Shaping the Brazilian Political Class: 
Causes and Consequences of Recruitment to the Chamber of Deputies

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Who becomes a federal deputy in Brazil, under what conditions, and does the process of political recruitment actually matter to the Chamber of Deputies? In fusing these disparate questions, this paper pursues three central objectives. The first objective is to provide a critical review of the burgeoning literature on recruitment to the legislative branch in Brazil. The second is to propose some intervening variables that clearly shape political recruitment yet that have been underutilized in the extant literature. Our third goal is to discover whether these proposed variables have any discernible impact on patterns of legislative behavior in the Chamber.

Thus, our second and third objectives in this paper take the form of potential correctives to the established literature. Specifically, we argue that omitted variables in the study of political recruitment have led us to ignore systematic biases in the process. Recruitment is nonrandom, and certain factors shape the probability distribution of admission to the political class. We focus on three such factors: partisan effects, social-structural effects, and malapportionment. We then go on to argue that if such variables are indeed important, then they should have palpable effects in the day-to-day business of the Chamber of Deputies. We hypothesize that legislators recruited from constituencies with low levels of human development will be less legislatively productive, and that deputies recruited to politics by conservative, catch-all parties will be less active in the Chamber than those drawn from left-wing parties. In testing these hypotheses, we attempt to redress the descriptive bias
of much of the literature on political recruitment. Additionally, we begin to cast recruitment as an independent rather than a dependent variable.

The paper proceeds in four major sections. In the first, we review the existing literature on legislative recruitment in Brazil. In the second section, we pose the three intervening variables that we argue deserve increased attention in the study of recruitment. In the third section, we engage in hypothesis testing involving these variables. The final section presents our conclusions.

What Do We Know About Legislative Recruitment in Brazil?

In this section we review the already considerable literature on recruitment to the legislative branch in Brazil. We focus on four themes that have undergirded this literature: the effects of democratization, the effects of the electoral system, the social and demographic characteristics of deputies, and career paths.

Regime change and democratization. Given that Brazil has had three distinct political regimes since 1945, it is not surprising that regime type has emerged as an important independent variable explaining political recruitment. Several important studies allow us to draw some conclusions about political recruitment in the 1946-1964 democracy, the 1964-1985 military regime, and the post-1985 democracy.

Nunes (1978) studied the impact of the 1964-1985 military regime on the types of individuals who became federal deputies between 1946 and 1977. His analysis shows that under military rule, the proportion of deputies with previous political experience decreased by half, whereas there was a substantial increase in deputies with a technocratic background. Nunes’ analysis is entirely consistent with O’Donnell’s (1973) characterization of bureaucratic-authoritarian regimes in the South America of the 1960s and 1970s. Although the Brazilian military regime differed from its Southern Cone counterparts in permitting
regular (albeit controlled) elections and a functioning (albeit emasculated) legislature, it shared with these regimes an innate distrust for professional politicians and marginalized them wherever possible (Fleischer 1984; Kinzo 1988).

This deprofessionalizing trend was troubling to authors such as Marenco (1997), who argues that the length of pre-Congressional political careers is a good overall indicator of the consolidation of a political class. Deputies with legislative experience should increase the level of institutionalization of the Chamber of Deputies, whereas a high level of political novices should weaken Congress. Examining congressional biographies in the post-1985 democracy, Marenco finds a decline in the proportion of *políticos* who reach the Chamber after a substantial political career. In the previous democratic period (1946-1964), 30.4% of deputies could claim such a background, whereas after the resumption of democracy in 1985, only 21.8% fit the same profile. Meanwhile, individuals with less than 4 years of political experience (whom Marenco terms “outsiders”) have increased their presence in the Chamber. Adding together deputies with no previous political posts and those with experience only at the municipal, the author shows that roughly 60% of federal deputies “subverted” the traditional career ladder, in which state-level politics constituted an important intermediate step between the local and national political spheres.

Several scholars have argued that the experience of the military regime, in which politicians were forced into a two-party system against their will and were forced to observe strict party discipline, contributed to the diffusion of anti-party attitudes among Brazilian political elites (Lamounier and Meneguello 1986; Mainwaring 1999; Power 2000). Marenco’s (1997) analysis of the post-1985 political class lends support to this thesis. While in the 1946-1964 democracy, party switching was not the norm (the highest rate reached was in 1958, when 11.8% of deputies changed parties), in the current democracy we see that the
rate of party defection has doubled. Of the federal deputies serving in 1995, ten years after the most recent transition to democracy, roughly half had been members of their parties for less than 4 years. Marenco concludes that federal legislators in the “New Republic” are less experienced políticos with fewer partisan loyalties than their counterparts from the first postwar democracy.

Comparing federal deputies in the 1946-1964 democracy and the post-1985 democracy, Santos (2003) finds that the social origins of members of Congress have remained largely stable over time. The major change produced by the authoritarian interregnum does not pertain to recruitment of legislators (i.e., the characteristics of individuals who are elected to Congress) but rather to the retention of legislators (i.e., the characteristics of politicians who opt to stay in the Chamber of Deputies and make a career out of legislative life). Careerist deputies in the 1946-64 period were more generally more experienced, having held electoral positions in the executive branch. In the New Republic, however, experienced politicians tend to abandon the Chamber more quickly. This may be a result of the significant reduction in the decision-making power of the legislative branch in the military years and the maintenance of a strong role for the executive branch in the 1988 Constitution (Baaklini 1992).

The electoral system. A second concern in the study of Brazilian political recruitment has been electoral rules. In any political system, electoral rules will partly determine what kinds of individuals are recruited into political life, but the Brazilian electoral system has particularly noteworthy effects. Brazil conducts legislative elections to the Chamber of Deputies under open-list proportional representation (OLPR). Voters may vote for a party label, but routinely about 90% vote nominally instead. After the election, the votes won by all

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2 In this regard, senators are significantly different from federal deputies: many senators tend to be former governors, and there is routine migration between governorships and the Senate. Santos finds that the participation of senators in ministerial positions has doubled when compared to the 1946-1964 democratic period.
the candidates of each party, plus the much smaller *voto de legenda* (votes for the party) are summed, and the D’Hondt method determines how many seats each party receives in the Chamber. Each party's candidates are then ranked according to their individual vote totals. Therefore, in the absence of a closed or blocked list, party authority over individual candidates is severely diminished. Moreover, electoral competition is often fratricidal, with candidates competing as much with members of their own party as with candidates from other parties (Mainwaring 1991).

Other countries, including Finland and pre-1973 Chile, utilized OLPR systems, but Brazil's version differs significantly. In elections for the Chamber of Deputies, each of Brazil’s 27 states is an at-large, multi-member district with between 8 and 70 seats (for district magnitudes, see Table 1). Lightly populated states, mostly in the North and Center-West, are overrepresented; heavily populated states have too few seats (Bohn 2006). Malapportionment is so severe that Roraima has one deputy per 30,000 voters, while São Paulo has one deputy per 400,000 voters. State parties, not national parties, select legislative candidates, and the states are important political arenas in themselves (Abrucio 1998; Samuels and Abrucio 2000).

In discussing the Brazilian variant of OLPR, Nicolau (2006) acknowledges the paucity of knowledge regarding how candidate selection works. No party undertakes primary elections to select candidates for legislative elections. Formally, candidates for federal deputy are nominated at the state-level party conventions held in June, about four months prior to the general election. However, it is well known that these conventions serve only to ratify candidate list decisions that are made well in advance. Although these internal party processes remain largely unclear to researchers, Nicolau hypothesizes that parties take into account two factors when organizing their electoral lists. First, party elites weigh the geographical diversity of congressional hopefuls, in an attempt to avoid the
overconcentration of candidates in some areas. Second, parties aim to select individuals linked to specific social groups, such as union bosses, professional and business leaders, social activists, religious figures, etc. In this way, they opt for individuals who already possess a “natural” constituency.³

Braga (2006) contests the thesis of Mainwaring (1991) that the electoral system necessarily weakens party authority over candidates. However, Nicolau’s recent work shows that 22% of incumbent deputies seeking reelection in Brazil are defeated by names on their own party list rather than by candidates from rival parties, and Melo’s (2004) research shows that a comparable percentage of the victors can be expected to change parties in the first year of the quadrennial legislature. These findings suggest that the allocation of candidacies is not very well coordinated. The analysis of Samuels (forthcoming) suggests that part of the problem may lie in the frequent practice of self-recruitment. Candidate self-selection results from the combination of a decentralized nominating process with permissive electoral rules. Parties can run between 1.5 and 2.5 candidates per available seat (depending on the district magnitude and number of coalition members), which makes spots on candidate rolls abundant. Since the seats are apportioned by the total vote share the party list or individual party candidates receive, parties routinely present a high number of candidates.⁴ Recall that for the federal Chamber of Deputies, the lowest district magnitude is 8 and the highest is 70,

³ Alvares’ (2004) study of women's political participation in the state of Pará gathers some evidence that support Nicolau’s conjectures. According to a PT leader in that state, the party takes into account three factors when selecting nominees: the geographical base of each prospective candidate, the political characteristics of these areas, and the representation of the party’s internal factions. The objective is to “guarantee that the names of the candidates match the demands of the electoral market.”

⁴ In a study of candidate selection in São Paulo, Braga (2006) questions the conventional wisdom that the electoral system should generate an oversupply of candidates. She makes a valuable contribution by showing that none of the four major parties in the state fills its quota of candidates. However, we are cautious about using the aggregate number of nominations as an indicator of party strength vis-à-vis candidates—first, because the number of slots available is very high in comparative perspective, and second, because the use of such an indicator implies that inter-election change in the supply of candidates is equivalent to change in the power relationships between the "selectorate" and congressional hopefuls. For example, from 2002 to 2006, the total number of candidates for deputy in Brazil rose from 4297 to 5529 with no accompanying change in district magnitudes—and if the number of candidates is taken as an inverse measure of party authority over aspirants, then it implies that parties are about 25% weaker in 2006 than they were in 2002, an assumption that we do not find plausible.
so this results in thousands of candidacies in the OLPR elections. In 2006 alone, 5,529 candidates ran for the 513 seats in the Chamber (Table 1). Thus, although we still know little about the details of the nominating process within most parties, we can say with some certainty that the selection process is generally fluid and permissive, and that self-recruitment is common.5

Social origins and demographic characteristics of deputies. A third area of research on recruitment has focused on the social backgrounds and occupational characteristics of politicians. In Brazil during the 1970s, there was a wave of descriptive studies examining the social origins of federal deputies, several of which focused on patterns of recruitment in the 1946-1964 democracy (Leopoldi 1973; Nunes 1978; Fleischer 1981). These studies are ably reviewed by Santos (1999), so here we will focus on contemporary patterns in the 1990s and beyond.

The most important recent studies of social backgrounds of federal deputies have been conducted by Rodrigues (2002) and Miguel (2003). Rodrigues identifies four main occupational groups in the Chamber of Deputies: firm owners, professionals, senior bureaucrats, and educators. These groups are not distributed equally across parties. Generalizing broadly, within right-wing parties there is a concentration of business persons, professionals, and bureaucrats. Centrist parties are dominated by professional white-collar occupations but with a lower presence of business owners. On the left end of the spectrum, there is a decline in the proportion of business people, professionals, and bureaucrats. What is more, left-wing parties have the highest proportion of teachers, reaching 30% of all leftist deputies (Rodrigues 2002).

Both Rodrigues and Miguel draw attention to the role of media related backgrounds (journalists, radio broadcasters, and television personalities). Miguel (2003) finds that in the

5 Leopoldi’s pioneering (1973) study on candidate selection in the state of Rio de Janeiro already emphasized that individuals willing to run for legislative office could comfortably be accommodated on the electoral list. Her interviews showed that the decision to enter the contest did not face resistance from party leaders.
late 1990s, some 6% of all federal deputies fell into this occupational category. Of deputies with no prior political experience before arriving in Congress, the percentage of media personalities rises to an astonishing 15%. According to Miguel, the public exposure these individuals receive because of their media related occupations allows them simply to bypass the lower level political positions. In an interesting argument linking occupational backgrounds to the OLPR electoral system discussed above, the author claims that the political capital of media personalities is best suited to proportional elections (e.g., the federal Chamber and state assemblies) rather than to majoritarian contests (e.g., for governorships, mayoralities, and the federal Senate), wherein media personalities have tended to fare quite poorly. The party structure and political capital required for first-past-the-post races makes their bids for executive branch positions less likely to succeed (Miguel 2003).

These recent studies have also examined the income, education, and religious affiliations of deputies. On income, the findings of Rodrigues are quite intuitive: deputies in right-wing parties are wealthier than those in left-leaning ones. The Workers’ Party (PT), for instance, did not have a single deputy among those in the highest income bracket, while over 50% of deputies in centrist and rightist parties are drawn from this category. With regards to educational levels, the majority of Brazilian deputies (82%) possess a university degree, while most legislators with postgraduate education are found in the centrist and leftist parties. An interesting pattern emerges in the PT. The party was born in 1979-1980 of an unusual alliance between workers and intellectuals, and echoes of that founding partnership can still be detected today: the PT has both the highest percentage of deputies with postgraduate education (14%) and the highest percentage of deputies without a high school degree (9%). As for religious backgrounds, although Protestants make up about 11-12% of federal deputies (roughly equivalent to their proportion in the population at large), there were eight times more Protestant ministers than Catholic priests elected to the Chamber.
Other studies of recruitment have examined issues of race and gender, with the major theme being the severe underrepresentation of minorities within the Brazilian political class. Johnson’s (1998) research focuses on the participation of Afro-descendants in the Brazilian Congress, and his study claims that both descriptive and substantive representation of the black population is minimal. The percentage of black deputies has barely increased since the end of the military regime (0.84% in the 1983-87 Congress, with a non-linear increase to 2.92% in the 1995-98 Congress), whereas approximately 45% of the Brazilian population is Afro-descendent. At the substantive level, Johnson argues that most of these representatives have rarely addressed racial issues and policies when in office. With regard to the representation of women, the findings have been broadly similar. In the 2003-2007 legislature, only 44 of the 513 federal deputies (8.6%) are women, despite a 1997 law that requires parties to award at least 30% of their candidacies to each gender. Resonating some of the concerns presented by Johnson regarding black politicians, Tabak (2002) emphasizes that few female deputies address the defense of women’s rights. This lack of engagement is due to the fact that few female candidates run on gender issues platforms; instead, most of them are elected due to their families’ political prestige. A recent attitudinal study Htun and Power (2006) supports this idea, finding that left-wing partisanship is a better predictor of gender progressivism than is sex.

These recent studies give us some insights as to the social composition of the major political parties in Brazil. Rodrigues and Miguel take care to avoid strong claims of sociological determinism, but (following an underlying assumption in much of the literature on political recruitment) the social classes represented in each party delegation are expected to provide clues to the type of representation they provide. The findings of Johnson and

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6 Araujo (2006) discusses the ineffectiveness of this law. The number of female candidacies has indeed increased, although never meeting the official requirement. However, since the electoral system in Brazil does not provide for a party ranking of candidacies, the increase in the number of women on party lists has not been followed by an substantial increase in the number of women elected. The law does not require that these candidates be electorally competitive.
underrepresented minorities do not seem to benefit from what little descriptive representation they have.

Ambition and career paths. A fourth and final stream of research that we review here has been the career trajectories of politicians. While career paths are conceptually distinct from political recruitment—the latter typically examines entry into political life, while the former describes strategic choices of already-established, practicing politicians—this distinction has frequently been relaxed in much of the literature.

The literature on career paths asks an important question: what do politicians want? Do they tend toward static ambition (seeking the same office again and again, like members of the U.S. House of Representatives) or progressive ambition (seeking to climb the perceived political ladder)? The most important study of political ambition in Brazil is that of Samuels (2003), who argues that federal deputies do not see a position in the Chamber as their most important career goal. He points out that 40% of all deputies take leaves of absence during their term in office, usually to take positions in the executive branch both at the national and subnational levels. In addition, he shows that there a substantial rate of turnover in the Chamber, as around 50% of deputies are replaced at each election. Because Brazilian politicians prefer to be executives rather than legislators, progressive ambition drives politicians out of the Chamber, which in turn further contributes to the low level of institutionalization within the assembly.7

Recent work by Pereira and Rennó (2001, 2003, 2006) reverses the perspective of Samuels, asking why deputies attempt reelection in Brazil when the Chamber has traditionally seen as an unappealing career choice for ambitious politicians. The authors are

7 Miguel (2003) agrees with Samuels that there is a hierarchy of prestige associated with elective offices. Majoritarian (executive) posts are more prestigious than proportional (legislative) posts, and federal offices are more prestigious than municipal ones (state-level posts occupy an intermediate position). However, Miguel’s data on career trajectories suggest that politicians follow a zig-zag path between these different levels, as opposed to the notion that politicians choose always to run for an office of higher prestige or, at least, to remain at the same level. In this sense, Miguel contextualizes Samuels’ argument about progressive ambition.
unconvinced that the real goal of deputies is to hold office in the executive. Pereira and Rennó claim that deputies who leave the Chamber for positions in the executive branch do so for short periods of time: 90% of deputies spend 90% of their terms in the Chamber. Permanent positions in the federal bureaucracy, they argue, cannot be seen as a career option since these are dependent on political appointments by the executive branch. The authors further detect a recent decline in the percentage of deputies who opt to run for mayor in the mid-term municipal elections, suggesting an incipient professionalization of Congress. Under democracy, up to 25% of sitting deputies have sought municipal office halfway through their legislative terms, and this percentage fell to 18% (94 mayoral candidates among 513 deputies) in 2004. However, this number is still remarkably high, suggesting support for Samuels’ thesis of progressive ambition. Moreover, the recent decline may be due to the fact that since 1998, Brazilian mayors have been allowed to seek reelection — thus thwarting the progressive ambition of some sitting legislators, and artificially inflating the number of deputies who seek reelection to Congress.8

Summing up the extant literature. This brief review of recent literature on political recruitment can be summarized as follows. Post-1985 democracy in Brazil features a reactive legislature increasingly colonized by outsider politicians, many of whom have weak loyalties to their political parties.9 Candidate selection is characterized by low party viscosity and frequent self-recruitment: the intraparty coordination of candidacies is generally poor, leading to unpredictability of electoral results. The majority of candidates winning election to the Chamber of Deputies tend to be firm owners, professionals, senior bureaucrats, and

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8 Another important factor here is the internal structure of Congress: deputies who acquire a key internal position such as a committee chairmanship or rapporteurship are much likelier to run for reelection (Leoni et al. 2003; Rennó and Santos 2004). Deputies selected for these key chairmanships tend to be party loyalists (Müller 2005).

9 In a comparative study of legislative recruitment in Brazil, Chile, and Uruguay, Marenco and Serna (2006) show that when compared to their Chilean and Uruguayan counterparts, Brazilian federal deputies are likely to have joined their first political party at a more advanced age, have belonged to a larger number of parties, and to have spent the least amount of career time in their current party.
educators, with a significant presence of media personalities and Pentecostal religious leaders as well. Women and blacks have minimal representation in Congress, despite attempts to make the political class more inclusionary. There is strong evidence of progressive ambition among elected deputies, with negative implications for legislative institutionalization and professionalization. Overall, democracy has been accompanied by a free and open recruitment process, but the benefits of this (easier access of aspiring politicians to the national legislature) are often offset by the costs (a declining role for institutional and partisan influences in the recruitment process). As Marenco (2000) wryly put it in his influential study, “they just don’t make oligarchies like they used to.”

Underutilized Variables in the Study of Brazilian Legislative Recruitment

As we have seen, the literature on legislative recruitment in Brazil is already quite substantial and has offered some valuable insights. However, by privileging discrete and competing dimensions of recruitment such as social backgrounds, race and gender, or career paths, it has so far avoided a holistic assessment of how the political class is produced and reproduced. Such an assessment can only be achieved by elevating some other critical variables into the spotlight and by examining how they work together to forge the universe of legislators. In the remainder of this essay we focus on three such variables: party structure, defined as the critical distinction between catch-all and left-wing parties (Mainwaring 1999); social structure, defined as the remarkable regional diversity of Brazil’s subnational units (Soares 1967, Cintra 1979); and malapportionment, which reinforces the preceding two variables by inflating the number of legislators drawn from conservative parties and from the least developed areas of the country (Nicolau 1997). We then illustrate how the joint effects of these three variables influence the productivity of the Chamber of Deputies.
Mainwaring’s (1999) study of the party system finds crucial differences between the political left, which tends to be organized into centralized, ideological parties, and the center and right, which favors the decentralized, catch-all party model. Politicians in catch-all parties believe that their electoral success rests more on their individual efforts than on the party label. In addition, the internal heterogeneity of catch-all parties blurs the importance of party labels. Parties play an insignificant role in campaigns: candidates have to run on their own. In catch-all parties, financing campaigns depends on individual candidates. Given the free-agent style of campaigning, candidates present little allegiance to the party once they are elected. Party switching is rampant, and party organizations are so weak that they all but vanish in the period between elections (Mainwaring 1999: 162-5).

Mainwaring goes on to argue that leftist parties behave quite differently. First, politicians in left-wing organizations see the party label as more important than their personal efforts in the campaign. In stark contrast to catch-all parties, left parties have been able to mobilize grassroots groups to keep the party organization running between elections. These organizations are more cohesive and therefore voters attach more value to the party label. Donations traditionally are channeled through the party rather than through individual candidates. Obviously, these features strengthen the party to the detriment of the personalism that characterizes catch-all organizations, and may also deter (though they clearly do not eliminate) clientelistic and patrimonial behaviors in Congress. Studies by Hagopian (1996), Power (2000), and Mainwaring, Meneguello, and Power (2000) have all suggested that these traditional political practices are more pronounced on the political right. The implication is that it should matter a great deal whether a randomly selected individual is recruited into legislative politics by a party of the ideological left or the catch-all right.
The effects of uneven development on recruitment. If looking at differences across parties is one useful way to examine political recruitment, another is to look at differences across states. An enduring theme in the study of Brazilian politics has been the contrast between the states of the South and Southeast, on the one hand, and those of the North, Northeast, and Center-South, on the other (Soares 1967). The former group is more economically advanced, has higher levels of human development, has a more differentiated and dynamic civil society, and features higher levels of political participation and contestation. The latter group tends toward the opposite pole on all of these variables, and tends to be characterized by higher levels of clientelism, patrimonialism, and personalism. We agree with Soares and Lourenço (2004) that such characterizations can easily be oversimplified, and here we treat them for what they are: generalizations. We do not claim that there are pure examples of “modern” and “archaic” states in Brazil. However, we do observe that there is an empirically verifiable relationship between human development and levels of political competitiveness, as Figure 1 demonstrates.

[HAGOPIAN (1996)]

Hagopian (1996) describes “traditional politics” as characterized by clientelistic bargains, corruption, personalism, and regionalism in Brazil. She stresses that traditional politics is nondemocratic given power is concentrated in the hands of a few, access to decision making is restricted, channels of political representation are hierarchically arranged, and political competition is strictly regulated. In her study, she notes that there has often been major continuity in regional elites from the military period throughout the democratic regime. In traditional politics systems, political parties are weak; they are merely instruments of oligarchical power. Moreover, civil society is far less organized in the states with lower levels of economic development. In the (relative) absence of either strong political parties or strong
accountability mechanisms emanating from civil society, political recruitment is likely to take the form of either oligarchical designation or direct self-representation.

One could argue that traditional politics has a foothold in *all* Brazilian states. However, there are clearly some states that tend toward oligarchy rather than political pluralism. There might be opposition groups in electoral contests, but politics revolves around loyalties to the dominant clan. A classic example of a system like this would be Bahia (BA), where politics is organized either for or against the family machine of Antônio Carlos Magalhães. The same pivotal role is played by the Sarney family in Maranhão (MA) politics, or the Siqueira Campos clan in Tocantins (TO). In Figure 1, these three states are all clustered in the lower-left quadrant of the graph, where both political competitiveness and human development are low. In contrast, the most polyarchic states tend to be those with the highest levels of human development, as is the case with Rio de Janeiro (RJ), São Paulo (SP), Santa Catarina (SC), Rio Grande do Sul (RS), and the Federal District (DF). These states are found in the upper-right quadrant of Figure 1, and they are the same five states that make up the “High HDI” column in Table 2.

[TABLE 2 HERE]

The Human Development Index is a composite measure of income, literacy, and life expectancy. It is a valid indicator of socioeconomic modernization, and we also take it as an excellent proxy for the density of civil society. The implication for legislative recruitment is that politicians from high-HDI regions will have greater incentives to professionalize as legislators, whereas politicians from low-HDI regions — far less constrained by civil society and much more likely to serve as proxies for local oligarchs and/or to engage in direct self-representation — will have weaker incentives to do so. Again, this is a general proposition: we do not claim that any relationship between HDI and legislator behavior is mechanical, but rather probabilistic.
The effects of malapportionment on recruitment. The third variable we wish to introduce is malapportionment of legislative seats. While the distinction between catch-all and leftist parties is an ideological factor in recruitment, and the distinction between low- and high-HDI constituencies is a sociological variable, malapportionment is purely an institutional factor. Simply put, the distribution of seats in the Chamber of Deputies favors less developed states and punishes the more economically advanced states, particularly São Paulo (Nicolau 1997; Soares and Lourenço 2004; Bohn 2006). Because the constitutional floor for district magnitude is 8, the sparsely populated states of the North and Center-West are overrepresented in the Chamber; and because the ceiling for district magnitude is 70, São Paulo has roughly 42 fewer seats than it would have under a perfectly proportional distribution. Does this matter to the formation of a national political class?

Table 2 shows that it does. Using data from the 51st Legislature (1999-2003), we divide the 513 members of the Chamber into three groups of roughly equal size based on levels of state human development. Overrepresented states are significantly more likely to send members of conservative, catch-all parties to Congress, whereas underrepresented and accurately represented states are more likely to elect members of ideological leftist parties. In fact, the five high-HDI states, which together are underrepresented by 37 seats in the Chamber, are twice as likely to elect leftist members as the twelve low-HDI states, which jointly are overrepresented by 12 seats in the Chamber. The table suggests that malapportionment does not have random effects: rather, it imparts a systematic bias to the formation of the political class in Brasília. By ensuring the overrepresentation of conservative, catch-all parties and of smaller, less economically developed states,

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10 Using electoral data from the 1994 Chamber elections, Nicolau (1997) conducted a simulation of what the distribution of seats would look like under perfect apportionment by population. In the simulation, the conservative PFL, PPR, and PP lost seats, and the PT and PSDB were the biggest winners.
malapportionment magnifies the effects of the partisan and sociological variables we have discussed above.

Do These Recruitment Variables Have Any Effect Upon the Legislature?

One of the recurring criticisms of the literature on political recruitment is that it is excessively descriptive: recruitment is the dependent variable in most analyses. Few efforts are made to show the impact of recruitment on macro or micro outcomes, leading to the charge that recruitment is merely “a cause in search of an effect.” To correct this bias, we now reverse our analytical angle, posing recruitment as an independent variable—or better yet, a set of independent variables—that may explain legislative behavior.

Do the partisan, development-related, and institutional factors that we introduced above have any impact on the performance of the Chamber of Deputies? If they do, then we should expect to find that legislators elected from lower-HDI constituencies should behave differently from those elected from higher-HDI states, and that deputies recruited into the legislature by conservative, catch-all parties should behave differently from those recruited by left-leaning, ideological parties. We expect that deputies recruited from low-HDI states will be less legislatively productive, because the relatively weaker status of civil society in their states generates fewer incentives to deliver accountable parliamentary representation, and conversely because the incentives to practice traditional politics are notably stronger in their constituencies. Similarly, we expect that deputies recruited by conservative parties will be less active in the Chamber than those drawn from left-wing parties.\textsuperscript{11} As Mainwaring (1999) argues, leftist parties are different. In leftist parties, the far stronger role of ideology — combined with a greater tendency toward party centralization and cohesion — should lead

\textsuperscript{11} Power (2000) advanced a parallel proposition, which is that supporters of military rule in 1964-1985 (i.e., veterans of the old ARENA/PDS party organization) would be less legislatively productive after democratization in 1985. Empirical support for this proposition was found by Amorim Neto and Santos (2003). Our hypothesis here casts a wider net, since we are interested in members of all present-day conservative parties.
deputies to pursue programmatic goals via legislative institutions, resulting in overall higher levels of activity on the part of their deputies.

To test these hypotheses, we rely on a survey of legislative behavior in the 2000 annual session carried out by the *Folha de São Paulo* newspaper (henceforth FSP). The FSP collected data on all 513 deputies, including their attendance rates, their participation in committee deliberations, their frequency of debating on the floor, their presence during critical roll-call votes, their frequency of introducing bills and amendments, and their success rates in getting bills passed. The FSP also used a point system to reward deputies who achieved positions of prominence in the legislature, for example the presidency of the Chamber, membership of the Mesa (governing board), chairmanships of committees and subcommittees, and service as relatores (rapporteurs) of both special and standing committees. The performance indicators plus the prestige points were then rolled together into a single classification of legislative activity levels: *muito atuante* (very active), *atuante* (active), *atução média* (average performance), *atução fraca* (weak activity level), and *atução muito fraca* (very weak performance).

The FSP study is careful, well documented, and relies entirely on empirical rather than reputational measures of legislative performance. However, it does suffer from one obvious bias, in the sense that it rewards deputies who obtain leadership positions within the Chamber and its committee system. Since the overwhelming majority of these positions were occupied by the propresidential coalition at the time (the *base aliada*), the FSP classification has the effect of inflating the legislative activity scores of the center and right parties supporting Fernando Henrique Cardoso in 2000. We note that Cardoso’s governing coalition, especially in his second term, was electorally stronger in the less developed regions of Brazil. At the same time, the FSP study has the effect of artificially lowering the productivity scores of left-wing parties, who at the time were united in solid opposition to the Cardoso
government.\textsuperscript{12} Therefore, the FSP measure of legislative productivity should work \textit{against} our hypotheses.

Some simple indicators from the FSP study are presented in Table 2, wherein deputies are grouped by the HDI of their state of origin. Interestingly, attendance in legislative sessions bears no relationship at all to HDI: deputies from all three groups of states have virtually the same attendance rates. However, deputies from the most developed states introduce approximately three times as many bills as deputies from the least developed states. They are also three times as successful in getting them approved by the full Chamber. With regard to the overall indicator of legislative performance, there is a clear relationship across the three categories of states: as human development increases, the percentage of weak-performing deputies falls and the percentage of active deputies rises. Although it is notoriously difficult to obtain usable data on “traditional political practices” (personalism, clientelism, and the like), a separate FSP study has valuable data on the practice of nepotism in Congressional offices (Folha de São Paulo 1999). Deputies from the low-HDI states are approximately three times more likely to employ a family member on their staff than are deputies from high-HDI states. The less developed states have a greater percentage of members from conservative parties, a greater percentage practicing nepotism, and a lower percentage of members who are active in legislative affairs. These states also benefit politically from malapportionment.

These simple crosstabulations can be misleading, however, unless we introduce the variables of interest into multivariate models with appropriate statistical controls. Therefore, we now regress the FSP categorical measure of legislative performance on a number of key

\textsuperscript{12} To their credit, the FSP journalists openly discuss this bias in the introduction to their study. They note, correctly, that the measurement problem derives more from the internal structure of Congress (often dominated by the executive branch) than from their classification scheme per se.
independent variables. The technique used is multinomial logistic regression.\textsuperscript{13} The key independent variables are constituency-level HDI and a binary variable for membership in a conservative party. Since we are modeling activity in Congress, we include controls for legislative experience (one dummy for freshmen and one for second-termers) and one for membership in the governing coalition—which, other things being equal, should raise the FSP classification of a given deputy. Since we also know that disloyal deputies are less likely to obtain leadership posts (Müller 2005), we include a binary variable for deputies who have switched party during the legislative session. Results are presented in Table 3.

\textbf{[TABLE 3 HERE]}

In Table 3, the baseline category is “Very Active,” and the multinomial logit estimates each category against the baseline. As a result, the equation yields the following binary comparisons: Very Weak vs. Very Active, Weak vs. Very Active, Medium vs. Very Active, and Active vs. Very Active. For our theoretical purposes here, the most interesting models here are the most contrastive ones, i.e., the models that compare weak or very weak performance to very active performance.

Differently from the linear regression technique, in models for categorical dependent variables the coefficients do not have a straightforward interpretation. In Table 3, we should focus on the significance levels and the signs of the coefficients. For instance, the negative sign in the statistically significant coefficient for HDI in the “Very Weak” column indicates that human development is negatively related to the probability of being a weak performer when compared to the baseline category “Very Active.” In other words, higher levels of development reduce the likelihood of having the worst FSP rating when contrasted against

\textsuperscript{13} Our dependent variable is ranked from low to high performance. In such cases, the literature suggests that the ordinal logit model be used to estimate the parameters. The ordinal logit model assumes that the effects of the independent variables is the same across the binary comparisons between categories. In other words, it assumes that the effects of, say, HDI on each binary comparison is the same. Our ordinal logit estimates (not presented here) were tested to assess whether said assumption is maintained. The Brant’s Wald test results indicate that the “Parallel Regression Assumption” was violated. As a result, even though our dependent variable is ordinal, a multinomial logit model is warranted.
the best FSP rating, thus providing support for our initial hypotheses. Also, in the “Very Weak” column, the positive sign on the coefficient for “Conservative Party” is also in accord with theoretical expectations. These coefficients do not tell us anything, however, about the magnitude of the impact on the probability of being assigned to the “Very Weak” category.

The nonlinearity of the model results in conditional effects for different variables, which cannot be seen in these raw coefficients. Whereas in a regular additive linear model the impact of each variable can be interpreted, as the other covariates are held constant, in nonlinear models the very levels of the other covariates affect the impact of the variable of interest. In practice, the effect of party, for instance, depends on the levels of other variables in the model, such as human development. Membership in a conservative party may, for instance, produce important effects on the performance of deputies from poorer regions, whereas such effects may not be distinguishable for those from more developed states. Therefore, our discussion of the substantive impact of the covariates in the model will have to rely on graphs of predicted probabilities, as shown below.

[FIGURE 2 HERE]

For example, Figure 2 plots four sets of probabilities. The two lower lines estimate the probability of a deputy being in the “Very Weak” category, comparing members of conservative parties (PFL, PPB, PTB, PL, and several microparties) to all other deputies. The lines indicate that at lower levels of human development, the predicted probability of being a very unproductive legislator is higher among rightist deputies. As the level of economic development rises, the distance between conservative deputies and others is diminished. It is interesting to note that the probability for non-right deputies to have such a weak performance is virtually flat and very low. At very high levels of human development, the predicted probability of being such a poor performer is zero, for both groups. In the same figure, the two upper lines compare the probability of being in the “Very Active” category.
As one can readily see, non-rightists are always more likely to be in that category than are rightists, at all levels of human development. Yet the distance between the two upper lines does not change appreciably. Thus, the overall message of the graph is not simply that members of rightist parties are less active than other deputies: it is that the negative impact of conservative partisanship upon legislative productivity is mediated by the level of human development. In poor states, rightist legislators are very different from others, whereas in richer states this difference diminishes.

[FIGURE 3 HERE]

So far we have found evidence in favor of our hypotheses that party type and social structure matter for legislative behavior. However, there remains the problem of bias in the FSP indicator, insofar as it tends to artificially inflate the performance scores of governistas, i.e., supporters of the president who tend to dominate key positions of power in the Chamber of Deputies. Figure 3 tests whether this bias could affect our results. The two lower lines predict “Very Weak” performance, and the two upper lines predict the probabilities of “Very Active.”

As can be seen in Figure 3, there is a considerable difference between coalition members and the opposition deputies, but it is contrary to the expectation of bias in the dependent variable. The predicted probability of being a weak-performing deputy is higher for coalition members than for opposition deputies, and opposition members—i.e., deputies in leftist parties—are more likely to be “very active” at all levels of development. In other words, although the FSP scoring system rewards deputies belonging to the governing coalition, these deputies are still less active in the Chamber than leftist opposition deputies.

An alternative way to understand the impact of the base aliada variable is by comparing two hypothetical deputies holding sample-average scores on our other variables and who differ only in their position vis-à-vis President Cardoso in the year 2000. The
predicted probability of the coalition member being very active reaches .33, whereas the hypothetical opposition deputy has a predicted probability of .51 of reaching the highest marks in performance. By similar reasoning, a governista from a state with HDI one standard deviation below the mean (the case of Ceará) and who has mean values on all other variables has a .28 predicted probability of being a very active deputy, whereas a coalition member with the same indicators, but from a state one standard deviation above the HDI mean (say, somewhere between Santa Catarina and Rio Grande do Sul) has a .37 predicted probability of being “very active.”

These findings are interesting in and of themselves, for they demonstrate that leftist deputies—despite being marginalized from the Chamber of Deputies power structure and from executive beneficence in 2000—are still consistently more active and productive than the center-right coalition politicians supporting Cardoso. This suggests that if it were not for the presence of formidable executive agenda power and of centralizing legislative rules in the Brazilian Congress (Figueiredo and Limongi 1999), the difference between leftist parties and catch-all parties might be even more pronounced than we find it here.¹⁴

Both our multinomial logit and our visual inspection of conditional coefficients support the same conclusions. Our initial hypotheses— that deputies from low-HDI states will be less legislatively productive, and that deputies elected by conservative parties will be less active in the Chamber than those drawn from left-wing parties—are supported by the available evidence, even when we control for other factors such as coalitional control of the Chamber power structure. Both partisan-ideological factors and sociological characteristics of constituencies are important variables in legislative behavior.

¹⁴ This raises the question of why leftist deputies are able to outperform coalition members, despite being marginalized from the Chamber power structure. A full answer to this question would require another paper. However, recall that our dependent variable here (the FSP indicator) is not a measure of legislative success, but rather of legislative activity. Leftist legislators could be more active in every way yet lose most of the key battles. The overall pattern of legislative approval favors the government agenda.
Discussion and Conclusions

We now return full circle to our original questions: who joins the legislature in Brazil, and does it matter? Political recruitment is interesting in and of itself, because it can tell us many fascinating things about the characteristics of politicians. Our literature review showed that many valuable insights have been gained. But, beyond simply reviewing the literature, in this essay we have advanced two principal arguments. First, the study of recruitment must do more to accommodate critical intervening variables such as partisan factors, social structure, and institutional design. Recruitment to legislative life is not a neutral or random process: there are filters that embed specific biases in the formation of the national political class. Second, political recruitment must be shown to have consequences: description alone is insufficient. Without the demonstration of palpable consequences, political recruitment becomes a “cause in search of an effect.”

In this study we have culled insights from several other scholars and inserted them into the burgeoning literature on Brazilian recruitment. We argued for the centrality of three intervening variables. The distinction between catch-all and ideological parties (Mainwaring 1999) is a crucial variable in shaping the kinds of political elites who arrive in Congress. The uneven regional development of Brazil (Soares 1967) means that politicians—even while sitting side by side in the same legislative chamber in Brasília—are routinely representing dramatically different social structures, with implications both for their style of representation and their accountability to civil society. A third, institutional factor—malapportionment—conditions the impact of the first two by artificially depressing the percentage of legislators drawn from ideological parties and artificially inflating the percentage drawn from the less socioeconomically developed regions.

We then went on to hypothesize that these factors, in addition to shaping the kinds of individuals who are recruited to legislative life, should also influence their behavior once
they take their seats. We showed that they do, confirming that recruitment matters. The implication is that legislative activity is shaped by partisan and sociological factors in political recruitment, even when controlling for other factors that influence behavior on the floor of the Chamber of Deputies. Although we did not give close attention to malapportionment in our empirical tests, its implications should be intuitively clear. As U.S. legislators have shown through their scientific devotion to the practice, legislative apportionment is essentially a set of institutional “levers” by which some politicians are recruited to Congress while others are routinely excluded. Malapportionment shapes the probability distribution of admission to legislative life.

The three intervening variables we have identified have nonrandom effects in shaping political recruitment to the Chamber of Deputies. As we conclude, it is worth asking: under what conditions might these variables modify their present filtering effects? Of the three variables, the most intractable is clearly human development—not at the aggregate level (in Brazil it is clearly rising over time), but in terms of persistent unevenness at the subnational level. Historically given factors ensure that the relative rankings of states and regions do not change much, and if they do the process is virtually imperceptible. The party system stands at an intermediate level of tractability: since decentralized and nonideological parties are favored by OLPR, a move toward closed party lists could have a strengthening effect on parties as organizations, improving the viscosity of political recruitment. Malapportionment is the easiest factor to change in theory and the hardest to change in practice. Legislative apportionment could be changed with a simple constitutional amendment (of which Brazil has been averaging one every four months since 1988), but because of the built-in political dominance of the less populated states in the federation, we can be virtually certain that malapportionment will not change in anything but a cosmetic fashion.
References


Marenco dos Santos, André, and Miguel Serna. 2006. “Do left and right have the same elites’ parliamentary recruitment? A comparative study of Brazil, Chile and Uruguay.” Paper presented at the Third International Conference of the Asociación Latinoamericana de Ciencia Política (ALACIP), Campinas, São Paulo, September 4-6.


Table 1: Candidacies for Federal Deputy in the 2006 Elections

<table>
<thead>
<tr>
<th>State</th>
<th>District Magnitude</th>
<th>Number of Eligible Voters</th>
<th>Candidates for Federal Deputy</th>
<th>Candidates per Seat</th>
<th>Candidates per 100,000 Voters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acre</td>
<td>8</td>
<td>412,840</td>
<td>57</td>
<td>7.13</td>
<td>13.81</td>
</tr>
<tr>
<td>Alagoas</td>
<td>9</td>
<td>1,859,487</td>
<td>96</td>
<td>10.67</td>
<td>5.16</td>
</tr>
<tr>
<td>Amapá</td>
<td>8</td>
<td>360,614</td>
<td>72</td>
<td>9.00</td>
<td>19.97</td>
</tr>
<tr>
<td>Amazonas</td>
<td>8</td>
<td>1,781,316</td>
<td>81</td>
<td>10.13</td>
<td>4.55</td>
</tr>
<tr>
<td>Bahia</td>
<td>39</td>
<td>9,109,353</td>
<td>252</td>
<td>6.46</td>
<td>2.77</td>
</tr>
<tr>
<td>Ceará</td>
<td>22</td>
<td>5,361,581</td>
<td>160</td>
<td>7.27</td>
<td>2.98</td>
</tr>
<tr>
<td>Distrito Federal</td>
<td>8</td>
<td>1,655,050</td>
<td>113</td>
<td>14.13</td>
<td>6.83</td>
</tr>
<tr>
<td>Espírito Santo</td>
<td>10</td>
<td>2,336,133</td>
<td>84</td>
<td>8.40</td>
<td>3.60</td>
</tr>
<tr>
<td>Goiás</td>
<td>17</td>
<td>3,734,185</td>
<td>121</td>
<td>7.12</td>
<td>3.24</td>
</tr>
<tr>
<td>Maranhão</td>
<td>18</td>
<td>3,920,608</td>
<td>183</td>
<td>10.17</td>
<td>4.67</td>
</tr>
<tr>
<td>Mato Grosso</td>
<td>8</td>
<td>1,940,270</td>
<td>107</td>
<td>13.38</td>
<td>5.51</td>
</tr>
<tr>
<td>Mato Grosso do Sul</td>
<td>8</td>
<td>1,561,181</td>
<td>79</td>
<td>9.88</td>
<td>5.06</td>
</tr>
<tr>
<td>Minas Gerais</td>
<td>53</td>
<td>13,679,738</td>
<td>564</td>
<td>10.64</td>
<td>4.12</td>
</tr>
<tr>
<td>Pará</td>
<td>17</td>
<td>4,157,735</td>
<td>172</td>
<td>10.12</td>
<td>4.14</td>
</tr>
<tr>
<td>Paraíba</td>
<td>12</td>
<td>2,573,766</td>
<td>98</td>
<td>8.17</td>
<td>3.81</td>
</tr>
<tr>
<td>Paraná</td>
<td>30</td>
<td>7,121,257</td>
<td>273</td>
<td>9.10</td>
<td>3.83</td>
</tr>
<tr>
<td>Pernambuco</td>
<td>25</td>
<td>5,834,512</td>
<td>231</td>
<td>9.24</td>
<td>3.96</td>
</tr>
<tr>
<td>Piauí</td>
<td>10</td>
<td>2,073,504</td>
<td>93</td>
<td>9.30</td>
<td>4.49</td>
</tr>
<tr>
<td>Rio de Janeiro</td>
<td>46</td>
<td>10,891,293</td>
<td>787</td>
<td>17.11</td>
<td>7.23</td>
</tr>
<tr>
<td>R. Grande do Norte</td>
<td>8</td>
<td>2,101,144</td>
<td>77</td>
<td>9.63</td>
<td>3.66</td>
</tr>
<tr>
<td>R. Grande do Sul</td>
<td>31</td>
<td>7,750,583</td>
<td>289</td>
<td>9.32</td>
<td>3.73</td>
</tr>
<tr>
<td>Rondônia</td>
<td>8</td>
<td>988,631</td>
<td>78</td>
<td>9.75</td>
<td>7.89</td>
</tr>
<tr>
<td>Roraima</td>
<td>8</td>
<td>233,596</td>
<td>87</td>
<td>10.88</td>
<td>37.24</td>
</tr>
<tr>
<td>Santa Catarina</td>
<td>16</td>
<td>4,168,495</td>
<td>139</td>
<td>8.69</td>
<td>3.33</td>
</tr>
<tr>
<td>Sergipe</td>
<td>8</td>
<td>1,299,785</td>
<td>61</td>
<td>7.63</td>
<td>4.69</td>
</tr>
<tr>
<td>São Paulo</td>
<td>70</td>
<td>28,037,734</td>
<td>1,090</td>
<td>15.57</td>
<td>3.89</td>
</tr>
<tr>
<td>Tocantins</td>
<td>8</td>
<td>882,728</td>
<td>85</td>
<td>10.63</td>
<td>9.63</td>
</tr>
<tr>
<td><strong>BRAZIL</strong></td>
<td><strong>513</strong></td>
<td><strong>125,913,479</strong></td>
<td><strong>5,529</strong></td>
<td><strong>10.77</strong></td>
<td><strong>4.39</strong></td>
</tr>
</tbody>
</table>

Source: Tribunal Superior Eleitoral, data as of August 1, 2006. Minor changes may occur due to legal challenges to candidates.
Figure 1: Human Development and Levels of Political Democracy in the States

Democracy and HDI in the States

Notes: The indicator of political democracy is adapted from Vanhanen (1993), who operationalized Dahl’s (1971) concept of polyarchy as (participation*contestation). Contestation incorporates both the closeness between the top two candidates for governor and the overall vote dispersion of the field of candidates, giving equal weight to both dimensions. First we take the as the spread between the top two finishers in the first round, subtracted from 100. We then take the total vote share of the “losing” candidates (i.e., the sum of the vote for everyone except the top finisher) in the first round. These two indicators are multiplied together and then divided by 100 for ease of interpretation, creating a single measure of contestation. To measure political participation, we take voter turnout. Following Vanhanen, we then take the measures of participation and contestation and multiply them together, again dividing by 100 for ease of interpretation. This produces the political democracy score shown above. Turnout is the average of all six legislative elections, 1982-2002, and competitiveness is measured for the same years for governor, except in DF, TO, RR, and AP, which had only four gubernatorial elections beginning in 1990.
Table 2: Human Development of Electoral Districts, Malapportionment, and Selected Indicators of Legislative Performance in the 51st Legislature (1999-2003)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low HDI &lt;.720</th>
<th>Medium HDI .721-.789</th>
<th>High HDI &gt;.790</th>
<th>Chamber of Deputies</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. states in category</td>
<td>12</td>
<td>10</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>No. seats in Chamber</td>
<td>184</td>
<td>158</td>
<td>171</td>
<td>513</td>
</tr>
<tr>
<td>% seats in Chamber</td>
<td>35.9</td>
<td>30.8</td>
<td>33.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Seats over/under-represented in Chamber</td>
<td>+12</td>
<td>+27</td>
<td>-37</td>
<td>N/A</td>
</tr>
<tr>
<td>% members in right parties, 2000</td>
<td>42.9</td>
<td>37.6</td>
<td>34.0</td>
<td>38.3</td>
</tr>
<tr>
<td>% members in left parties, 2000</td>
<td>17.5</td>
<td>12.8</td>
<td>34.6</td>
<td>21.5</td>
</tr>
<tr>
<td>Mean no. relatives employed in office, 1999</td>
<td>0.77</td>
<td>0.66</td>
<td>0.28</td>
<td>0.57</td>
</tr>
<tr>
<td>% office salaries spent on relatives, 1999</td>
<td>8.42</td>
<td>8.56</td>
<td>3.53</td>
<td>6.83</td>
</tr>
<tr>
<td>Mean attendance per deputy, 2000</td>
<td>83.1</td>
<td>84.3</td>
<td>85.3</td>
<td>84.2</td>
</tr>
<tr>
<td>Mean bills introduced per deputy, 2000</td>
<td>1.77</td>
<td>3.26</td>
<td>5.34</td>
<td>3.41</td>
</tr>
<tr>
<td>Mean bills approved per deputy, 2000</td>
<td>.07</td>
<td>.18</td>
<td>.24</td>
<td>.16</td>
</tr>
<tr>
<td>Mean floor speeches per deputy, 2000</td>
<td>29.4</td>
<td>22.4</td>
<td>41.1</td>
<td>31.2</td>
</tr>
<tr>
<td>% deputies weak or very weak (FSP)</td>
<td>24.0</td>
<td>17.6</td>
<td>13.3</td>
<td>18.5</td>
</tr>
<tr>
<td>% deputies active or very active (FSP)</td>
<td>50.8</td>
<td>55.4</td>
<td>65.4</td>
<td>58.1</td>
</tr>
</tbody>
</table>

### Table 3: Multinomial Logistic Regression of Federal Deputy Performance in 2000

*When Compared to Very Active Category*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Very Weak</th>
<th>Weak</th>
<th>Medium</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>1.107</td>
<td>-.487</td>
<td>-.029</td>
<td>.742*</td>
</tr>
<tr>
<td></td>
<td>(.932)</td>
<td>(.355)</td>
<td>(.312)</td>
<td>(.334)</td>
</tr>
<tr>
<td>Second-Termer</td>
<td>1.394</td>
<td>.105</td>
<td>.343</td>
<td>.791*</td>
</tr>
<tr>
<td></td>
<td>(.949)</td>
<td>(.345)</td>
<td>(.322)</td>
<td>(.341)</td>
</tr>
<tr>
<td>Governing Coalition</td>
<td>.731</td>
<td>1.213***</td>
<td>.602*</td>
<td>.568*</td>
</tr>
<tr>
<td></td>
<td>(1.12)</td>
<td>(.418)</td>
<td>(.322)</td>
<td>(.310)</td>
</tr>
<tr>
<td>Party Switcher</td>
<td>1.427†</td>
<td>.489</td>
<td>.308</td>
<td>-.067</td>
</tr>
<tr>
<td></td>
<td>(.749)</td>
<td>(.339)</td>
<td>(.312)</td>
<td>(.344)</td>
</tr>
<tr>
<td>Conservative Party</td>
<td>1.651†</td>
<td>-.209</td>
<td>.172</td>
<td>-.276</td>
</tr>
<tr>
<td></td>
<td>(.905)</td>
<td>(.313)</td>
<td>(.274)</td>
<td>(.291)</td>
</tr>
<tr>
<td>State HDI</td>
<td>-15.192*</td>
<td>-5.486*</td>
<td>-4.717*</td>
<td>-1.881</td>
</tr>
<tr>
<td></td>
<td>(5.828)</td>
<td>(2.606)</td>
<td>(2.371)</td>
<td>(2.597)</td>
</tr>
<tr>
<td>Constant</td>
<td>5.397</td>
<td>2.495</td>
<td>2.439</td>
<td>.081</td>
</tr>
<tr>
<td></td>
<td>(3.881)</td>
<td>(1.973)</td>
<td>(1.827)</td>
<td>(2.058)</td>
</tr>
</tbody>
</table>

N = 454  
lnL = -614.661  
p.r.e. = 3.1%

Significance Levels: ** ** ** p<.01 ** p<.05 * p<.10. Robust Standard Errors in Parentheses. Notes: Very Active is the base category (DV=0). The dependent variables are taken from *Folha de São Paulo* (2001). Conservative parties are PFL, PPB, PTB, PL, and several microparties. The Human Development Index is calculated from the 2000 national census by IPEA.
Figure 2: Legislative Productivity of Conservative vs. Nonconservative Deputies by HDI of Electoral District, 2000

Notes: The two upper lines plot the probability of a deputy being in the “Very Active” category, and the two lower lines plot the probability of a legislator being in the “Very Weak” category. Conservative parties are PFL, PPB, PTB, PL, and several microparties. The Human Development Index is calculated from the 2000 national census by IPEA. Legislative productivity calculated from Folha de São Paulo 2001.
Figure 3: Legislative Productivity of Progovernment vs. Opposition Deputies by HDI of Electoral District, 2000

Notes: The two upper lines plot the probability of a deputy being in the “Very Active” category, and the two lower lines plot the probability of a legislator being in the “Very Weak” category. The base aliada at the time included the PSDB, PFL, PMDB, and PPB; the opposition included PT, PDT, PSB, PC do B, and PPS. The Human Development Index is calculated from the 2000 national census by IPEA. Legislative productivity calculated from Folha de São Paulo 2001.