, and other private goods. That is, local public goods like roads weren't sufficient for election - voters demanded private goods.

Another deputy revealed that the cost of a vote, purchased in cash, was about \$20 reais (1999), and that candidates spend up to \$1 million dollars in an election attempt.[137] This deputy had created a network of private health clinics in poor neighborhoods of Teresina. I visited several. The clinics provide free health care to *favela* dwellers. Patient's names are recorded in a database used to track possible voters. And the image of the deputy as the benefactor - the provider of these goods, is reinforced by his image in the clinic. Even the clocks have his picture as the face.

He also mentioned how he provides "bolsas de estudo" - or "scholarships" to low income families. In this case, the deputy provided free health care to school administrators and in return could move students (of potential voters) up on the admission list. With this strategy, he bragged that "I'll never lose an election" [137].

Other interviews were similar. Deputies emphasized the importance of providing goods to voters or groups of voters. A politicians might finance a graduation party, or pay for a musical group to perform for the community, or pay for a medical exam, x-rays, or other kinds of health care.

These sorts of exchanges were obvious and institutionalized. During one interview, a constituent burst in to ask for funds for medicine. The state assembly had several doctors on staff, and deputies could refer voters for medical care. Private goods, and local public good politics were clearly central to politics in Piauí.

2.4.3.3 Brasília

Three features of Brasília make this state unique. The first is its combination of municipal and state government responsibilities in a single political institution. The second is its *lack* of history - the district is a relatively young political unit. The third is the relatively high indices of development - on most demographic measures, Brasília is the most developed state in the Brazilian union.

Strictly speaking, Brasília is neither a state nor a city - it is classified as "the federal district". It differs in several ways from the other 26 states. Brasília is physically smaller than all the other states, and within the district there are no cities - there is a unitary government that provides both state and municipal services. For example, the district government resolves local planning issues, as does a municipality, but also acts within the sphere of state governmental activity - creating or privatizing state-owned industries and imposing state taxes. Reflecting this dual nature of the government, the district's legislature is called the "Legislative Chamber" - a combination of states' "Legislative Assemblies" and cities' "Municipal Chambers".

But aside from these differences, the federal district and its legislature are virtually identical to the other states. The district has executive, legislative, and judicial branches. The district elects three senators, and based on population, eight legislators to the national congress. The electoral rules, internal procedures of the legislature, and division of powers between branches of government are as in the other states. And while the Legislative Chamber does have to resolve some strictly municipal issues - like zoning ordinances - it also confronts all the same issues that a state legislature faces, including the creation and privatization of state-owned banks and other industries.

The political history of the federal district is easy to tell - because there is

almost none. Brazilians had been talking of moving their capital to the vast interior for hundreds of years[28], but the move finally happened under the direction of President Kubitschek. The new city built from scratch on the open high plains of the interior beginning in 1956; the capital was transferred from Rio de Janeiro in 1960.

Because it is so new, the district does not have any enduring political cleavages or traditions based on a historical path, like that seen in Rio Grande do Sul. Residents come from every state in the country. Even 50 years after its founding, most residents of Brasília were born somewhere else - everyone is an immigrant from another part of the country, and many are only there temporarily.

Initially, the Federal District had no political independence. An appointed Governor administered Brasília, and a Senate committee provided oversight and acted as the district's legislature - basically just rubber-stamping the district Governor's proposals. The district did have representation in Congress, and provisions were made for the election of a local legislature, but all these plans were put on hold with the 1964 military coup.

It was not until democratization that Brasília began to acquire real political independence. In 1990, the first district elections were held for the Governor's office and for the new Legislative Chamber. The legislature itself is in a temporary building at the northern end of Brasília's "plano piloto" with plans to construct a permanent home in the center of the district.

The most important industry is obviously the federal government and the service industries that it creates. Because of the large, well-paid civil service sector, the district's almost 1.8 million residents enjoy the highest social development indices of all the Brazilian states. Income, education, life expectancy - Brasília is ranked first among Brazilian states. There is, however, a growing lower-income segment of the population that lives in the "satellite" cities outside of the plano piloto. The lower-income sector includes descendants of the workers who came to build the capital in the 1950's and more recent migrants from the northeast and the neighboring state of Goiás.

Perhaps because of the high levels of political information, income, and education, as well as lack of personal ties between the new citizens of Brasília and their elected officials, *Brasilienense* elections have not been characterized as clientelistic or private-goods oriented. One deputy noted that "Voters here won't let themselves be bought." He went on to note that some voters will accept payments for their votes - but these voters typically will sell their votes to more than one candidate and vote for still another. Further, he noted that the regional electoral agency had been very rigorously enforcing campaign laws.[192] Another stated that, "Look, voters here are very demanding - but they don't ask for things in exchange for voting." He also stated that the few voters requesting payment made these requests of all candidates - they tried to get private goods from many candidates.

A few deputies disagreed, noting that in the poorest areas of Brasília some voters could be persuaded to vote for private goods or local public goods. I personally observed many constituents seeking jobs and other assistance in the legislature. But these deputies also agreed that direct cash payments for votes were extremely rare.⁴³

Further, some deputies also noted that constituents do pay attention and ask about specific roll-call votes, which they attributed to the higher levels of education in Brasília.[35]. This may be further reflected in another feature of Brasília's politics - corporativist representation. Many deputies noted how many

 $^{^{43}}$ See [178] and [50].

representatives are tied to a specific social or occupational sector. For example, one was elected by the police union, another by the electrical workers' unions, and a third by evangelical church members.

This pattern of representation is likely a function of size and history. Brasília's small size and recent settlement set it apart from other states. Most states are too large for statewide campaigns; instead, candidates focus their efforts on a small number of geographically proximate cities. Further, recent settlement means that voters are less likely to have ties to any existing political machines. Consequently, many candidates in Brasília have sought to represent sectors, instead of carving out geographical voting bases.

Brasília stands in contrast to Bahia and Piauí. Deputies acknowledged that private goods and local public goods are still used in campaigns, but noted that outright cash payments are almost extinct. Many voters simply will not sell their votes, and those willing to sell are not making credible voting commitments. Public goods campaigns are more common and are likely reinforced by union and other sectoral forms of representation, where candidates are tied to specific collective interests.

2.4.3.4 São Paulo

It is hard to say much about Brazil without mentioning the state of São Paulo. As of the 2000 census, São Paulo's population was just under 37 million - more than 20% of all Brazilians. This makes the state of São Paulo larger than most Latin American countries.⁴⁴ The City of São Paulo and surrounding metropolitan area account for almost half of this - 18 million residents, or about 10% of Brazil.

⁴⁴Only Mexico, Brazil, Colombia, and Argentina have populations larger than the state of São Paulo. Population figures in millions: Colombia 39; Venezuela 23; Chile 15; Peru 27; Paraguay 5.6; Uruguay 3.3; Ecuador 13; and Argentina 37.[36]

São Paulo's immensity is only magnified when considering economic data. The state's 1995 GDP of \$172US billion represents 35% of Brazil's total domestic product[85]. Again, this is greater than many Latin American countries.

Perhaps the key factor to consider when studying *Paulista* political society is diversity. During the wave of European immigration (1880-1930), some 2 million immigrants went to São Paulo. Almost half were Italians, another 40% were Portuguese or Spanish. The rest were from assorted other countries, especially Japan and Lebanon[101, page 11]. By 1920, 2/3 of São Paulo residents were either immigrants, or children of immigrants[59, page 11]. Since the 1930's, withincountry immigration has predominated, especially from poorer regions of the Northeast to the greater São Paulo metropolitan area.

The result is a state whose political society is very diverse and complex. There is a significant middle class, large labor movement, sizeable rural sector,⁴⁵ and the new urban poor in São Paulo's growing *favelas* (slums). The state is ethnically diverse, with some groups distinctly active in politics and other potential groups largely unactivated. Evangelical religious movements have grown in recent years. This societal diversity would suggest that voters' demands will be similarly diverse.

Deputies were aware of these distinctions. Several observers noted that candidates with lots of financial resources go to the *favelas* of São Paulo City for votes, buying or trading for "immediate" goods, like cestas básicas, shirts, or other such items. One noted that deputies were criticized if they did not attend to their base or their sector[46]. The "most serious," I was told, work to deliver real benefits for their cities; the pure clientelists are just after political jobs for their relatives and rural political connections. Finally, sectoral representation does not always

⁴⁵Seven percent of the state still lives in rural areas[79].

eliminate the private good requests, though it may concentrate them - a deputy told me how a union leader offered to endorse him - in exchange for his office furniture![62] None, however, spoke of cash payments for votes.

But other deputies with different constituencies spoke of a very different kind of electoral connection. The leader of the PMDB noted that more informed sectors do pay attention to roll call votes and hold deputies accountable. Others noted that the most ideological deputies had middle class constituencies, generally from the city of São Paulo. One deputy even told me that he lost his re-election bid largely because of opposition to a single roll-call vote he cast. Others told me that their most important accomplishments in office were bills to limit child labor and simplify income tax - in contrast with the stories of roads and scholarships that I heard in Piauí and Bahia.

2.4.3.5 Rio Grande do Sul

Rio Grande do Sul is Brazil's southern-most state. Encompassing an area roughly equal to Poland (about 282,000 square kilometers), it is home to 9.6 million $Ga\acute{u}chos$, as the residents are called.⁴⁶ On many demographic and economic variables, Rio Grande do Sul falls between Bahia and Piauí on one hand, and São Paulo and Brasília on the other. The state has a significant agricultural sector (10% of state GDP) and lower-income sector. However, in the last 20 years, there has been increasing urbanization and industrialization. Most recently, General Motors Corporation and Dell Computer are both building factories in the state. Ford had planned to do the same, but was lured away by Bahia after disagreements with the $Ga\acute{u}cho$ governor, Olívio Dutra.

However, as discussed above, there is not a deterministic relationship between

 $^{^{46}}$ See [79]

income, education, and voters' preferences. As I argued, other social characteristics, including historical events and development paths, can raise or lower voters' utility for public goods. In the case of Rio Grande do Sul, there is a large body of research suggesting that that state's history has fundamentally altered its political culture and raised voters' utility for public goods.

Politics in the state has been characterized somewhat differently than in other parts of Brazil due to Rio Grande's unique history and political trajectory. Scholars suggest that several features of Rio Grande have left the electorate more highly politicized and with a major bipolar social cleavage, legacies of Rio Grande's historical development. These factors - and their origins - merit some additional consideration.⁴⁷

Historians identify several features in Rio Grande do Sul's historical path that make that state unique: patterns of settlement that included land grants to attract European settlement, a history of polarizing international, interstate, and intrastate conflict, and isolation from the rest of Brazil.

Rio Grande do Sul was heavily colonized by German and Italian immigrants in the late 19th and early 20th centuries. This European immigration has been linked to several trends in Rio Grande. First, land grants to encourage immigration led to a large number of small family farms as opposed to the *latifúndio* model of large estates that predominated in most other parts of Brazil.⁴⁸ Second, these immigrants brought their experiences as part of European labor movements.⁴⁹ Finally, perhaps as a result of wealthier immigrants or more equitable distribu-

 $^{^{47}}$ This section draws heavily from [41] and [100].

⁴⁸Santa Catarina, the state adjacent to Rio Grande do Sul, also had a similar pattern of German and Italian settlement on small farms. Rio Grande do Sul's more arid South is the region of large estates established by the early 1800's, prior to this second wave of immigration. See [100] and [41] for more details.

⁴⁹See [17] Note as well that immigrants also took their labor movement experience to São Paulo and Rio de Janeiro.

tion of land, basic social indicators were historically much higher in Rio Grande do Sul than in the rest of Brazil. In 1872, Brazil's overall literacy rate was an appalling 16%. In that same year, 76% of *Gaúchos* could read and write [184, pages 14-15].

Second, this southern frontier state has been defined by violent conflict, both internal and external. As part of the Portuguese empire, the state saw frequent conflict between Spanish and Portuguese armies.⁵⁰ After independence, the pattern continued.⁵¹ The state even rebelled against the Brazilian emperor in the 1830's, and was a de facto independent nation for 10 years before rejoining the rest of Brazil.⁵² Then, in the 1890's, a political conflict between the Federalist Party and Republican Party turned into an internal state civil war. Both sides committed terrible atrocities, including the mass execution of prisoners.

Finally, the state was for many years relatively isolated, and this isolation should have preserved existing political cleavages. To the south and west are Uruguay and Argentina; to the east is the Atlantic Ocean, and to the north, a range of mountains separates Rio Grande from its only Brazilian neighbor, the state of Santa Catarina. This isolation, scholars have argued, has preserved Rio Grande do Sul's historical legacies.

The cumulative effects of isolation, immigration, and conflict, scholars argue, is a more politicized electorate with a bipolar political cleavage that has endured some four national party systems and other significant changes.⁵³

⁵⁰These conflicts included the War of the Seven Missions (1754-56), and additional conflicts in 1762, 1767, 1774-1776, 1801, and a 17-year conflict (1811-1828) over possession of the 'Banda Oriente', now part of Uruguay.

⁵¹Rio Grande was constantly facing incursion from less-stable Uruguay, and occasionally conflict with Argentina. Some battles of the War of the Triple Alliance (Britain, Argentina, and Brazil against Paraguay, 1865-1870), were fought in Rio Grande.

⁵²This rebellion was known as the Farroupilha War.

 $^{^{53}}$ Suffrage has increased from a low of 0.8% in 1886 to presently universal adult suffrage[184]:16) and the electoral rules have been modified several times.

Trinidade and Noll (1991) wrote that, "Rio Grande do Sul since the Old Republic has been configured in a bi-party system with competition between the Republicans ("pica-paus") and Liberals ("maragatos") ..." [184, page 20].⁵⁴ They further note that this bipolar party conflict contrasted sharply with most of Brazil where regional single-party systems were the norm. [184, page 65]

Cortes (1974) writes that

Gaúchos considered politics, like war, to be a two-sided struggle between "we and they." Third positions were rejected, compromise was abhorred, and neutrality was viewed as weakness.... This rigid political polarity was reflected in the state's persistent two-party structure. With only brief interruptions, the state remained divided into two political camps from 1889 to 1964. This contrasted sharply with the national political scene both from 1889 to 1945, when there was no continuous national party system, and from 1945 to 1964 when a national multiparty system existed...[41, page 9]

This bipolarity was evidently transformed as well into relatively strong partisan attachments. Writing about the 1962 gubernatorial campaign in Rio Grande, another author notes that the campaigns had little impact on public opinion. Instead, the electorate cast loyal *party* votes.[140, page 266].

Even the military's imposition of a two-party system in 1966 apparently had little impact.⁵⁵ Xausa and Ferraz found that, "Unlike in the majority of other states, where ARENA and the MDB were artificial or heterogenous agglomer-

 $^{{}^{54}}Pica$ -Paus means "woodpeckers". Maragatos is a term used by Uruguayans to identify Spanish immigrants from the province of Leon.

⁵⁵In 1966, the Brazilian military regime imposed a two-party system on the nation. The pro-government party was called ARENA (National Renovation Alliance) and the opposition party called the MDB (Brazilian Democratic Movement). See [89] and [49] for more details.

ations, in Rio Grande they served just to confirm and formalize the structure firmly established in the elections of 1962".[191, page 184] ⁵⁶

This pattern of an enduring cleavage has been observed in other Latin American countries, including Colombia and Uruguay. In both, brutal civil wars left an enduring social cleavage. For this study, the implication is that *gaúcho* voters should place a relatively higher value on public goods than their income and development levels would otherwise predict. These more politicized and mobilized voters, more conscious of their group membership and common interests, should thus be less likely to prefer private goods than voters from unmobilized regions.

In fact, while Rio Grande do Sul is not immune to private goods politics, it was also not a theme in the literature or secondary sources about politics in that state. My interviews and observations concurred. Deputies still talked about delivering local public goods to the municipalities that elected them. The President of the state assembly attributed his re-election to "taking care of" his voters.[152] One former deputy told me that he was constantly dealing with constituents' requests, and that he still receives calls requesting assistance - 9 years after leaving the state assembly. However, as in São Paulo, no deputy mentioned direct vote-buying as playing a part in elections. Further, deputies rarely talked at all of private goods - instead talking of local public goods and public works.

Further, there was apparently a strong public goods component to voting behavior. Several deputies ran on thematic issues - human rights, for example. And I repeatedly observed politicians using roll-call votes in speeches, campaigns, even in televised debates to attack their opponents' positions on key legislation.

 $^{^{56}}$ Not all scholars agree with these interpretations. Notably, Tavares [179] challenges the notion of a stable bipartisan system - noting that during the previous democratic period (1946-1964) and since 1990, the effective number of parties is consistently about six[179, page 184]. Other scholars, however, suggest that the multiparty system rests on the traditional bipolar lines.

Some deputies mentioned that constituents might primarily be concerned about local problems, but that they would sometimes ask about roll call votes. Others noted that there was a significant partian component to voters' behavior ([131] and [153]).

Comment on Interview Analyses Elite interviews can provide many useful insights, but several qualifications deserve mention. First, one must rely on the subjects to be truthful about behavior that in many cases is illegal or subject to criticism, in this case vote-buying and clientelistic politics. I tried to avoid these biases by asking the questions in terms of "Are there any deputies here who...?", and also by focusing on voters' demands for goods, rather than deputies' role in supplying them. Even so, it is likely that deputies would understate the extent of clientelistic practice.

Second, the sample sizes are relatively small and may be biased. I tried to interview a representative sample of deputies from each institution, but some deputies never did provide interviews despite my waiting many hours in their office lobbies. Most of the deputies who did not provide interviews had rural and low-income constituencies, and may have been more likely to be providers of private goods.

2.4.3.6 Public and Private Goods in the Five States

An analysis of demographic data, public opinion data, and additional research and interviews shows how very different voters' demands are in the five states in this study. São Paulo, Brasília, and Rio Grande do Sul have significant public goods components to voting behavior. Income and Education levels were much higher there than in Bahia and Piauí, and survey data correlated these variables with voters' policy priorities. In addition, while there are accusations of votebuying in these states, the practice is unacceptable enough that deputies agreed that it was very rare. Demands for traditional clientelistic behavior were present in all three states but were mentioned much less frequently and were often about local public goods - public works projects - instead of pure private goods - t-shirts, cash, and food.

There were certainly differences between the states - Brasília is probably the least private-good oriented, São Paulo is extremely diverse, and Rio Grande has a unique history that should strengthen the party system above its level of development. But they stand in stark contrast to the nearly pure private goods politics of Piauí and Bahia. In those states, deputies noted that even local public goods - like road construction - were not enough to be elected. They had to provide private goods - cash, scholarships, or other goods. The next section tests how these differences across states are reflected in legislative behavior.

2.5 Results

This section tests my theory of voter preferences and parties in two steps. First, I explore and compare legislative behavior across the five states. I focus on two measures in particular: roll-call votes and party-switching. Second, I complement my state comparison with an examination of patterns of party-switching in the National Congress.

2.5.1 State Assembly Roll-call Votes

This section tests my theory of voting behavior and political parties by comparing roll-call votes across states. My discussion (above) predicted different patterns of roll call cohesion across states:

- Parties in the governor's coalition should be more cohesive than those in the opposition in private good states.
- Both opposition and government parties should be relatively cohesive in public good states.

One of the challenges in testing these hypotheses is that we rarely are assured that roll-call cohesion scores are fully comparable across time period or across legislatures. For example, legislature A might have the norm of keeping all controversial bills from roll-call votes, legislature B might only have roll-call votes on controversial measures, and legislature C might vote on *everything*. Consequently, even if party cohesion were identical across the institutions, we would observe high cohesion scores in legislature C, low scores in legislature B, and moderate scores in legislature A.

This agenda-control problem turns out to be a serious concern for my study. Table 2.5 compares the frequency of roll-call votes I recorded from each of my five cases. The methodology I used to collect the data varied slightly from state to state, as discussed in Appendix A, but not enough to account for the severe differences observed across states.

The table shows extreme variation in the frequency of roll call votes - from 5,122 in Rio Grande do Sul during an eight-year period, to just two in Bahia. This raises the issue of selection bias and comparability of cohesion scores across states.

Figures 2.7 and 2.8 provide some insights on the agenda question. The graphs show, for each state and each period studied, the total legislative cohesion on each vote that occurred. Effectively, this is equivalent to a Rice cohesion score

State	1991-1994	1995-1998		
Rio Grande do Sul	2669	2453		
São Paulo	571	471		
Brasília	2622	5349		
Piauí	11	9		
Bahia	1	1		
See Appendix A for details on data.				

Table 2.5: Frequency of Roll Call Votes in Five States

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calculated for the entire legislature - a measure of how unanimous the legislature is when casting roll call votes. A value of one means that the decision was unanimous in support or opposition to the measure considered. A value of zero means that the legislature was equally divided - half voting yes and half voting no.

This data shows whether the items considered in roll call votes are on average controversial, polemical, or somewhere in between. Why does this matter? A comparable measure of roll-call cohesion is not produced by votes on bills to create a new festival, or declare "week of the *garimpeiro*," but rather on items on which there truly are two contested positions.

The figures suggest distinctly different agenda control patterns across states. In Brasília, while there are many roll-call votes, the majority of bills get unanimous votes. In Rio Grande do Sul, agenda patterns are similar, though there are fewer unanimous votes. Finally, in São Paulo, the distribution of overall cohesion is much closer to uniform. Contested votes are much more frequent relative unanimous votes. The few votes from Piauí and Bahia vary greatly from nearly unanimous to highly contested measures.⁵⁷

Further, the mechanisms that explain roll-call vote frequency support my initial hypotheses. Private goods states have no need for frequent roll-call votes they are simply a waste of time. Constituents do not care how deputies voted on tax reforms, or environmental regulations. Their primary concern is the delivery of private goods, or local private goods. This delivery takes place through an executive-legislative pact - deputies trade support for the executive's legislative agenda in exchange for access to state resources, as described above.

⁵⁷Note that each period's graph from Bahia represent only a single roll-call vote. See Appendix A for a discussion of data sources.
Figure 2.7: Legislative Cohesion on All Roll-Call Votes - Rio Grande do Sul, São Paulo, and Brasília









In public goods states, roll-call votes can be useful demonstrations of effort and position-taking or part of a legislative strategy. Deputies can use roll-call votes to demonstrate their effort on behalf of a public goods agenda - support for a new environmental law, opposition for tax hikes, or work for a raise for public employees. Such votes can similarly be used against their opponents in future elections. Opposition deputies might seek recorded roll-call votes so they can criticize their opponents who supported any policy initiatives that failed or proved unpopular.

Finally, requests for roll-call votes can be part of a legislative strategy to obstruct or delay the majority. Legislatures can quickly pass large numbers of bills on symbolic votes. I have personally observed state assembly Presidents racing through hundreds of bills and amendments like auctioneers, "Now being considered, amendment 10, all in favor stay seated, approved, now being considered, bill number ...". Just as in the United States' House of Representatives, the opposition can obstruct a majority's plans to race through their legislative agenda by requesting a roll call vote verification after each symbolic vote - lengthening the voting process from four or five seconds to 15 or more minutes. During a polemical debate on the budget, privatization, or administrative reform, where hundreds of amendments are considered, calling for roll-call votes can turn an afternoon's work into weeks of legislative sessions lasting all day and well into the early morning hours.

My observations and interviews in each state confirmed that these mechanisms were at work. In Bahia, I was surprised by the scarcity of roll call votes and asked why there were not more. The Administrative Director was puzzled by my question and asked, "Why would we have a roll call vote on something that the governor sent us?" [22] Legislators did not need to have roll call votes - because

the executive branch had taken complete control of state policy. Their bargain with the executive was simply to approve the agenda and seek state resources from the executive branch for their constituents. There were no electoral payoffs for position-taking, obstruction, or otherwise doing anything but trading legislative support of the executive for private goods for voters.

I discussed legislative strategy with opposition parties in all states. The Internal Rules of all five legislatures allow any deputy to ask for a roll-call verification of a symbolic vote.⁵⁸ Why, I asked, did they not use verifications to obstruct the government's agenda?

In Bahia and Piauí, some opposition deputies simply made reference to "negotiation" with the governor and majority, with no additional comment. I interpreted these comments as indicators of legislative-executive negotiations, trading roll-call votes for particularistic state resources.

I also spoke with opposition deputies from parties with reputations for disciplined and ideological behavior (the PT, or Worker's Party, for example). The few deputies in Bahia and Piauí from these parties claimed that *they did not know they could request verifications*. Some seemed to quite like the idea - one said it was a way to "give names to the cattle" [103] and others claimed they would begin to use this strategy in the legislature. This may generate roll-call votes for future scholars, or these responses might simply have been dishonest. Either way,

 $^{^{58}}$ A typical rule is São Paulo's, "Whenever he/she judges convenient, any Deputy can request a verification of a symbolic vote." [12, Title VI, Chapter II, Section V, Article 213]. For other states' rules, see [15, Title III, Chapter III, Section V, Subsection III, Article 132], [13, Chapter XIII, Section VI, Article 182], [29, Chapter X, Section II, Article 164, Subsections 1 and 2], and [10, Title VIII, Chapter II, Section III, Article 166, Subsection 1]. Note that Brasília's Legislative Chamber imposes several restrictions. Any deputy can request a verification of a vote, but in a one hour period, the first request will be honored, and subsequent requests required the approval of one-third of the deputies. This would be problematic except that (a) the Câmara Legislativa almost *always* has roll-call votes and (b) the minority coalition there is generally larger than 1/3 of the deputies.

the lack of roll-call votes suggests that public position-taking or moving forward with a legislative agenda have had little to do with legislators' career strategies in Piauí or Bahia.

Rio Grande do Sul, São Paulo, and Brasília are clearly very different in this regard. In both Rio Grande do Sul and Brasília, the legislature acquired the norm of having a roll-call vote on *every* bill that made it to the floor - they almost never held symbolic votes. In Brasília, one President of the Legislative Chamber did reduce the number of roll-calls during his two year term. But the next President returned the practice of holding roll-calls for all bills. Staff members in Rio Grande do Sul were puzzled by my question, "Why does the Assembly use rollcall votes on every proposal?" It was simply the accepted practice.

In both states, even obviously administrative or symbolic measures like extending the legislative session for another half hour or declaring "The Week of the Miner" were subject to roll-call votes. In Brasília, the number of unanimous votes (See Figure 2.7) was partly the result of an odd informal pact. Legislators had reached in informal understanding to unanimously support nearly every bill authored by a legislator, but returned to party lines on anything proposed by the executive branch. Most of legislators' proposals were considered relatively noncontroversial measures in contrast to the more divisive questions of privatization and zoning policy that were part of the Governor's agenda.

The legislature took this practice to such an extreme that they often passed mistakes. For example, one deputy proposed requiring retail businesses to close on weekends. After being approved on a first vote (23-1), the bill faced heavy opposition from retail merchants and was defeated (24-0) in a second round of voting.[115, page 92] Many other bills passed were actually unconstitutional and were vetoed by the Executive. The legislature then almost always voted in favor of the veto.

Roll-call votes in São Paulo were less frequent, but still much more common than in Bahia or Piauí. Noncontroversial projects were generally dealt with using symbolic votes. The College of Leaders decided which items would face roll-call votes. If a controversial item was left off the roll-call agenda, an opposition deputy would request a roll call verification, as described above. These roll-calls typically had no effect on the outcome, but did lengthen the legislative session and force deputies to take positions.

The procedures described above are apparently reflected in Figure 2.7. In Rio Grande do Sul and Brasília, there are many unanimous or near unanimous votes. In São Paulo, there were far fewer roll call votes overall, but the votes that took place had lower overall cohesion scores - meaning they were opposed in the legislature.

In all three states there was at least some evidence of these votes being used as position-taking measures. Deputies in Rio Grande do Sul would commonly show and refer to copies of votes while making speeches and participating in discussions. During the gubernatorial debates, candidates showed their opponents' and opponents' parties' positions on key votes. Deputies in Brasília reported that voters would ask them how they voted on the more publicized and controversial measures. And one deputy in São Paulo actually told me that he was not reelected because of a single roll-call he cast against an amendment to the budget increasing education funding.

These statements, however, must be qualified. Particularistic good politics are still important to varying egress in Rio Grande do Sul, São Paulo, and Brasília, as discussed above. Not all deputies used roll-call votes in campaigns or speeches, or faced criticism in their campaigns for their voting records. But the fact that roll call votes are frequent in these states and not in Piauí or Bahia, and that deputies in São Paulo, Rio Grande, and Brasília *did* use roll-call votes as part of their career strategy in these states, and not in Piauí or Bahia, would be expected if my theory were correct.

2.5.2 Party Cohesion Scores

Table 2.6 compares party cohesion across the five states. As in Chapter 3, I deal with potential agenda problems by using two measures of party cohesion - a Basic Cohesion Score (BCS) and Weighted Cohesion Score (WCS). The calculations involved in producing these scores and the intuition behind them are discussed in Chapter 3.

The table offers several insights regarding my hypotheses. First, regardless of the measure, there are not dramatic differences in average party cohesion. Across states, party cohesion is on average 88%, with little difference between public and private good states. Piauí's low score is an exception, but there is no evidence of consistent differences between private and public goods states, since Bahia's overall cohesion score is one of the highest.

Second, these scores are mostly quite high. Rio Grande do Sul's cohesion scores are among the highest, consistently above 90%.⁵⁹ São Paulo and Brasília are lower, both with very similar scores - about 85% regardless of measure. Piauí's score is much lower, but it is hard to say much with confidence about Piauí's twenty roll call votes; even less can be said about Bahia.

One of the key testable implications of my theory was that we should observe differences in government and opposition party cohesion. My theory predicted

⁵⁹Exceptionally high party cohesion is a consistent pattern in both state and national rollcalls for deputies from Rio Grande do Sul. This pattern concurs with the characterization of Rio Grande do Sul's enduring cleavage and zero-sum political culture, described above.

State	BCS	WCS					
Rio Grande do Sul	.92	.90					
São Paulo	.87	.86					
Brasília	.86	.85					
Piauí	.69	.67					
Bahia	.89	.92					
See Appendix A for details on data.							

Table 2.6: Overall Party Cohesion in State Assemblies

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		BC			WC	CS			
State	Gov't.	Opp.	Diff.		Gov't	Opp.	Diff.		
Rio Grande do Sul	.89	.94	05	****	.87	.93	06	****	
São Paulo	.86	.88	01	**	.84	.87	03	****	
Brasília	.86	.86	.00		.84	.86	02		
Piauí	.89	.55	.34	***	.94	.48	.46	****	
Bahia	.94	.80	.14		.98	.81	.17	**	
See Appendix A for details on data.									
* .10, ** .05, *** .01, **** .001									

 Table 2.7: Government and Opposition Average Party Cohesion in State Assemblies - 1991-1998

that the government party would be more cohesive in private goods states, but that cohesion would be relatively equal in public goods states.

Table 2.7 compares government and opposition parties' average cohesion scores across the five states, using both the Basic Cohesion Scores (BCS) and Weighted Cohesion Scores (WCS). The key difference is that the WCS scores are weighted by one minus the overall cohesion on the vote - effectively counting divided votes more than unanimous votes. The BCS counts all votes - including unanimous votes on naming someone a 'citizen of the month' - equally. Both measures are discussed more fully in Chapter 3.

The results strongly support my hypotheses. First, the government party is more disciplined than the opposition in Bahia and Piauí. In the private goods states, the government coalition parties are consistently more cohesive than the opposition parties, regardless of measure or period. The extent of the difference varies from as little as .14 to as much as .46, but is always greater than zero. The differences are almost all significant at the .05 level or higher. ⁶⁰

Second, in public goods cases, the opposition is consistently equally cohesive or more cohesive than the government party. The opposition is significantly more cohesive than the government party in Rio Grande do Sul and São Paulo, with the differences above the .001 level. Opposition and Government parties' cohesion is nearly equal in Brasília.

I tested these findings against a slightly different coding of coalition membership. Originally, I coded the parties in each legislature as members of the government or opposition coalitions based on interviews with legislative staff, official documents, newspaper articles, and scholarly work on each state. In the case of Brasília and São Paulo, several parties were not part of the government coalition, but were only questionably part of the opposition. Such parties included those that took an independent stance - sometimes with, sometimes against the governor - and those that my sources could not code clearly as an opposition party. I checked the results presented above against models that excluded any 'independent' or uncoded parties. The results, presented in Table 2.8, did not

⁶⁰I performed these statistical tests using simple linear regression, where party cohesion was the dependent variable, and an indicator of dummy variable for coalition membership provided the statistical test. This is typical of the methods used to analyze roll-call votes - maybe even a little better than average. But it suffers several problems and has several relatively clear if time-consuming solutions. An alternative approach to do this would be to bootstrap the party cohesion scores. This would avoid making strong or unrealistic assumptions required by regression.

change any of the substantive conclusions, but only increased the differences between the opposition and government parties in São Paulo. Other results were substantively unchanged.

I also repeated both tests excluding the Workers' Party (PT). The PT is known for its ideological and disciplined behavior. PT legislators are expected to vote with their party, and deputies that do not may be punished. The PT has created a series of mechanisms to enforce discipline on its members. The PT is frequently in the opposition, and is larger in more developed states like São Paulo, Rio Grande do Sul, and Brasília. Consequently, the greater cohesion observed in opposition parties might simply be the result of the PT's presence.

Repeating the analysis without the PT had little effect. In Rio Grande do Sul, the opposition parties continued to be significantly more cohesive than the government parties. In Brasília, the results changed from no differences to a significantly more disciplined opposition.⁶¹ In São Paulo, the differences varied with measure. The government parties were actually more cohesive than the opposition using all parties. But there were no significant differences between them when comparing the government only with the active opposition.

How can this variation be understood? It has no real impact on the substantive conclusions, but warrants two comments. First, the strength of the PT in the three more developed states only strengthens my argument. The PT's ideological stances and disciplined behavior, according to my theory, should be appealing to public goods voters with leftist views. Consequently the PT's strength in São Paulo, Rio Grande do Sul, and Brasília reflects the very mechanisms I argued should be at work. Second, the patterns in São Paulo seem to reflect the diversity in that state. There are politicized labor unions and impoverished *favela*

 $^{^{61}\}mathrm{Note}$ that from 1994-1998, the PT was the governor's party in Brasília.

voters susceptible to private goods' appeals from candidates.

In both Piauí and Bahia, my interviews and observations suggested that the theoretical mechanisms I described above do in fact explain patterns of roll-call cohesion. In Bahia, opposition parties were apparently fragmented. While I was in Salvador, the PSDB and PMDB were both members of the opposition coalition. Half the PSDB, however, had publicly declared their allegiance to the governor and willingness to support his legislative agenda.

The PMDB in Bahia suffered a similar split. At one time formally part of the opposition, the party has divided into two groups[175]. One group follows Geddel Vieira Lima, and opposes the government led by ACM. The other half of the PMDB supported ACM's government.

There are some smaller opposition parties that are more disciplined, notably the Worker's Party or PT. In 1994, the PT elected 5 members to the state assembly. This small party appears ideological and disciplined. Interestingly, as discussed above, these deputies' constituencies are different from those of the other parties. Most of the PT deputies have backgrounds in union organizing or as union leaders, and many of their voters are the organized workers of Bahia's industrial sector.

In Piauí, the behavioral patterns were very similar. After the 1998 elections, the governor actually only had a minority coalition in the assembly - 14 of 30 deputies. I discussed this with the leader of the opposition parties - deputy Leal Junior of the PFL. I asked him why the opposition - with a majority in the state assembly - did not challenge the governor's legislative agenda more aggressively. He simply answered, "We negotiate." Although he was the majority leader, he went on to note that "being in the opposition in the Northeast is tough" and that his party "Can't get anything [from the government]." His comments were a bit more forthcoming in a newspaper interview a year later, in March of 2000. When asked about the opposition's decision to vote in favor of the governor's proposals, he noted that, "Certainly there will be an opposition. We will continue just as firm as before, but we will be able to vote in favor of the government's proposals[38]." It turned out that deputies in his own party were publicly siding with the governor, and that others had simply switched into one of the governmental parties in exchange for "benefits." The PFL leadership had tried to provide strengthen their party's opposition to Governor Santo - but failed as its members sided with the governor.

Both states fit with the expected pattern: in clientelistic settings, parties are replaced by governors as political organizers. The government party is highly disciplined and responsive to government demands. The opposition is fragmented and incapable of resisting the governor's pressure - even when the governor does not have a majority. The opposition is only strong and somewhat independent among politicized sectors that seek broader policy goods, in this case, the PT deputies representing various labor and urban interests.

The dynamics were very different in public goods states - São Paulo, Rio Grande do Sul, and Brasília. In these states, the opposition parties did not divide over support for the governor. Across multiple measures and codings of government and opposition cohesion, the opposition parties were usually at least as cohesive as the government parties, often actually more cohesive. Where the governor had a majority coalition, executives sometimes had conflict with their own party. And where the executive did not have a majority coalition, I observed highly conflictual legislative-executive relations.

	BCS					WC	S	
State	Gov't.	Opp.	Diff.		Gov't	Opp.	Diff.	
Rio Grande	.89	.94	05	***	.87	.93	06	***
São Paulo	.86	.93	07	***	.84	.93	09	***
Brasília	.86	.86	.00		.84	.86	02	
Piauí	.89	.55	.34	**	.94	.48	.46	***
Bahia	.94	.80	.14		.98	.81	.17	*

Table 2.8: Government and Active Average Party Cohesion in State Assemblies- 1991-1998

See Appendix A for details on data.

* .05, ** .01 *** .001

São Paulo Political parties in São Paulo were relatively cohesive. Observers told me that most deputies follow their party leader's orientation for roll-call votes. The differences between Bahia, Piauí, and São Paulo were reflected in the way São Paulo dealt with controversial legislation. I observed the opposition using quorum calls, roll-call votes, and its allotted discussion time to prolong both the 1999 budget and the privatization of Comgas (Gas Company of São Paulo) processes as long as possible, with many sessions extending well past midnight.

But as the São Paulo electorate is diverse, so are that state's deputies. As discussed above, some have attentive sectoral constituencies, but others have more private-goods oriented voting bases. abrúcio [1] noted how governor Covas was elected with a minority in the Assembly, but quickly and easily assembled a coalition - from deputies whose electoral strategy requires private and local public goods. One of the government party's chief analysts acknowledged the emotional debates in the state legislature, but qualified this by noting that none of the Governor's key policy proposals had been defeated - all passed eventually.

While cohesion was relatively high, there is no strong evidence that it reflects party discipline. Cohesion indicates that deputies from a party are voting together, but discipline means that such voting is encouraged by the party and that significant costs are imposed on deputies that refuse to conform. Party leaders from the "catch-all" PMDB and PPB both complained to me about the lack of party discipline.[181] [52] Deputy Tonin (leader of the PMDB) noted that he had formal powers to discipline members, including control over their committee memberships, but suggested that these powers were of little value. He did recount party meetings to discuss polemical roll-calls, where he would expound the need to "stay together on this one." Members of several parties told me that they could vote against their party if they chose to. Only members of the Workers' Party mentioned that party cohesion was mandatory and that there were costs to voting against the party. Finally, other interviews suggested that roll-call votes had nothing to do with discipline or ideological cohesion. One observer, when discussing the legislative battle over the Comgas privatization, simply said, "the price must be very high", referring to the cost of deputies' bargains for state resources in exchange for support for that bill.

My interviews in São Paulo left me with the impression that two mechanisms were at work there. First, there was a relatively disciplined opposition that did not need to seek private goods from the governor. These deputies - like those in the PT - had public goods constituencies and did not need to bargain with the executive. Second, deputies in the government's coalition included both ideological supporters of the governor's agenda, and goods-seeking bargainers. Further, because fewer deputies needed private goods, the governors' market for votes on controversial legislation was smaller. As a result, the price of votes may have been higher, and prolonged negotiations were sometimes necessary. In contrast with Bahia where the governor dominated the legislature, the São Paulo executive had to engage in substantial negotiation to advance his agenda.

Finally, it must also be noted that the governor was still *very* influential in São Paulo. When I asked the majority leader in the Assembly about several bills that were apparently stalled in the legislature, he acknowledged the controversy and opposition, but noted that the Assembly had eventually approved every one of the governor's major initiatives.[62] Abrúcio's study of state "ultrapresidentialism" focuses on the state of São Paulo, where he shows how Governor Fleury was able to circumvent any challenges or independence from the legislature.[1] **Brasília** Parties in the Federal District were also relatively cohesive - consistently about 85%. The data concur with predictions. Using the basic cohesion scores, the government and opposition had almost identical cohesion scores; using the weighted scores, the opposition was slightly more cohesive than the government parties. These slight differences are not significant for either measure.⁶²

Deputies' comments in Brasília were similar to the Paulista legislators. Several noted that their party was "democratic" - that is, they could have their own opinions and vote differently than the party. I also tried examining cohesion in Brasília separately for each of the two legislative sessions (1991-1994, and 1995-1998). I had expected the two periods to be very different due to the election of a PT governor for the period 1995-1998. The PT or Workers' Party is known for disciplined, ideological behavior. Brasília's other parties are less ideological. Consequently, I expected the governing coalition to be more disciplined than the opposition for the period 1995-1998, since the most ideological party was in the government and the opposition parties were those typically considered "catch-all" parties.

However, my theory held even when the Workers' Party was in the government. The PT government coalition had lower cohesion that the opposition. This might be partly due to Governor Buarque (PT)'s relationship with the legislature. One deputy noted that PT Governor Cristovam Buarque never "took care of" the legislators - did not receive them or attend to their requests. In fact, he said that Buarque did not even care for his own coalition. In contrast, PPR/PMDB Governor Roriz "takes good care of" the deputies.[192]

 $^{^{62}}$ It is also worth nothing that Brasília is one of the few Brazilian states to ever have divided government. In 1994, PT candidate Cristovam Buarque was elected governor, but was unable to assembly a majority coalition. It is interesting that during his term, the PT government was actually less cohesive than the catch-all parties in the opposition.

Rio Grande do Sul Rio Grande do Sul stands out as having the most disciplined parties of all the states. The opposition parties are significantly more disciplined that the government parties using either measure of roll-call cohesion. Unlike Bahia or Piauí, the opposition was never consistently weaker than the government, or tempted to realign with the executive. Further, the parties have shown remarkable independence from the executive branch. For example, during Governor Britto's mandate (1994-1998), his own assembly majority overturned his veto of a wage increase for public employees.

The current Worker's Party governor, Olívio Dutra, only has a minority coalition in the state legislature and has not been able to assemble a majority coalition. The opposing majority has passed legislation over his vetos and defeated executive legislative proposals - even challenging him on an executive order that receptionists answer phones saying "A popular and democratic government."

Deputies suggested different levels of party discipline and influence. Workers' Party members told me that any consistent position against the party would be problematic. We discussed a vote where Luciana Genro (PT) left the floor before the roll-call. Her absence, they indicated, was a sign of opposition. They further noted that her behavior was an exception, and that repeated strategic abstentions could create problems for her within the party.

PMDB staff noted that deputies who did not agree on controversial votes would also avoid attending the session - because public disagreement within the party was strongly discouraged.[21] But I was also told that the PTB, for example, was not very rigid in imposing discipline on members.⁶³

⁶³In this Chapter, as in others, I have avoided dealing directly with the problem of strategic abstentions by deputies as being effectively "no" votes or votes against the party majority's position. My decision to limit myself to just actual "yea" and "nay" votes was made based on three considerations.

First, it is not clear if an absence is a yes or no vote. Second, not all abstentions are strategic - some are caused by illness, travel, or a preoccupation with constituency service.

Conclusions to Section An analysis of roll-call vote cohesion from my five cases suggests several conclusions. First, my hypotheses are largely confirmed. In the private goods states, the opposition was consistently less cohesive than the government party. I argued that this was the result of all deputies' need for state resources. Interviews with deputies, staff, and other contextual information suggested that these mechanisms were in fact at work. The results are significant in spite of the very few roll-call votes from Bahia and Piauí.⁶⁴

In contrast, in public goods states, the opposition parties have equal or greater roll-call cohesion than the government parties. I argued that opposition deputies in public goods states build their reputations on opposition to the governor. In contrast, deputies in the governors' coalition may have pressure to defect on controversial proposals with which they do not agree or on which their constituents lobby heavily.⁶⁵

Second, interview evidence suggests that the mechanisms in my theory explain these cross state (and within-state) differences. Opposition deputies in Bahia and

⁶⁵I observed a similar dynamic on roll-call votes during the authoritarian regime. See [49].

Third, resolving these quagmires would require deliberately making some strong assumptions about exactly what absences mean. There are additional problems with the data for some legislatures - some recorded absences, others only recorded actual yes or no votes. As the membership of Brazilian legislatures is often changing when deputies take leaves of absence to run for other positions or to occupy state departmental appointments, for some legislatures it would be difficult to identify exactly which deputies were even in the legislature at a given time period. Consequently, identifying exactly which legislators were absent would be very problematic. Some of this data could be recovered in the legislatures' *Diários Oficiais*, but this data collection task was beyond the scope of this dissertation.

⁶⁴Why would not all deputies vote with the governor's coalition in private good states? Opposition deputies have several reasons not to always support the governor. First, some opposition deputies have access to other political goods that they can deliver to constituents. Some leadership positions, for example, include additional political jobs and benefits that can be harnessed. Other distributable resources may be institutionalized, like free lunches, medical care, or social funds that all deputies receive and can distribute. Second, the governor may not want to expend the resources to build more than a super majority. The benefits to buying off all deputies are not much more than buying off most deputies. Further, some opposition deputies are likely to challenge the governor or governor's allies in future elections for mayor, federal deputy, senator, or even governor. The executive has no reason to help such potential opponents build their electoral bases.

Piauí felt substantial pressure to align with the governor. Opposition deputies in the other states did not have the same concerns. Further, within-state differences in party cohesion correspond to constituent differences. In Bahia, the deputies with labor union constituencies did not defect and vote with the government - in fact this small group has significantly affected the style of legislative politics in that state.

2.5.3 Party Switching

I compare the results of the roll-call vote cohesion data with an examination of party switching. I examine both the frequency and nature of party switching. If legislators use parties to develop policy credibility and to advance a common agenda - as predicted in public good environments - we should observe less party switching. If parties are secondary to legislative-executive bargains, we should see less long-term party loyalty and membership.⁶⁶ Further, what party-switching does occur should be tied to ideological or policy questions in public goods arenas, and to private good access in private goods arenas.

Table 2.9 shows switching rates for the last two legislatures (1991-1994 and 1995-1998) for each of the five states studied. The switching rates presented are the total number of switches divided by the total number of seats. This measure does not count switches where the originating party disbanded or merged with another. Merger decisions take place at the national level and are forced on state parties.⁶⁷

The pattern does not match my predictions. Defection is relatively common

⁶⁶For an extended discussion of the costs and benefits of party switching, see [48].

⁶⁷This is the best way to compare rates across states. Comparing the number of deputies that switch, percent that switch, or percent that switch one or more times is confounded by patterns of substitutions by runners-up.

State	Total Seats	1991-1994	1995-1998				
Rio Grande	55	.07	.04				
		(4)	(2)				
São Paulo	94	.21	.30				
		(20)	(28)				
Brasília	24	.50	.42				
		(12)	(10)				
Piauí	30	.17	.20				
		(5)	(6)				
Bahia	63	.43	.43				
		(27)	(27)				
(Number of switches in parentheses)							

Table 2.9: Party Switching Rates

in Bahia (about 30%) and less so in São Paulo (20%). But switching is less frequent than we would expect in Piauí (17% average), much more frequent than expected in Brasília (45%), and exceptionally rare in Rio Grande do Sul (about 6%).

The low switching rates in Piauí may simply reflect poor data. The Piauí state assembly does not document party switches. Assembly staff kindly attempted to reconstruct these figures from memory for me. But in spite of their gracious efforts, it is very possible that some switches were overlooked. Hence these figures may well understate rates of party-switching in Piauí.

The second surprise is the Federal District. In spite of high education, information, and income levels, it has the highest party-switching rates of all cases. As discussed above, Brasília has effectively no political history. The parties, electorate, and politicians are all new to this political arena, and alignments and coalitions may simply require more time to evolve. The period of this study (1991-1998) represents the first years of the Brasilienense political arena. These rates may fall over the next several legislatures as the district's party system begins to take shape. Notably, switching rates do fall from the first to second legislature.

Finally, Rio Grande do Sul has switching rates below what we might expect based on economic development alone. This result mirrors the findings in the roll-call cohesion analysis above, where I found Rio Grande do Sul to have relatively cohesive parties when compared with the other states in the study. The explanation here has again been tied to the electorate and Rio Grande's political history. Deputies told me that switching is looked upon very unfavorably by the electorate. Switchers are seen as traitors and have difficulty seeking re-election.

How can one interpret these results? I had expected that party switching rates would vary in accordance with voters' preferences for private and public goods, but Brasília in particular stands out for violating this pattern. There are two possible explanations.

First, one might conclude that this is strong evidence against my theory. However, given the solid results from the roll-call cohesion section, this particular conclusion would be inconsistent.

Second, one might conclude that my theory is correct but my analysis of partyswitching rates is conceptualized improperly. My theory of voters' preferences and party formation suggests that there should be higher costs associated with switching in public goods states than in private goods states. However, for this comparison to be an adequate test, deputies across all states must have identical benefits to party switching. Unfortunately, that is probably not a reasonable assumption. My previous work shows how party switching can be motivated by various strategic opportunities for individual deputies, as well as by random political shocks. For example, in São Paulo, a split within the PFL caused every deputy in that party to switch to the PL in a period of a few days. In Brasília, Governor Roriz' party (the PTR) merged into what eventually became the PPB. Governor Roriz chose to move to the PMDB rather than merge into the PPB; all his PTR allies in the Assembly switched with him. Other states may not have had any similar shocks during the period I studied.

These kinds of random political shocks would not be problematic if distributed equally across a large sample of states, but with only five states and two legislative sessions, the unexpected differences could simply reflect observed and unobserved political shocks and other random events. If I had a sample of all states, the larger number of observations might stabilize the results. I correct for this possibility by examining behavior in the National Congress later in this Chapter.

What motivates switchers' decisions? What do parties do for them? Table 2.10 answers a different question: what motivates legislators' party switching? I model switchers' choices of destination parties. Each switcher must choose between the other parties in the legislature (excluding the possibility of forming a new one). This choice may be based on ideology, electoral opportunities, access to patronage, or other factors. Effectively, the question becomes, what makes a party attractive to switchers?

I estimated a conditional logit for switchers' destination parties as a function of three factors: electoral threshold, government or opposition member, and ideological proximity. For each state, I collected party switching data. Most states only partially tracked deputies' partian affiliations, but I was able to reconstruct switches using roll-call votes, formal communications to the Presidencies of the legislatures, electoral records, committee membership records, and other documents.

The electoral gain measure captures the threshold differential between deputies' old and new parties. Many deputies - in all states - explained that party switching could be an electoral strategy. The electoral threshold is often lower in smaller parties.⁶⁸ So deputies may switch into a small party where re-election will be easier before the election, and then switch back into their old party after the election.

I included two additional variables. Governor's Coalition is a dummy variable that distinguishes government and opposition parties. To classify parties as government, opposition, or independent, I first asked the Parliamentary Secretary of each legislature. Where they did not know or remember, I relied on interviews with deputies and newspaper accounts of cabinet formation to categorize parties. Where neither of the previous was revealing, I used electoral records of coalition formation to code parties as government or opposition.

Finally, I coded the ideology variable to capture the ideological distance crossed by deputies that switch from one party to another. Did deputies move from left to right - or limit themselves to adjacent parties? Note that this does not capture ideology as a motive for switching - because we have no way of estimating deputies true underlying ideal point. However, it does show the limits that ideology imposes on party-switching.

⁶⁸There is no mathematical rule that forces smaller parties to have lower thresholds. But if they have fewer supporters and still run the maximum number of candidates, and if votes are distributed roughly equally across candidates, then smaller parties will have lower thresholds. Parties that get more votes but have the same number of candidates will have a higher threshold to the extent that votes are distributed normally. The more the distribution of votes tends toward a single candidate getting all the votes (or a few candidates) the more equal the thresholds will be.

Table 2.10 shows the results from estimating this model on switching data for the five studied legislatures. The first model offers mixed support to my hypotheses. In Piauí, government coalition parties are significantly more attractive than opposition or independent parties, and ideology has nothing to do with deputies' affiliation decisions. In São Paulo, all variables are significant, again supporting the idea that there is substantial diversity within that states' politics. Some deputies must consider their potential access to pork when switching party; others must consider the ideological implications of switching party. In Brasília, government coalition membership appears irrelevant; the most important factor for deputies is the ideological distance of the target party.

None of the variables is significant for *gaúcho* deputies - but this is no surprise. Since only 6 deputies changed party over the period studied, any significance would be a surprise. Deputies and analysts in Rio Grande do Sul told me that switching was very poorly received by gaucho voters. Especially criticized is switching into the government party - voters considered this opportunist and inappropriate. In the switches studied here, none of the gaucho deputies changed into the governor's party. This is again consistent with the idea of party membership as an informational cue for voters. Switchers lose credibility among voters.

The results for Bahia, however, are surprising. Ideological distance is a key concern for deputies and government coalition membership does not seem to affect deputies' decisions.

Model 2 modifies the test for Bahia and for Brasília. As discussed previously, although the PMDB was not formally part of the government in Bahia, informally the party had ties to the ACM-led government. Consequently, I recoded the data considering the PMDB to effectively be part of the governors' coalition. For Brasília, I considered the impact of different kinds of executives. The governor during the first period (Roriz, 1991-1994, 1999-) was a member of a less-ideological party (the PTR and then the PMDB). He was known as a governor who would bargain with deputies (see interview notes, above). In contrast, Governor Buarque (1995-1998) was a member of the ideological Workers' Party and had a reputation for refusing to trade state resources for deputies' support. I included a variable to distinguish between these two governments.

These modifications had some interesting effects on the results. In Bahia, governors' coalition membership did make parties more attractive destinations for switchers, though the finding is only significant at the .10 level. In the Federal District, the sign on government coalition reverses across the two periods. Under Governor Roriz, the government coalition was a more attractive destination than independent or opposition parties, though that result is not statistically significant. Under PT Governor Buarque, switchers avoided the government's coalition. These findings show how the nature of the executive's electorate affects the dynamic of legislative behavior. Specifically, where there is an executive elected with a public goods constituency, the dynamics of coalition formation change significantly. Deputies that might seek deliverable private goods from the governor no longer have that option. Admittedly, the pressures to do so are significantly less in Brasília than in poorer states, but different signs for Governors Roriz and Buarque's administrations reveal the important role of executive constituencies on the legislative arena.⁶⁹

⁶⁹It is further interesting to consider the dynamics of voting behavior and how they interact with executive style and constituencies. Private goods voting is most common in legislative elections and local elections, as discussed above. Gubernatorial and especially Presidential elections tend to be more programmatic though they can still be very personalistic and populist. This creates a situation where a system could have a majority of voters willing to trade their legislative votes for private goods, but casting programmatic votes for President and governor. Consequently, they could elect an executive that would not give legislators access to pork. If legislators cannot deliver private goods, they will have to offer public goods platforms to voters

	-	Model	1		2	
	Coef.	SE	P > z	Coef.	SE	P > z
Rio Grande						
Gov't Party	0.75	0.68	0.27	0.75	0.68	0.27
Elect. Threshold	0.00	0.00	0.41	0.00	0.00	0.41
Ideol. Dist.	0.24	0.54	0.65	0.24	0.54	0.65
Brasília						
Gov't Party	0.07	0.22	0.77	0.39	0.31	0.21
PT Gov't Party				-0.81	0.49	0.10
Elect. Threshold	0.00	0.00	0.51	0.00	0.00	0.48
Ideol. Dist.	-0.54	0.26	0.04	-0.50	0.28	0.08
São Paulo						
Gov't Party	2.11	0.33	0.00	2.11	0.33	0.00
Elect. Threshold	0.00	0.00	0.00	0.00	0.00	0.00
Ideol. Dist.	-0.80	0.26	0.00	-0.80	0.26	0.00
Bahia						
Gov't Party	0.16	0.19	0.40			
Effective Gov't Party				0.33	0.19	0.08
Elect. Threshold	0.00	0.00	0.84	0.00	0.00	0.55

 Table 2.10:
 Conditional Logit Models of Party Affilia

 tions

to seek election. Thus voters' programmatic voting for executive offices could eliminate their supply of private goods in the legislative election market, even if their prices are low.

	Model 1]	Model	2
	Coef.	SE	P > z	Coef.	SE	P > z
Ideol. Dist.	-0.91	0.24	0.00	-0.87	0.24	0.00
Piauí						
Gov't Party	0.89	0.35	0.01	0.89	0.35	0.01
Elect. Threshold	0.00	0.00	0.73	0.00	0.00	0.73
Ideol. Dist.	0.00	0.59	1.00	0.00	0.59	1.00
Log likelihood	-310.18894			-307.5521		
Ν	1748			1748		

Table 2.10: (continued)

2.6 Evidence from the National Congress

I complement my analysis of states by considering the implications of my theory for behavior in the National Congress. I examine indicators of party cohesion and several models of party-switching.

2.6.1 Cohesion in the National Congress

How should voters' preferences affect party cohesion in the National Congress? One way to conceptualize this is by considering the ideal points of legislators from a single party. Legislators with private goods constituencies should engage in bargains with both the President and their governors, as well as responding to political elites and special interests that can help finance campaigns. As legislators from different states and with different special constituencies may face varied pressures on different votes, their estimated ideal points should have substantial variance. Legislators with public goods constituencies should have more pressure to defend a party label and reduce voters' information costs. Consequently, the variance of these deputies should be much smaller.

A simple way to test this is to model legislators' distance from their party mean as a function of their voters' preferences. I use education as a proxy for voters' utility for public or private campaign goods, and use the following model:

$$\sigma = \beta_1 * LowEducation + \epsilon$$

The dependent variable, σ is the logged distance of the legislator from her party's centroid. Taking the log of the distance transform legislators' distance from their party from a variable that is always greater than or equal to zero to a variable ranging from negative to positive infinity. Low Education is percentage of a deputy's constituents with less than four years of formal education. Since deputies are technically elected at-large but practically tend to concentrate their campaigns (and receive votes) in a subset of all municipalities, I merged Census and municipal-electoral data. I then calculated the average percent of adults with less than four years of education across all municipalities where a deputy received votes, weighting by the number of votes she received there. Finally, ϵ is a normally distributed error. My theory predicts a positive slope to low education. The higher constituents' education, the more legislators' should vote with their party. The lower constituents' education, the higher legislators' average distance from their party should be.

As in the other Chapters in this project, I estimated legislators' ideal points using Poole and Rosenthal's WNOMINATE methodology.[130] Since the dependent variable in this analysis is an estimated quantity, this introduces additional variance in the model that can be problematic (see [97]). As discussed more fully in Chapter 4 and in [97], using a robust standard error estimator solves this problem in most situations.

Table 2.11 shows the results for four models; two from the 49th Chamber of Deputies, and two from the 50th. For each legislature, I estimated both a simple model and a model that includes party fixed-effects. The fixed-effects model allows each party to have a different level of cohesion, and tests only for within-party differences in party dispersion.

The results support my argument. In every case, the coefficient on Low Education is positive. Deputies with larger low-education constituents are, on average, farther from their party's centroid. I argued that these deputies' constituents place higher values on private and local public goods and are less concerned with party labels. Deputies with highly educated constituencies stay closer to their party's center.

The results are significant for the simple model without party effects (.10 level for the 49th legislature and .001 level for the 50th). None of the results are significant when party-level effects are included. This implies that much of the variance in party dispersion is a function of cross-party differences. Such a finding does not weaken my argument. Legislators with more educated constituencies should self-select into more cohesive parties with well-defined labels; legislators with less-educated constituencies should self-select into less disciplined parties where they will have room to negotiate with other actors for goods for their constituents.

	Bas	sic Mod	el	With	Party				
	Coef.	SE		Coef.	SE				
49th Congress									
Low Education	95	(.57)	*	.70	(.58)				
Constant	-5.93	(.30)	***	-8.54	(.13)	***			
R2	.01			.15					
n	500			500					
50th Congress									
Low Education	1.57	(.47)	***	.41	(.45)				
Constant	-5.34	(.26)	***	-5.53	(.41)	***			
R2	.01			.19					
n	775			775					
* .10, ** .05, *** .01									

 Table 2.11: Constituents' Preferences and Party Dispersion

2.6.2 Party-Switching in the Chamber of Deputies

My theory also offers predictions regarding party switching in the Chamber of Deputies. Legislators with public goods constituents should face higher costs than legislators with private goods constituents. Further, legislators' priorities in their affiliation decisions should vary with voters' preferences. Deputies with public goods constituencies should place more weight on ideological and cohesion concerns. Deputies with private goods constituencies should be more concerned with their access to deliverable private or local public goods.

I test for these patterns with a time-series cross-sectional model of party switching:

The dependent variable is an indicator coded "1" if deputy i switched party during period t and coded "0" if she did not switch party during that period. The model controls for a series of career variables, discussed in my previous work. See [48] for more details.

The key variables for the current test are low education and its interaction with ideological distance and coalition membership. My theory makes predictions for each of these. First, education should have an impact on switching. Party switchers will lose credibility among higher-education constituents that tend to prefer public goods. In contrast, private goods voters should not be concerned with party membership. Consequently, deputies with more educated constituencies should be less likely to switch and deputies with less educated constituencies should be more likely to switch, all other things equal.

Second, the interaction of education and president's coalition should have an impact on switching. One motive for switching is to seek access to private goods. Deputies in the President's coalition already have said access and have less reason to switch. Deputies outside the coalition may feel pressure to switch in search of private goods for constituents. They may find these goods by switching into a party in the presidential coalition or by switching as part of a bargain with a state-level party or other actors. These pressure, however, should vary with constituents' preferences. Specifically, these pressure should be strongest for deputies with private goods voters and weakest for deputies with public goods voters.

Third, the interaction of education and ideological distance should have an impact on switching. Deputies that have public goods constituencies may need to switch party if their behavior is inconsistent with their party's platform. In contrast, legislators with private goods constituencies should fewer concerns about their party label and any ideological differences with their party.

This model solves the problems discussed above with state party switching. I noted that the payoffs for switching party could vary greatly across states. In particular, random political shocks could have dramatic impacts on the observed outcomes. But since all the federal deputies are in the same national system, they should all respond to national level shocks and incentives for switching. Hence switching rates for deputies with public goods and private goods constituencies can be compared and tested.

Table 2.12 shows two models of party switching in the Chamber of Deputies. As discussed elsewhere, the main general findings are that experienced deputies and deputies holding leadership positions are less likely to switch than less senior members of the legislature. Switching frequency increases significantly around the filing deadlines for municipal and federal elections, and falls off significantly during the electoral campaigns for these offices. Finally, the coefficient on PRN is positive and significant, reflecting the mass abandonment of that party after President Collor's impeachment, since the PRN was in many ways Collor's personal election vehicle.

The more important question, however, is the impact of voters' preferences on legislators' behavior. Model one shows a strong and significant impact of education on party switching. Deputies with many low education constituents are significantly more likely to switch than deputies with more educated voting bases. This finding offers support for my theory. There should be lower costs to switchers with private goods constituencies because their voters are not concerned with party labels. There should be higher costs to switching for deputies with public goods constituencies that use party labels as informational tools.

The models also include a variable for Presidential coalition. The estimated coefficient is negative and significant in both models. Deputies outside the President's coalition are more likely to switch, either in to the coalition or into another party in an effort to seek goods for constituents. Deputies already in the President's coalition have weaker motives for switching party; hence the negative coefficient.

I interacted the coalition variable with the low education variable. This variable has a negative and significant estimated coefficient in both models. All deputies in the President's coalition are less likely to switch party. And as predicted, deputies with less educated constituencies are more likely to stay with the President to ensure their access to pork and patronage. These deputies' constituents prefer private and local public goods, and staying in the government's coalition is the best strategy for addressing voters' preferences.

Model 2 includes variables for deputies' spatial distance from their parties. When controlling for distance from party mean, the results from Model one hold. Further, the raw distance variable is significant and positive. Deputies that are far from their party's centroid are more likely to switch than those that are close to the party center. The ideological-low education has a negative estimated coefficient, indicating that ideological distance matters less as education levels fall, but the estimate is not significantly different from zero. The lack of significance may suggest that all deputies have some ideological concerns; it might also simply mean that deputies with public goods' constituencies are already close to their party centroids.

Model 1 Model 2 Education and Interactions *** *** Low Educ. (0.18)1.00(0.25)1.07Pres. Coalition *** (0.29)*** -1.38(0.23)-0.97*** Low Ed.*Pres -0.89(0.28)-0.73(0.34)** Ideol. Dist ** 3.16(1.33)Low Ed.*Ideol Dist -0.85(1.59)Controls *** * Incumbent -0.13(0.05)-0.10(0.06)*** Com. Leader -0.35(0.13)-0.21(0.14)

Table 2.12: Party-Switching and Voters' Preferences,Chamber of Deputies 1991-1998

	I	Model 1		Model 2			
Party Leader	-0.16	(0.13)		-0.25	(0.16)		
PRN	1.49	(0.20)	***	1.63	(0.23)	***	
Party Coes.				12.18	(2.58)	***	
Local Deadline	1.03	(0.22)	***	0.58	(0.28)	*	
Fed. Deadline	1.17	(0.20)	***	1.02	(0.25)	***	
Local Campaign	-1.40	(0.28)	***	-1.68	(0.38)	***	
Fed. Campaign	-0.50	(0.22)	**	-0.69	(0.27)	**	
Rank				0.06	(0.04)		
Constant	-3.44	(0.21)	***	-4.45	(0.30)	***	

Table 2.12: (continued)

2.7 Summary of Findings

This chapter offers several contributions to the study of legislative politics and parties, both in Brazil and more broadly. The research design, the first comparison of five state assemblies, offers a powerful test for the impact of societal variables on legislative behavior. The states share identical and exogenous formal institutions - the same electoral system, internal rules, and balance of legislative and executive power. The states differ, however, most dramatically in their indices of development and political histories. Consequently, differences observed in legislative parties and politics across the states can be confidently attributed to societal - not institutional - variables.

I proposed and tested a model of legislative parties based on the nature of campaigns and voting behavior. I argued that where politics is based primarily on the exchange of private goods for votes, we should observe weak or nonexistent political parties, and executive domination of the legislative branch. Politicians in such settings should focus on delivering private goods regardless of their parties' positions. Where politics is based primarily on the exchange of public goods for votes, we should observe more disciplined parties as politicians seek to advance legislative agendas and develop policy credibility. Further, the executive will have greatly reduced influence over legislators in such an environment.

I tested the model through a comparative examination of Brazilian state legislative behavior, including the first look at state legislative roll-call votes and party switching. I supplemented the states' quantitative data with extensive interviews and observations, and validated the results with additional tests from the Brazilian National Congress. The results suggest two central findings.

First, the basic outlines of my theory were confirmed by the roll-call votes analysis. In states where private good exchanges predominate, the legislative branches have largely ceded all policy and law-making responsibility to the executive branch. In exchange, legislators gain access to the goods that their constituents demand, both purely private goods and local public goods. Part of the price of this bargain is weak or meaningless political parties in the legislature. Executive dominance was reflected in the frequency of roll-call votes, the low cohesion levels of opposition parties and high cohesion levels for government parties, and numerous anecdotes and observations.

In states with a greater emphasis on public goods campaigns, the legislature acted more independently as legislators sought to deliver the public goods that their constituents demanded. The opposition parties were generally as cohesive or more cohesive than the government parties. The legislature sometimes challenged and occasionally defeated the executive branch. The results were significant and robust across several measures, even though two key states (Bahia and Piauí) had very few roll-call votes.

The results may be weakened because of the lack of variance in cross-state differences. The states do have substantially different demographic profiles. But there is poverty in all states, and there is evidence that segments of the electorate in each of the states I investigated are interested in private or local public goods. The fact that my results are significant in spite of this limitation further strengthens my argument.

This study has several additional limitations. Infrequent roll-call votes in Bahia and Piauí challenge the robustness of cross-state cohesion comparisons. The lack of votes, however, is consistent with the mechanisms I described.

My analysis of state-level party switching did not confirm my hypothesis. I suggested that this inconsistency might reflect different payoffs and reasons for party-switching, and that my sample of five states was too small to capture these differences. To further test my argument, I examined roll-call votes and partyswitching in the National Chamber of Deputies.

In several examinations of roll-call votes and party dispersion, I found a pos-

itive relationship between low education and party dispersion, as predicted. A deputy with less educated constituents is likely to be further from his party's mean; a deputy with more educated constituents is likely to be closer to her party's mean. This finding suggests that parties act as informational tools - effectively policy labels or brand names - for voters with stronger preferences for public goods. Where voters' place relatively higher values on private goods, deputies' distance from their party center is less important.

A model of national-level party-switching also supported my theoretical argument. Unlike the state level analysis, the national arena ensures that most random political shocks will affect all deputies equally, and the large sample size (over 500 deputies per term) helps average out any confounding state level factors.

Patterns of national party-switching showed the influence of voters' education levels on deputies' behavior. Legislators with more educated constituents were significantly less likely to switch party. Further, constituents' education also interacted with coalition membership. Deputies with less-educated constituencies were more likely to switch if they were in the opposition and significantly less likely to switch party if they were already in the President's coalition.

My analysis also showed how voters' preferences are not simply about income and education levels, but can be tied to other social characteristics. In particular, Rio Grande do Sul is neither the wealthiest or most educated state, but I argued that enduring cleavages and political culture created during the state civil war of the 1890's strengthens current-day political parties. Rio Grande has relatively cohesive government and opposition parties and very infrequent party-switching.

These findings make several contributions to Brazilian politics and legislative politics more generally. Specifically, this project suggests some revisions to purely institutional explanations for political behavior. In particular, Brazil's electoral system has been heavily blamed for producing an "inchoate" party system. My analysis, however, suggests that this particular set of institutional rules need not deterministically lead to feckless democracy. The differences observed across states point to an important role for noninstitutional variables.

More broadly, these results offer a challenge to any study that focuses exclusively on institutions to explain political phenomenon. The institutional arrangements in these states are as close to a natural experiment as we should observe anywhere, and were mostly exogenously imposed. The diverse outcomes observed, some attributable to voting behavior and campaign styles, and others attributable to historical paths, offer an important challenge to institutional studies. The differences show that institutional theories are clearly incomplete without incorporating electorate and societal variables, and show that these variables can have very powerful impacts on the political arena. These societal variables may prove even more influential than institutional rules.

This chapter shows a need for incorporating societal variables into rational choice models, but leaves many unanswered questions. In particular, I would like to discuss the question of institutional interactions, why they cannot be fully tested here, and suggest some approaches for addressing them.

Do the same institutions work differently in different societal settings? Or, like gravity, do they inevitably pull in the same direction regardless of the electorate's characteristics? In the context of my study, one might ask if single member districts (SMD) might increase party cohesion in Bahia, for example, and decrease it in Rio Grande do Sul - or if SMD would exert the same pressure and behavioral incentives in both settings.

Unfortunately, this also cannot be well-studied in the Brazilian context. The states all share identical institutions - this is the strength of this study. But it also

means I cannot build any sort of interactive test to explore how institutions and societal variables interact. This question may be among the most pressing. Mixed electoral systems that combine district and at-large proportional representation are in fashion, but if there are institutional-societal interactions, treating mixed systems as one stop turn-key solutions to all countries' political problems is clearly inappropriate and may risk serious negative consequences.