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Explaining the Allocation of Legislative Specialization

Ponce, Aldo F

Centro de Investigación y Docencia Económicas (CIDE)

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Aldo F. Ponce
Centro de Investigación y Docencia Económicas (CIDE)
aldo.ponce@cide.edu

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Overview

This article studies the determinants of the concentration of legislative specialization of parties across policy jurisdictions. Greater concentration of legislative specialization leads parties to concentrate their legislative efforts on a smaller set of policy jurisdictions. Through enhancing their concentration of legislative specialization in certain policy areas, parties can more clearly signal their policy concerns and interests to voters.

Previous studies argue that delegation of legislative functions to committees in charge of specific policy jurisdictions occur because of three reasons. First, under the informational perspective legislative majorities delegate prerogatives to committees because they need expertise and greater information on certain policy jurisdictions (Gilligan and Krehbiel 1987, 1989; Krehbiel 1991). As members of these specialized committees share their policy expertise, legislatures accomplish collective benefits from specialization (Krehbiel 1991). Second, under the distributional perspective, special privileges are granted to committees to solve the problem of majority rule instability and to facilitate log rolls (Baron and Ferejohn 1989; Weingast and Marshall 1988). Third, partisan theories contend that delegation to committees occurs to strengthen the control of party leaders over the legislative agenda (Cox and McCubbins 1993; Rohde 1991). Although these approaches offer convincing explanations on why legislative specialization occurs through the delegation of rights and prerogatives to committees, there is scant research on how legislative parties allocate their policy initiatives across committees. For instance, are parties concentrating their legislative efforts equally or unevenly across policy jurisdictions? The existence of different electoral rewards across policy jurisdictions can justify
why the distribution of efforts is uneven. In fact, party attention varies across policy jurisdictions prioritizing salient policy jurisdictions that provide greater electoral rewards to parties. However, is the allocation of legislative efforts equal across parties? I argue and verify that the concentration of legislative specialization varies across parties. The existence of this variation leads to ask why some parties further concentrate their legislative efforts on a fewer number of policy jurisdictions than other parties. This article aims at explaining why this occurs.

This study argues and shows that relatively low electoral volatility and a low number of political parties (institutional traits) boost the concentration of legislative specialization. Greater electoral stability increases the incentives for parties to specialize further on certain policy jurisdictions. I also argue and verify that lower legislative fragmentation, producing larger parties, reduces the opportunity costs of legislative specialization. As I explain below, understanding the configuration of legislative specialization might help illuminate the evolution of key characteristics of party systems such as its degree of programmaticness and its degree of institutionalization, and to which extent parties are able to construct issue ownership.  

The rest of this article is divided into five sections. The following part describes the electoral benefits legislative specialization can bring to parties. The second section elaborates and presents the hypotheses of this study. The third segment justifies the case selection. This part discusses how other studies have characterized the role of party leaders in coordinating legislative actions in Latin American legislatures. In general, several studies have described this role as decisive and relevant. The fourth segment shows how two key institutional traits – legislative fragmentation and electoral volatility – are associated with the concentration of

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2 Stefaan Walgrave, Jonas Lefevere, and Anke Tresch (2011) state that issue ownership refers to “the fact that specific political parties are identified by the public at large with specific policy issues and are considered to be the most competent party to deal with those issues.”
legislative specialization across policy jurisdictions. The final part concludes and presents suggestions for further research.

**The Advantages of Greater Concentration of Legislative Specialization**

Greater concentration of legislative specialization can bring parties either short term or long term benefits. In the short term, showing policy preferences in highly salient policy jurisdictions might help parties gain support especially electoral advantages during campaigns (Edwards et al. 1995; Fournier et al. 2003; Krosnik 1988, 1990; Rabinowitz et al. 1982; Bélanger and Meguid 2008; Budge and Farlie 1983; Walgrave, Lefevere, and Tresch 2011). To enhance support, parties deliberately target the media to inform the public about their actions in legislatures (Walgrave and DeSwert 2007; Walgrave and DeSwert 2004; Norris et. al. 1999).

In the long term, as political parties consistently specialize in certain policy jurisdictions in the legislature, they inform society about their policy preferences and expertise. Over time legislative specialization might help them claim ownership of policy issues (Ponce 2012). Parties take advantage of issue ownership to enhance the support of the electorate in future elections. Empirical evidence supporting this assertion is coherent and consistent across several studies of voting behavior in several countries (Petrocik 1996; Budge and Farlie 1983; Damore 2004; Holian 2004; Simon 2002; Bellucci 2006; Green and Hobolt 2008; and van der Brug 2004; Sellers 1998; Hayes 2005; Ansolabehere and Iyengar 1994; Nadeau et al. 2001; Clarke et al. 2004; Aldrich and Griffin 2003). Petrocik et al. (2003:601) contend that issue ownership becomes a major asset for parties in their efforts to convince citizens to vote along party lines, since it indicates which problems the party will address. Furthermore, Bélanger and Meguid (2008) find that a citizen is more likely to support a party if it is perceived to be the most
competent on a given issue. In general, studies contend that issue ownership can change to some degree, but also contend that stability in issue ownership is predominant and, instead, shifts in issue ownership are exceptional (Petrocik 1996; Budge and Farlie 1983; Damore 2004; Holian 2004). Likewise, Budge and Fairlie (1983) show that parties can win elections when they own issues that are high on public’s agenda. These advantages, electoral gains and relative stability, represent payoffs parties consider when designing their strategies for achieving issue ownership. In addition, parties can take advantage of issue ownership to deter entry of new parties, as emerging parties will have to make additional efforts to overcome the electoral benefits of parties already owning policies.

Greater concentration of legislative specialization in certain policy domains can provide voters with greater information on parties’ preferences and goals, and help them distinguish parties based on policy domains. Over time, these actions might help parties own policy issues by persuading citizens that a particular party is the most competent to deal with problems in a certain policy jurisdiction. Similarly, other studies view media as a facilitator in the construction and maintenance of issue ownership by political parties (e.g., Norris et al. 1999; Walgrave and De Swert 2004). In sum, parties might employ legislative specialization to maximize electoral support in the short and long terms. Such actions also help explain the emergence and consolidation of programmatic parties and party systems\(^3\) (Ponce 2012).

**The Hypotheses: Explaining the Degree of Concentration of Legislative Specialization**

\(^3\) If voters can distinguish across political parties according to the policy domains voters believe parties prioritize, which can be clearly signaled by issue ownership, then these parties are considered programmatic in this study. Since programmaticness is one of the characteristics of “institutionalized” parties and party systems, greater concentration of legislative specialization shall also contribute to the formation of institutionalized parties and party systems.
This section explains why and to which extent legislative parties employ legislative specialization to maximize electoral support in the short and long terms. In this analysis, I treat the legislative party as the unit of analysis that makes decisions to maximize electoral support. Overall, I assume that legislative parties can win these seats by either responding to the demands of both local constituencies or of the population at large. For simplicity, I also assume that this unit of analysis is the average party, which holds a number of seats in the legislature equal to the total number of seats divided by the number of legislative parties.

Moreover, I contend that the number of bill initiatives serves as a good proxy of legislative effort. Bill initiation data can indicate the types of policies political parties target for legislative specialization. I assume that bill initiation data can best reflect the priorities of legislators and legislative parties. Bill initiation provides the media and supporters with more visibility and clarity (and salience) to identify which legislators or which parties (or party) are sponsoring a particular policy change. Rather than simply supporting or rejecting a particular policy change (captured by roll call votes), bill initiation data can clearly and visibly signal the authors of a particular initiative. While information on the authors of an initiative is clear and easy to identify and transmit, data on who supports or rejects it (roll call data) remain diffuse, difficult to identify, and more costly to transmit given the greater amount of information on the different legislative entrepreneurs supporting or rejecting the initiative. The list of votes for each legislator is not only longer than the list showing who proposed the initiative, but also less indicative of whether or not a particular legislative party is supporting or rejecting an initiative.\(^4\)

Considering the greater salience or visibility of legislative actions introducing potential

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\(^4\) This does not mean necessarily that legislators and legislative parties more truly reveal their preferences through bill initiation data than with roll call votes. Legislators or legislative parties could simply propose bills to signal policy preferences without much hope of having these bills passed. For more details on this issue, which is not the goal of this study, consult the work of Alemán, Calvo, Jones, and Kaplan (2009).
legislation, it becomes reasonable to argue that legislative parties or legislators prioritize these as a means to signal or publicize their preferences and goals to their constituencies even when these initiatives are rejected.\textsuperscript{5}

Defining Benefits

Why would parties pursue an unequal concentration of legislative specialization across policy jurisdictions? As stated above, parties could gain electoral support, at least in the short term, by targeting highly salient policies. Specifically, parties might seek to increase support from focusing on highly salient policy jurisdictions that voters consider to be the most important areas for enhancing their welfare. Previous studies find that issue saliency can have a relevant indirect effect on voting behavior (Edwards et al. 1995; Fournier et al. 2003; Krosnik 1988, 1990; Rabinowitz et al. 1982; Bélanger and Meguid 2008; Budge and Farlie 1983; Walgrave, Lefevere, and Tresch 2011).

In fact, another answer to this question concerns the institutional factors that alter the expected future electoral benefits party leaders estimate from accomplishing issue ownership. Legislative parties might design strategies to construct issue ownership and maximize electoral support in the long term. Over time, the persistent use of legislative efforts focused on particular issues might help parties gain ownership of them. The pursuit of ownership of a particular issue would lead a party to spend considerable legislative resources on highlighting its interest in a particular policy jurisdiction. This strategy might be conducive to increase the degree of concentration of legislative specialization. However, these short-term or long-term incentives would make parties within a party system adopt similar degrees of concentration of legislative specialization.

\textsuperscript{5} Even when these initiatives are rejected, the act of proposing and debating the policy change can clearly signal which legislative party or legislators are interested in a particular issue.
specialization. Perhaps, informational advantages -- on what policy jurisdictions can provide parties with greater electoral benefits -- might help explain to some extent differences across parties in their concentration of legislative specialization. Nevertheless, as this study shows below, these differences across parties are striking and can hardly be explained by only informational advantages. This leads to also consider other types of incentives. The rest of this section proposes and discusses these incentives.

**Defining Marginal Benefits, Marginal Costs, and Constraints**

For the construction of my theory, I assume that the marginal electoral benefits of greater concentration of legislative specialization for parties are positive but decrease as parties seek to increase the concentration of legislative specialization (by targeting highly salient issues or pursuing ownership of issues). This assumption reflects the different levels of satisfaction that diverse issues convey to voters. In fact, it is reasonable to assume that legislative parties prefer targeting or pursuing ownership of the most salient issues first. The heterogeneity in the voters’ levels of satisfaction across issues or policy jurisdictions helps explain why certain issues are preferred to be targeted (by parties or legislators) while others are discarded. As parties target or pursue ownership of additional issues, the saliency of subsequent issues is lower and therefore the marginal benefits consequently decrease. Because of this reason, I assume that the marginal electoral benefits are positive but decreasing.

However, greater concentration of legislative specialization and its potential benefits are not exempt of costs. Opportunity costs[^6] are especially relevant as we consider the legislative agenda of legislators. For instance, a bill initiative could either respond to the immediate

[^6]: Opportunity costs constitute all the benefits one could have received by taking the best alternative action.
demands of the constituencies of a legislator, or it could contribute to enhancing its reputation over time on how well a party deals with a particular issue. Although these two objectives – legislator’s or party’s agenda -- might not be totally incompatible, it is almost certain that opportunity costs will arise when a bill initiative cannot contribute to these two objectives equally.

Specifically, as legislators spend more time and effort to present new bills that follow party leaders’ directives, they might reduce their chances of winning seats in the legislature if they lose votes based on less responsiveness to the immediate (short-term) demands of their constituencies. Initiatives designed by leaders are more likely to favor the construction of issue ownership or short-term support for the party than to respond to particular demands of citizens residing in specific electoral districts. The opportunity costs of the actions supported by leaders include all the votes that could have been gained under the best alternative strategy (e.g., votes gained by responding to the immediate demands of a particular district).

In other words, a legislative party might actually lose seats in the legislature if it allocated too much effort to pursuing issue ownership or short-term support for the party. A potential trade-off between strategies strengthening the support for the party label and party responsiveness to the demands of specific electoral circumscriptions must be taken into account by party leaders in order to maximize electoral rewards for the party as a whole. For instance, as legislative parties allocate more efforts to pursuing issue ownership, they might be reducing localized electoral support as efforts to satisfy localized demands from their constituencies suffer. This potential trade-off between legislators’ goals and partisan electoral benefits poses an optimizing problem to party leaders.
Furthermore, I assume in my theory of legislative specialization the existence of increasing marginal electoral costs, which are determined by growing opportunity costs. Specifically, these opportunity costs comprise the electoral support parties lose as they “invest” more time, technical, and administrative resources to pursue issue ownership or target salient policy jurisdictions. As parties target these jurisdictions or seek to own additional issues, they risk losing seats in the legislature as their legislators respond less to the demands of their electoral constituencies. These demands could respond to certain needs from particular electoral districts or specific geographic areas (for polities with a single electoral district). This type of support falls as these demands become increasingly unsatisfied.

Hence, I assume that as parties target salient policy jurisdictions or increase the number of issues they try to own, their additional legislative efforts produce increasing opportunity costs measured by these electoral losses. Under the assumption of positive but diminishing marginal utility, it becomes straightforward to understand why additional unsatisfied demands produce increasingly greater opportunity costs to political parties. As legislators increasingly ignore their constituencies’ demands when following their leaders’ directives, they increasingly reduce their voters’ levels of satisfaction. Therefore, opportunity costs increase as the concentration of legislative specialization expands.

In other words, further targeting of salient policy jurisdictions or additional pursuit of issue ownership (at expense of reducing response to localized demands) will increase the electoral costs for the party while the electoral benefits of these strategies still grow but less than the contributions of previous actions following these strategies. The presence of both

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7 The assumption of diminishing marginal utility of individuals is commonly employed in neoclassical economics. Also called law of diminishing marginal utility, this law assumes that the first unit of consumption of a good or service yields more utility than the second and subsequent units (Nicholson 2002). Previous empirical studies show that this axiom describes well individuals’ structure of preferences (Horowitz, List and McConnell 2004).
(increasing) marginal electoral costs and (decreasing) marginal electoral benefits can produce a maximizing state in which legislative specialization’s marginal benefits equal its marginal costs. Parties can maximize electoral support under this condition. Hence, this condition determines parties’ optimal degree of concentration of legislative specialization.

Finally, limitations on presenting bill initiatives are determined by both the legislative capabilities of legislative parties for proposing new bills and the number of all possible bills that can be proposed by the average legislative party and/or legislator. Legislative capabilities vary across legislative bodies and depend on the level of experience of legislators, the existence of a qualified staff supporting legislators’ work, and the frequency or length of legislative sessions.

*Party System Fragmentation and Party Size*

I hypothesize that lower party size reduce the concentration of legislative specialization because of two reasons. First, changes in the number of legislative parties will modify the cost structure of the concentration of legislative specialization. An alteration in the number of legislative parties modifies the opportunity costs of legislative parties and legislators. The likelihood of winning seats in the legislature for legislative parties and legislators varies as the number of legislative parties changes. As the number of effective legislative parties falls, it becomes relatively less costly to further pursue ownership or target highly salient policy jurisdictions. A decrease in the number of parties automatically increases the number of legislators of the average party. For instance, if party leaders decide to pursue ownership of an additional issue, they could delegate the preparation of law initiatives to a greater number of legislators. Each member of the legislature will have to sacrifice less time and effort in complying with these directives since party leaders now can delegate tasks to a greater number of legislators. Therefore, the number of
bill initiatives legislators sacrifice when following party leaders’ goal of pursuing issue ownership or targeting highly salient issues becomes lower. Clearly, the magnitude of opportunity costs becomes lower.

In addition, since there are now fewer competitors, and legislative parties possess greater resources (e.g., time, legislators), legislative parties might now count on winning these seats (responding to short-term demands of local constituencies) with a lower proportion of bill initiatives a legislative party can produce. Because of these reasons, the marginal costs and average costs of greater concentration of legislative specialization decline as the number of legislators increases. The reduction in average costs is not only experienced by a single legislative party, but also by all parties in the system (as their allowance of legislators and resources grow).

The existence of declining average costs of greater concentration of legislative specialization as the number of parties goes down suggests the presence of informational scale economies. In fact, the costs of constructing ownership of an issue or targeting a highly salient issue ownership minimize when the number of parties equals two. For instance, parties will more likely pursue ownership of another policy jurisdiction as the costs become lower. Because of these lower average costs, the degree of concentration of legislative specialization becomes greater since the remaining parties in the system can obtain greater net electoral benefits (benefits minus costs) for each issue to be owned.

If I relax the assumption of the average party to assume the existence of heterogeneous parties in terms of their sizes (parties have different number of legislators), there will be also differences across parties in the degree of concentration of legislative specialization. For instance, as party leaders command a greater number of legislators, each legislator has to spend
less time and effort when obeying party leaders’ directives to pursue the ownership of an additional issue. Hence, the opportunity costs of an additional issue fall. In sum, party size might matter for explaining differences in the scope of legislative specialization across parties in party systems composed by parties of different sizes.

Nevertheless, the smallest parties – as measured by the number of their legislators – are very likely to prioritize the targeting of only highly salient issues (meeting citizen demands rather than specializing based on issues) since their small number of legislators might not be able to propose sufficient number of bill initiatives to own a single policy jurisdiction. Party leaders and legislators of these parties might seek to target only those (a few) policy jurisdictions that maximize electoral rewards in the short-term. Consequently, legislative specialization might also be relatively high for the smallest parties. Hence, a U-shaped curve might define the relationship between party size and the degree of concentration of legislative specialization. The degree of concentration might be the highest for the smallest and the largest parties.

Second, the effective number of legislative parties also alters the maximum number of bills the average party produces. More precisely, the average party proposes a number of bills equal to the ratio between the total number of bills that can be proposed in the legislature during a certain period and the effective number of legislative parties. If legislative fragmentation increases, the number of bills that the average party can produce decreases. If a certain number of law initiatives is necessary to own a policy area, greater fragmentation reduces the number of issues that can be owned by the average party in the legislature. Hence, greater fragmentation might impose a constraint to the capacity to deepen legislative specialization.

*Electoral Volatility*
I also hypothesize that greater electoral volatility contributes to reduce the degree of concentration of legislative specialization. Expectations about party’s survival in the legislature might alter the expected electoral benefits of issue ownership. For instance, in an electorally volatile context (new parties entering and old parties disappearing from the political market), the expected electoral benefits of owning additional issues decrease. Under this volatile scenario, the expectations about the benefits of issue ownership diminish as ownership endures a shorter period of time. Therefore parties will value these benefits less.

Since legislative parties expect to obtain electoral rewards from issue ownership in the long term, as previous empirical studies have found (Petrocik 1996; Budge and Farlie 1983; Damore 2004; Holian 2004), they might be sensitive to changes in electoral volatility regarding their decisions on how many issues to own. As the expected electoral benefits of issue ownership decrease, political parties face fewer incentives to increase the concentration of legislative specialization. For instance, if legislative parties observed increasing electoral volatility, they might proceed to recalculate (discount by a factor capturing the electoral instability) the future electoral benefits of issue ownership and prioritize the targeting of highly salient issues for short-term benefits or increasingly allow legislators respond to their constituencies’ demands regarding regional or local issues. Under these conditions, it is likely that legislative specialization reduces.

**Legislative Capabilities**

Finally, I hypothesize that lower capabilities might lead to lower legislative specialization. Changes in legislative capabilities could also alter the total number of bill initiatives produced per legislative period. Enhancements in technical capabilities of the legislature through more numerous and qualified staff or more experienced legislators could enable legislative parties to
propose more law initiatives in each legislative period. Also, legislators’ experience and the quality of staff could impact the effectiveness of legislative parties’ bill initiatives and create or enhance the party’s reputation. Legislative parties benefit from these enhancements because they can produce more bill initiatives or more effective bill initiatives to signal their policy preferences to their constituencies. The following section justifies the case chosen to test the hypotheses of this study.

The Latin American Context

I proceed to examine the role of the determinants of legislative specialization within the Latin American context for several reasons. First, differences in party system fragmentation, electoral volatility, and legislative capabilities are also large enough to make comparisons meaningful, as Table 1 shows. I include the seat volatility and legislative fragmentation indicators taken from Jones (2005), which are calculated based on the Pedersen Index (1979), and the Laakso and Taagepera (1979) formula respectively. The index of legislative

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8 Clear differences in these characteristics are not easy to find in the post-Communist new democracies where all of them are crippled by high party system fragmentation and high electoral volatility (Toka and Henjak 2007). Furthermore, recent studies show how policy outcomes do not correspond well in relation to the mandates given to parties (Lipsmeyer 2009; Roberts 2010). Roberts (2010) also argues that the policy distinctiveness of party systems in most post-Communist new democracies has remained lower than that of established democracies. Hence, the study of this region hardly provides variation in both the dependent variable (programmatic linkages) and the key independent variables (party system fragmentation and electoral volatility) to ensure the existence of a control group.

9 Volatility is calculated by subtracting the percentage of the vote won by every party in an election from the percentage won in the previous election, taking the absolute value of this result, summing the results for all parties, and then dividing this total by two.

10 The effective number of parties is computed by following formula:

\[ N = \frac{1}{\sum_{i=1}^{n} P_i^2} \]
capabilities, which is constructed by Stein et al. (2006), presents an important advantage. It focuses only on Latin American legislatures, which probably improves its accuracy as it analyzes fewer legislatures with more similar characteristics. The index compares legislatures according to eight indicators, five quantitative and three qualitative. The quantitative indicators assess:

1) the confidence of citizens and business people in the performance of congress,
2) average years of legislator experience and percentage of legislators with university educations, and
3) the average number of committee memberships per legislator.

The qualitative indicators constructed by capture:

1) the strength of committees,
2) whether the legislature is a good place to build a career, and
3) technical expertise.

This index examines both those characteristics that could boost not only productivity of bill initiatives, and the experience and quality of legislators to produce more effective bill initiatives. More effective bill initiatives might better persuade citizens that particular legislators or their parties are the most competent to deal with problems in certain policy jurisdictions.

[ Insert Table 1 ]

Second, party leaders play a decisive role in Latin American legislatures. For instance, according to John Carey (2009, 25),

Party groups are subordinate to national party organizations and generally can be instructed by them as to how to vote on specific issues. National party congresses invariably occur less frequently than legislative party group meetings, but national party executive committees generally have the authority to establish the party line.

Where \( n \) is the number of parties with at least one seat and \( P_i^2 \) the square of each party’s proportion of all seats.
There is frequently some overlap between members of party executive committees and legislators, particularly among legislative group leaders. Many parties also retain disciplinary bodies, composed of national party leaders that are authorized to impose sanctions on legislators who break discipline on votes where a party line has been established.

Saiegh (2005, 23) notes that party leaders “usually set policy agendas, nominate candidates and monitor the work of elected representatives.” These activities frequently take place in regularly scheduled meetings, which usually occur once a week. It is in these meetings that party policy is established, strategies for passing legislation or publicizing important matters are developed, and party and legislative leaders are selected. According to Saiegh (2005), in most Latin American countries the overwhelming majority of decisions are made by party leaders or in party meetings. Indeed, party leaders make the nomination decision of candidates for congress in most Latin American countries. The only exceptions correspond to four countries: Mexico, Argentina, Colombia, and Brazil (Ancántara Sáez and Freidenberg 2001).

Jones (2005) builds an index of centralization of power within political parties. This index is based on five factors: selection of legislative candidates, the electoral system employed for the election of legislative candidates, the timing of presidential and legislative elections, the presence of autonomous regional leaders, and the level of intra-party democracy. Countries in which the most powerful party leaders can be found are Guatemala, Bolivia, Nicaragua, Honduras, and Costa Rica. Table 1 displays these scores. However, even in countries where national party leaders are consider to be relatively weaker (Brazil, Argentina, Mexico, Colombia, and Chile), party leaders still possess several other tools and prerogatives to influence legislators’ behavior, such as guaranteed access to mass media, control of public campaign finance (in case

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11 Most Latin American countries have adopted systems with closed lists, which favor the influence of party leaders (Ames 2001). The exceptions are found in Brazil, Chile, Dominican Republic, Ecuador, and Peru.
reelection is permitted), the use of the party label and the issues the party owns, support from the party for their legislative agendas, and disciplinary actions.

Party leaders can strategically employ their prerogatives to reward obedient legislators or punish defiance. This means help explain the influence of parties over legislators as described above, and consequently, help clarify the relatively high levels of cohesion and party unity in the legislative arena. Likewise, this sheds light on the reasons explaining why party leaders have been found to play an important role in countries registering the weakest scores of the index of centralization of power constructed by Jones (2005). For instance, Langston (2011: 10) reports that party leaders in the legislature continue to dominate decision-making in Mexico after the Partido Revolucionario Institucional’s defeat in the 2000 Presidential election. Similar accounts have been reported for Brazil -- a country in which electoral rules, federalism, and the inability of party leaders to nominate candidates tend to favor individual legislators’ agendas over party agendas. For example, Figueiredo and Limongi (2000, 2007) argue that internal rules organize legislative work entirely around political parties, giving rise to highly centralized decision-making. Although there is no clear consensus on the relative power of party leaders vis à vis that of legislators -- especially in the Latin American countries listed above (Brazil, Argentina, Mexico, Colombia, and Chile) – there is general agreement that party leaders can exert a significant influence over legislators’ actions.

Furthermore, despite some variations across Latin American legislatures, overall levels of party unity are rather high (Saiegh 2005; Carey 2009; Alemán, Ponce, and Sagarzazu 2011; Alemán and Saiegh 2007), which suggest an effective party leadership. A conclusion this literature can offer is that legislators’ decisions and actions are greatly influenced by their leaders’ actions. The differences in party unity across Latin American legislatures are attributed,
instead, to intraparty competition (less power of party leaders to coerce legislators) (Carey 2009), age of parties (Carey 2009), and a relatively low level of institutionalization of the party system (Alemán, Ponce, and Sagarzazu 2011). Intra-party competition has also been associated with the power of party leaders in the U.S. Congress (Palazzolo 2008). In sum, previous studies attribute an important and decisive role to party leaders in coordinating actions and strategies in Latin American legislatures.

Based on these previous studies, it becomes reasonable to presume that party leaders could be strong enough to influence a particular legislator (or a few legislators) to propose a new bill initiative that could help party leaders solve parties’ collective action problems. In particular, these bill initiatives could help legislative parties accomplish greater electoral support through short-term strategies or the accomplishment of ownership of additional issues through legislative specialization. In sum, most studies focused on the role of party leaders in Latin American legislatures find that these actors play a relevant role in coordinating strategies within their parties. They seem to solve effectively collective action problems within their parties (in the legislature). In any case, countries with either strong or weak leaders are included in the empirical analysis to evaluate whether this difference can affect legislative specialization and to observe whether the validity of the hypotheses of this study holds.

Third, democratization and democratic consolidation are still recent phenomena in most countries of the region, which facilitates analyzing the potential construction of issue ownership in settings where issue ownership is either unlikely to exist or presumably fragile. During this

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12 However, the party leader’s lack of interest in coercing legislators to make them follow the party agendas could also reduce discipline in congress. This study suggests that the incentives created by the electoral and legislative conditions of my explanation (highly fragmented party systems, high electoral volatility, and low legislative capabilities) might also help explain the association found in previous studies between low levels of party system programmaticness and less legislative cohesion. Under these conditions, party leaders might prefer letting legislators follow their agendas relatively more freely. Furthermore, this lower degree of involvement of party leaders might reduce discipline of legislators when voting.
period parties might be using legislative specialization, and perhaps very intensively, to accomplish issue ownership. Indeed, greater legislative specialization could lead to more programmatic party systems as voters increasingly learn on how to distinguish parties. Then this institutional trait might lead to lower electoral volatility as stronger programmatic linkages between parties and citizens might help deter the entry of new competitors. Hence, analyzing legislative specialization at the early stages of democratic consolidation helps avoid the potential endogenous relationship between electoral volatility and programmatic bonds between parties and citizens.

Fourth, Latin American countries share both common cultural roots and presidential systems,\footnote{According to the literature, presidentialism reduces party unity in congress (Carey 2009). If the hypotheses of this study, which rely to some degree on the power of party leaders, are verified, it is then reasonable to assume that the likelihood of observing this behavior could be greater in parliamentary regimes.} which helps reduce the number of potential determinants explaining parties’ legislative specialization. Finally, data on bill initiatives is available for several countries, which makes it feasible to test the hypotheses of this dissertation. The following section tests the validity of the hypotheses within the Latin American context.

**Testing Legislative Specialization**

In this section, I examine empirically the hypotheses of this study. In order to test the effect of the key institutional traits (high legislative capabilities, low legislative fragmentation, and low electoral volatility) on legislative specialization, I select five different Latin American legislatures. The legislatures of these five countries – Chile, Paraguay, Uruguay, Nicaragua, and Peru – are strategically selected for several reasons. First, these countries register diverse scores of legislative fragmentation, seat electoral volatility, and legislative capabilities (see Table 1). Second, bill initiation data are available for these countries. Appendix 1 displays the sources of
these data, which are the official web pages of the national congresses of the selected countries (lower houses for those countries with bicameral legislatures: Chile, Uruguay, and Paraguay). Third, the relative strength of party leaders also varies across these countries according to Jones’s *Index of Centralization of Power in the Political Parties* (2005). For instance, while the Nicaraguan parties register one of the highest strength scores (13.5), Chilean parties present one of the lowest scores in the region (it only reaches 9).

As I state above, I employ bill initiation data for testing my hypotheses. Appendix 1 shows the number of bill initiatives for each legislative period that I use in the analysis. The number of bill initiatives scrutinized in the overall analysis totals 18,455 for all legislatures. To assess the degree of concentration of specialization across parties and across party systems, I classify these bill initiatives according to 12 possible policy jurisdictions. Appendix 3 presents the list of issues. After classifying these bill initiatives, I assess the degree of concentration of legislative specialization for both legislative parties and party systems and for each legislature.

In order to measure the concentration of legislative specialization of each party, I employ the Gini coefficient. The Gini coefficient is a widely used measure of inequalities across units (Creedy 1998; Shryock et al. 1976). It ranges from 0 in cases of perfect equality across all units to 1 in cases of complete inequality. As used in this study, the Gini coefficient assesses the extent to which a party specializes across policy jurisdictions. Thus, a Gini coefficient of 0 indicates that a party allocated the same share of bill initiatives in every policy jurisdiction. A Gini

14 Appendix 2 displays further information such as the number of seats of each legislative party and the effective number of legislative parties for each legislative period. Chile is the only case in which I compress four different legislatures into one. The number of bill initiatives of each legislative period is relatively much lower than those of other legislatures. In order to increase the robustness of the results, I condense the data.

15 I only exclude bill initiatives regarding constitutional reforms since these changes do not signal clearly a policy jurisdiction which could be owned.
coefficient of 1 means that a party assigned 100 percent of its bill initiatives in one policy jurisdiction and 0 percent in all the rest.

Based on this concentration score for individual parties, I calculate a measure of the concentration of party systems. I simply multiply the concentration score for every party by its share of seats in the legislature, and then sum this product for all the parties. The contribution of every party to the party-system concentration score is then proportionate to its share of seats in the legislature. One important advantage the Gini coefficient offers is that it is not party or party-system specific; a particular value of the Gini coefficient in one party system is comparable to another value of the Gini coefficient in another party system.

To calculate these coefficients, I first count how many bills legislators of a certain party presented. I exclude from this count all bill initiatives that legislators initiated clearly to favor their constituencies in the electoral districts which they were elected. Legislators might employ these initiatives to respond to their constituencies’ demands or to build “a reputation” as the most competent to deal with particular issues (among their own electoral constituencies). Appendix 1 shows in the second column the number of bill initiatives of every party for every legislature, after eliminating the bill initiatives conceived to foster individual electoral gains.

After counting the number of bill initiatives proposed in each policy jurisdiction, I calculate the percentage of bills proposed by each party in each policy jurisdiction. Then, I calculate the Gini coefficient for every party and for each legislative period using the Stata command “ineqdec0” (Jenkins 2001). Alternatively, I calculate a second Gini coefficient for every party by weighting every policy jurisdiction differently, employing the percentage of bill initiatives in every policy jurisdiction. This takes into account differences in the salience or relevance of each policy jurisdiction. It is reasonable to assume that legislative parties tend to
target mostly those policy jurisdictions demanded by the median citizen (across several dimensions – each of them representing a policy jurisdiction). I display the results of these calculations in the third and fourth columns of Appendix 1. Appendix 1 also shows the scores for party-system specialization computed based on the two (Gini coefficient) scores calculated for every party.

Simple correlations between party-system specialization scores and the values of the key institutional traits of this study show support for hypothesis 1. These “specialization” scores correlate negatively with seat volatility (-0.76) and legislative fragmentation (-0.62), and positively with legislative capabilities (0.61). I find similar results for the party-system specialization scores calculated based on the weighted Gini coefficients. These figures clearly support my hypotheses. I present the values of these correlations in Table 2.

Finally, I run two different econometric models to assess the accuracy of the hypotheses from a different angle. This time I directly evaluate the ability of my expectations to predict legislative specialization. Since this model relies on the legislative party as the unit of analysis, I construct statistical models explaining the degree of specialization at the party level. Specifically, I employ the scores of legislative concentration at the party level as the dependent variable (the Gini coefficient).

This analysis primarily assesses the impact of seat volatility, party size, and legislative capabilities on a party’s legislative concentration of specialization. Party size captures the effect of legislative fragmentation at the party level (as legislative fragmentation increases, party size tends to decrease). I use the share of seats in the legislature to measure party size. I also employ
the square of party size as an additional variable to assess the existence of U-shaped relationship between party size and legislative specialization.

As other independent variables, I include both party system level variables: electoral volatility\textsuperscript{16} and legislative capabilities. Finally, I control for the relative power of party leaders. I use Jones’s *Centralization of Power Index* to account for these differences (2005). Since the number of observations is relatively low (44 parties in the sample), I employ two different models especially designed to deal with small samples (the classical frequentist estimations could be biased in these contexts). First, I employ a parametric bootstrap\textsuperscript{17} in which I cluster legislative parties by legislatures. Previous studies advocate the bootstrap technique, which was invented by Efron (1979), to estimate parameters when working with small samples (Benton and Krishnamoorty 2002; Scholz 2007). In particular, I fit a multilevel Tobit model (with limits between 0 and 1 given the configuration of the Gini coefficient) varying intercept to account for possible statistical dependence among observations belonging to the same legislature. I run this model using the software *Stata*.

Second, I take advantage of a Bayesian Tobit model, which relies on Markov-Chain techniques, to produce successive replications. As stated above, the use of the classical frequentist approach\textsuperscript{18} is questionable for small sample sizes. In the frequentist approach using maximum likelihood, inferences are based on the asymptotic theory. The normal asymptotic

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\textsuperscript{16} I show in Appendix 2 the values and sources of the variable seat volatility.

\textsuperscript{17} Bootstrapping is the practice of estimating properties of an estimator when sampling several times from an approximating distribution. The standard choice for an approximating distribution is the empirical distribution of the observed data. The technique employs a random sampling with replacement from the original dataset.

\textsuperscript{18} In the classical frequentist approach, the inferential question is the “how often” question assuming that a hypothesis is true (Jackman 2009). Specifically, the classical frequentist approach focuses on answering “how often would we obtain a result at least as extreme as the result actually obtained?” where the sampling distribution of the result informs how to evaluate relative frequencies of possible different results (under the hypothesis) (Jackman 2009).
approximation has been found to produce significant bias for small samples (Griffiths, Hill, and Pope 1987; Zellner and Rosi 1984; Albert and Chib 1993). In order to avoid the lack of accuracy of the frequentist approach for estimation in small samples, I employ a Bayesian Tobit model.\textsuperscript{19} Bayesian models have been found capable of providing analyses appropriate for both small and large samples (Zellner and Rosi 1984). Specifically, I take advantage of the Tobit regression model using the data augmentation approach (data-augmented Gibbs sampler).\textsuperscript{20} I run the Bayesian Tobit models using the R package \textit{MCMCpack} to produce the data-augmented Gibbs sampler for this estimation (Martin, Quinn, and Park 2009). I display the models’ results in Table 3. The Bayesian model reports the posterior mean and the quantiles at the 2.5% and 97.5% levels of the posterior distribution for each of the explanatory variables. The bootstrap estimation also reports confidence intervals at the 2.5% and 97.5% levels of the distribution.

\textit{Results}

Results of these models once again confirm the argument that electoral volatility matters for legislative specialization. Higher volatility reduces legislative concentration of specialization in

\textsuperscript{19} Unlike the frequentist approach, which conditions on a hypothesis to evaluate the plausibility of the data with another step required to either reject or fail to reject hypotheses, the Bayesian approach conditions on the available data to evaluate the plausibility of a hypothesis (Jackman 2009). Based on the data at hand and priors (beliefs on the parameters and hypotheses), the result of a Bayesian analysis is a posterior probability density of parameters or hypotheses of direct interest for the researcher (Jackman 2009). This posterior density reflects the distribution of possible values of the parameter of interest, which can be characterized by typical indicators such as a mean, a variance, and confidence intervals. The mean and the confidence intervals are of especial importance for a researcher when assessing possible parameters’ values. In addition to providing more appropriate estimations when working with small samples, Bayesian analysis provides: 1) parameter estimates with good statistical properties; 2) parsimonious descriptions of observed data; 3) predictions for missing data and forecasts of future data; and 4) a computational framework for model estimation, selection and validation (Hoff 2009).

\textsuperscript{20} The Gibbs sampler rests on the idea that the joint probability densities can be completely characterized by their component conditional densities. Therefore, rather than sampling from the high-dimensional density (p(β /data)), the Gibbs technique samples from the lower-dimensional \textit{conditional} densities that put them together to define the joint density. Like other samplers, the Gibbs sampler constitutes one of the Markov Chain Monte Carlo algorithms, which combine simulation techniques and time-series analysis.
all specifications. The negative sign of the estimated mean and the quantiles of the posterior densities (or confidence intervals for bootstrap), reported in Table 3 consistently show this association across all specifications. Party size also matters. The results confirm the existence of a U-shaped relationship between party size and the degree of concentration of specialization. As the number of legislators increase within a party, the party embarks in further concentration. Both the estimated mean and the quantiles of the posterior densities (or confidence intervals for bootstrap) provide evidence of this influence. This is consistent with the idea that the opportunity costs of pursuing ownership of additional issues goes down as party leaders can distribute duties regarding the pursuit of issue ownership to a greater number of legislators.

Finally, I examine the effect of legislative constraints at the party level. Although the results suggest a positive impact on the degree of concentration, these results are less conclusive than previous findings, since the likelihood of a change of sign for the estimated mean is relatively higher (as the quantiles indicate). However, it is also possible that the legislative constraints Latin American parties face are not preventing them from choosing their optimal amount of concentration. Since electoral volatility still remains relatively high in the region, parties might be selecting a relatively low optimal amount of concentration. It is then likely that parties do not encounter obstacles (or legislative constraints) to achieve their optimal amount of

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21 These posterior distributions demonstrate that these parameters are highly unlikely to be zero, and they corroborate the Bayesian model’s findings. The set of graphs in Appendix 4 (right side) displays these posterior distributions. Graphical evaluation of the Gibbs sampler output can be helpful to assess how well the sampler is exploring the posterior densities. Specifically, the traceplots displayed on the left side of Appendix 4 correspond to the independent variables of the dataset. In all cases, the traceplots are indistinguishable from white noise (absence of clear patterns or trends), clearly suggesting that the sampler has successfully converged on the posterior density of the model parameters.

22 Even after controlling for party size, which captures the rationality for why the pursuit of ownership enhances, the inclusion of legislative fragmentation as a different independent variable still seems to produce a negative impact on legislative specialization (the estimated mean is negative). However, the quantile (at 2.5%) of the posterior distribution does not present a negative sign.
concentration. This might help explain why these results are less convincing. I suggest expanding the sample of legislatures in future research in order to corroborate the inconclusive results related to this variable and provide further evidence to confirm the positive effect of legislative capabilities on the degree of concentration. Finally, as expected, party centralization also seems to affect specialization positively but these results are also inconclusive. Differences in the degree of party centralization across countries might not be important enough to influence the results.

**Conclusions**

This study provides several lessons. First, policy makers could encourage further concentration in legislative specialization by implementing institutional changes conducive to reducing party system fragmentation in legislatures, decreasing electoral volatility, and enhancing legislative capabilities. These reforms can either enhance the incentives for greater concentration or reduce the constraints that legislative parties face when deciding to what extent they want to concentrate their efforts in the legislative body.

Second, studies already report that in relatively more fragmented party systems, parties own fewer issues (usually at most one or two issues) than in two-party systems, and most of the policy issues are not owned by any party (Bélanger and Meguid 2008; Walgrave and De Swert 2007; Bélanger 2003; Petrocik 1996). My study sheds light on (at least) some reasons explaining why this occurs. It can also help explain why other studies have found an association between lower party system fragmentation and higher degrees of party system programmaticness. As greater legislative specialization and the pursuit of issue ownership become more robust, voters can increasingly learn about programmatic differences among
political parties. In this case, credibility and generation of information are more likely to increase in a polity with programmatic parties; and this goal becomes less costly under less fragmented party systems. For instance, accountability and responsiveness from the legislative body can be amplified by a two-party system.

For further research, cross-regional comparisons could offer the opportunity to analyze the effect of other determinants on the formation of programmatic linkages such as presidentialism. Finally, I also suggest including cases from other (less volatile) regions to assess more accurately the effect of legislative capabilities.

References


### Table 1. Seat Volatility, Number of Effective Parties, and Legislative Capabilities

<table>
<thead>
<tr>
<th>Countries</th>
<th>Electoral Volatility</th>
<th>Number of Political Parties</th>
<th>Legislative Capabilities (Stein et al. 2006)</th>
<th>Centralization Index (Jones 2005)</th>
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Source: Jones (2005)

*Calculated by author
Table 2. Correlations between Party System Specialization and the Key Institutional Traits

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<th>Correlations</th>
<th>Legislative Fragmentation</th>
<th>Seat Volatility</th>
<th>Legislative Capabilities</th>
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<td>-0.76</td>
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<td>Party-System Specialization (based on the Gini Index Weighted by Issue Importance)</td>
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<td>-0.67</td>
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Table 3. Explaining Legislative Specialization at the Party Level

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<td>0.43</td>
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<tr>
<td></td>
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Appendices

Appendix 1. Specialization by Parties and by Party Systems

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<tr>
<th>Parties</th>
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<th>Specialization (Gini Index Weighted by Issue Importance)</th>
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<td>Specialization (Gini Index)</td>
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**Party-System Specialization**

0.27 0.30

Source:
http://www.congreso.gov.py/
Law Initiatives: 1805 analyzed

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**Party-System Specialization**

0.10 0.16

Source:
http://www.congreso.gob.pe/
Law Initiatives: 11697 analyzed

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**Party-System Specialization**

0.22 0.31

Source:
http://www0.parlamento.gub.uy
Law Initiatives: 461 analyzed

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**Party-System Specialization**

0.21 0.40

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Appendix 2. Legislative Composition

Chile (1990-1993)

Concertación: 68 legislators  
Alianza: 48 legislators

Partido Demócrata Cristiano: 38 legislators  
Partido por la Democracia: 16 legislators  
Partido Socialista: 0 legislators  
Partido Radical Social-Demócrata: 5 legislators  
Independientes Concertación: 9 legislators  
Renovación Nacional: 29 legislators  
Unión Democrática Independiente: 11 legislators

Seat Volatility (Roberts and Wibbels 1999): 10  
Effective Number of Legislative Parties: 5.31

Chile (1994-1997)

Concertación: 70 legislators  
Alianza: 50 legislators

Partido Demócrata Cristiano: 37 legislators  
Partido por la Democracia: 15 legislators  
Partido Socialista: 15 legislators  
Partido Radical Social-Demócrata: 3 legislators  
Independientes Concertación: 0 legislators  
Renovación Nacional: 33 legislators  
Unión Democrática Independiente: 17 legislators

Seat Volatility (Roberts and Wibbels 1999): 10  
Effective Number of Legislative Parties: 4.97

Chile (1998-2001)

Concertación: 69 legislators  
Alianza: 47 legislators

Partido Demócrata Cristiano: 38 legislators  
Partido por la Democracia: 16 legislators  
Partido Socialista: 11 legislators  
Partido Radical Social-Demócrata: 6 legislators
Independientes Concertación: 0 legislators
Renovación Nacional: 25 legislators
Unión Democrática Independiente: 22 legislators

Seat Volatility (Roberts and Wibbels 1999): 10
Effective Number of Legislative Parties: 5.40

Chile (2002-2005)

Concertación: 63 legislators
Alianza: 57 legislators

Partido Demócrata Cristiano: 25 legislators
Partido por la Democracia: 21 legislators
Partido Socialista: 12 legislators
Partido Radical Social-Demócrata: 6 legislators
Independientes Concertación: 0 legislators
Renovación Nacional: 25 legislators
Unión Democrática Independiente: 33 legislators

Seat Volatility (Roberts and Wibbels 1999): 10
Effective Number of Legislative Parties: 5.94

Nicaragua (2007-2011):

Frente Sandinista de Liberación Nacional (FSLN): 38 legislators
Partido Liberal Constitucionalista (PLC): 25 legislators
Alianza Liberal Nicaragüense (ALN): 23 legislators
Movimiento Renovador Sandinista (MRS): 5 legislators
Independiente (Ex Presidente Ing. Enrique Bolaños Geyer): 1 legislator

Seat Volatility (Jones 2005): 15
Effective Number of Legislative Parties: 3.14

Paraguay (2008-2012)

Asociación Nacional República (ANR): 30 legislators
Partido Liberal Radical Auténtico (PLRA): 27 legislators
Partido Unión Nacional de Ciudadanos Éticos (UNACE): 15 legislators
Partido Patria Querida (PPQ): 3 legislators
Alianza Patriótica para el Cambio (APC): 2 legislators
Movimiento Popular Tekojoja (MPT): 2 legislator
Partido Democrático Progresista (PDP): 1 legislator
Seat Volatility (Jones 2005): 18
Effective Number of Legislative Parties: 3.43

Perú (2001-2006)

Perú Posible (PP): 45 legislators
Partido Aprista Peruano (APRA): 28 legislators
Unidad Nacional (UN): 17 legislators
Frente Independiente Moralizador (FIM): 12 legislators
Unión por el Perú (UPP): 6 legislators
Somos Perú (SP): 4 legislators
Acción Popular (AP): 3 legislators
Solución Popular: 1 legislator
Todos por la Victoria: 1 legislator
Renacimiento Andino: 1 legislator

Seat Volatility (Roberts and Wibbels 1999): 53.8
Effective Number of Legislative Parties: 4.37

Uruguay (1990-1995):

Partido Colorado: 30 legislators
Partido Nacional: 39 legislators
Frente Amplio: 21 legislators
Nuevo Espacio: 9 legislators

Seat Volatility (Roberts and Wibbels 1999): 11.9
Effective Number of Legislative Parties: 3.33


Partido Colorado: 32 legislators
Partido Nacional: 31 legislators
Frente Amplio: 31 legislators
Nuevo Espacio: 5 legislators

Seat Volatility (Roberts and Wibbels 1999): 11.9
Effective Number of Legislative Parties: 3.3

Uruguay (2000-2005):
Partido Colorado: 32 legislators  
Partido Nacional: 22 legislators  
Frente Amplio: 40 legislators  
Nuevo Espacio: 4 legislators

Seat Volatility (Roberts and Wibbels 1999): 11.9  
Effective Number of Legislative Parties: 3.07

Uruguay (2005-2010):

Partido Colorado: 10 legislators  
Partido Nacional: 36 legislators  
Frente Amplio: 51 legislators  
Independiente: 1 legislator

Seat Volatility (Jones 2005): 16  
Effective Number of Legislative Parties: 2.39
Appendix 3. Issues Included in the Analyses

Policy Jurisdiction 1: Audit and Drug Control
Policy Jurisdiction 2: Defense and Law Enforcement
Policy Jurisdiction 3: Economy and Production
Policy Jurisdiction 4: Education, Science, and Culture
Policy Jurisdiction 5: Decentralization and Public Administration
Policy Jurisdiction 6: Environmental care
Policy Jurisdiction 7: International relations
Policy Jurisdiction 8: Population care and housing
Policy Jurisdiction 9: Infrastructure, tourism, and transportation
Policy Jurisdiction 10: Labor affairs
Policy Jurisdiction 11: Health and Social Security
Policy Jurisdiction 12: International trade and integration
Appendix 4. Explaining Legislative Specialization: Posterior Distributions from the Bayesian Model