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Political institutions, competing principals, and party unity in legislative voting

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Political institutions, competing principals, and party unity in legislative voting

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Abstract
Almost all legislators are subordinate to party leadership within their assemblies. To varying degrees, legislators are also subject to pressure from other principals whose demands may conflict with those of party leaders. I present a set of hypotheses on the nature of competing pressures driven by formal political institutions, and test the hypotheses against a new dataset of legislative votes from across 17 different countries. Voting unity is lower where legislators are elected under rules that provide for intra-party competition than where party lists are closed, marginally lower in federal than unitary systems, and the effects on party unity of being in government differ in parliamentary versus presidential systems. In the former, governing parties are more unified than the opposition, win more, and suffer fewer losses due to disunity. In systems with elected presidents, governing parties experience no such boosts in floor unity, and their legislative losses are more apt to result from cross-voting. The results support the competing principals account of party voting in legislatures.

Political institutions, competing principals, and party unity in legislative voting

Introduction

Scholarship in comparative politics frequently claims that the design of formal

institutions affects the internal unity of parties. For example, parties in parliamentary

systems are generally characterized as highly unified, whereas those in presidential

systems are more fractious and less disciplined, with resulting difficulty for presidents in

the legislative arena (Diermeier and Feddersen 1998; Hix, Noury, and Roland 2002;

Persson and Tabellini 2003; Shugart 1998). Federalism, by encouraging the organization

of parties at the sub-national level, is regarded as fostering divisions within parties at the

national level (Mainwaring 1999; Weyland 1996). Electoral systems that provide for

competition among legislative candidates within the same party for personal votes are

portrayed as encouraging disunity relative to closed lists election rules (Ames 1995;

Chang and Golden 2001; Hix 2004).

These assertions are not uniformly accepted. Brown and Hunter (1999) argue

against disaggregating the various characteristics of democratic systems, demonstrating

that a dichotomous democracy/authoritarian distinction provides substantial traction in

understanding public policy outcomes. Based on a broad cross-national study,

Przeworski, Cheibub, and Saiegh (2004) argue that presidents are on par with

parliamentary executives in forming legislative coalitions to pass legislation. Based on a

careful study of Brazil, a presidential, federal system with intra-party electoral

competition – all the characteristics listed above as undermining party unity – Figueiredo

and Limongi (2000) argue that various provisions centralizing control over the legislative

agenda provide leverage to control wayward parliamentarians and govern as efficiently as governments that confront none of these institutional obstacles ostensibly do.

Why should we care about party unity in legislative voting? First, legislatures are where major public policy decisions are ratified. In all democracies, budgets, taxes, treaties and the like must be approved by legislative vote. Voting behavior is of intrinsic interest because the stakes are high. Second, political parties serve as information conduits to citizens. As corporate organizations, parties can pledge to support comprehensive policy agendas on which individual politicians cannot credibly claim to have much impact. Whether voters can know what they are getting in terms of connecting suffrage in elections to representation depends partly on legislative voting unity. If the voting behavior of a party's legislators is unrelated to the positions in its national platform, then the communicative value of the party's label is limited. Third, unity affects the ability of parties to win votes. Unity determines whether governments can act decisively or, by contrast, whether each legislative decision requires separate deliberation and the construction of a distinct support coalition. In this sense, party unity is linked to the ability of parties and governments to deliver the promises in their platforms (Bowler, Farrell, and Katz 1999).

The lack of consensus over whether and how institutions matter to party unity is possible in part because there has not been a broad cross-national study of legislative voting unity sufficient to allow for variance in the institutional factors of interest. The cost of collecting data on legislative votes presents a special challenge, because many assemblies do not regularly record votes at the level of the individual legislator, and do not make the records easily available even when they do. This paper tests a number of

hypotheses regarding institutional effects on party unity, and on the relationship between unity and winning and losing votes, by examining legislative voting records across hundreds of parties in lower chambers across 17 countries.

In the following section, I spell out a number of hypotheses regarding the effects of institutions on legislative voting unity. Next, I present a number of measures of party unity in legislative voting, and discuss some methodological issues they raise, particularly with respect to cross-national comparison. Then I present the empirical data, and show party unity indices based on recorded vote data from all 17 legislative chambers. I present the models used to test my hypotheses against the data, present the results, and conclude by discussing the implications for the study of democratic institutions.

Hypotheses: Legislative parties and competing principals

National legislatures in all democratic systems are organized by parties, and almost all legislators are members of party groups within their assemblies. The leaders of these groups control resources – appointment to key committees, control over the legislative agenda, office space, staff, and perks – valued by rank-and-file members. Legislative party leaders may also share command of national party organizations, which often control resources critical to legislators' political career prospects, such as nominations for reelection to the legislature or for other offices, appointed posts, and access to campaign finance. Thus, virtually all legislators are subject to influence by at least one principal: their legislative party leadership. Whether they are subject to

pressure from other, competing principals depends on the institutional context in which they operate.

To start, consider the electoral connection. Where party leaders exercise strong influence over a legislator's election, the demands to which the legislator must respond in order to pursue reelection and the demands from those who control the distribution of resources within the assembly are consistent. The principal to whom the legislator must respond on both counts is the party leadership. Where voters exercise relatively more control over legislators' electoral prospects and party leaders less, legislators may face demands from their electoral principals that compete with those of party leaders. The rules by which legislators are elected affect their relative responsiveness to party leaders and to alternative interests in the electorate (Shugart, Ellis, and Suominen 2003; Hix 2004). Where party leaders draw up closed lists of candidates that are presented in general elections and cannot be altered by voters, electoral responsiveness to a competing principal is minimized. By contrast, where candidates compete against copartisans for voter support, legislators may cultivate reputations distinct from their copartisans.

> H1: Party unity should be lower where legislative candidates compete against members of their own parties for personal votes than where nominations are controlled by party leaders and electoral lists are closed.

Next, consider the effects of unitary versus federal systems of government. Under the former, the strongest level of party organization is generally national, the level at which the leaders who control the party group in the national legislature operate. Under federal systems, by contrast, the primary level of party organization, where politicians build careers and win or lose re-nomination for office, is often a sub-national political

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unit (e.g. state, province, etc.). If interests vary across these units, then the conflicts may be reflected within parties at the national level, subjecting legislators to competing pulls from principals at the national versus sub-national levels, and undermining voting unity in the national legislature.

H2: Party unity should be lower in federal systems than in unitary ones.

Another familiar thesis regarding institutional effects on party unity posits a fundamental difference between presidential and parliamentary regimes. At the heart of this distinction is often a story about control over the legislative agenda – that is, over which proposals make it to the assembly floor for a vote and under what conditions. Parliamentary systems generally endow the chief executive, the prime minister, with the authority to present legislative proposals to the assembly as matters of confidence, such that rejecting the measure triggers the collapse of the government, and possibly early elections. The confidence provision raises the stakes for all parties. If a party splits, and loses as a result, on a vote subject to a confidence provision, the costs are greater than just foregoing the new policy for the status quo, or vice versa (Bagehot 1872; Cox 1987; Diermeier and Feddersen 1998; Huber 1996).

H3: Party unity should be higher in systems with confidence vote provisions than those without.

The confidence vote story is compelling, but not without proviso. In the first place, even where confidence vote provisions exist, they are not formally summoned on most votes, so technically there is room for party voting disunity that does not threaten

government survival.[1] Moreover, the confidence vote is not restricted to pure parliamentary systems. The best-known case combining a confidence vote provision for the cabinet with a more-than-ceremonial elected presidency is France, but such hybrid arrangements are common among newer regimes. In short, the distinction between regimes with and without confidence vote provisions does not map perfectly onto the distinction between those with and without elected presidents and, to the extent that presidents affect voting unity, the effect may conflict with that of the confidence vote in some systems

The case that presidentialism undermines party unity is broader, however, than the logic of the confidence vote, and the broader story is consistent with a competing principals account of legislative politics. Presidential elections allow the possibility that candidates whose political careers and fortunes are built outside the legislative party system occupy the chief executive office, and they may use their influence and authority toward ends at odds with legislative voting unity (Linz 1994). Competing principals in this context suggests simply that more than one actor controls resources that can influence legislative voting, and that divergence in the demands of these principals will sow divisions within legislative parties. Hix (2002 and 2004), for example, demonstrates that legislators in the European Union Parliament are responsive to both national parties, which control their nominations and elections, and E.U. Parliament parties, which control access to resources within that assembly, and that institutional rules endowing the former

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1 On the other hand, even when the confidence provision is not invoked, its shadow may hang over the legislative process. The potential to invoke confidence may, thus, may increase party unity even in its absence.

principals with greater resources undermine voting unity within EU Parliament party groups. I suggest that presidents can cause an analogous phenomenon within parties in national legislatures.

In parliamentary systems, the party leadership is the principal most influential over any given legislator, and in the case of government parties, the legislative party leaders and the executive are one in the same. In presidential systems, legislators are subordinate to legislative party leaders, but in addition to these principals, legislators in the president's party (or coalition) are subject to influence from a chief executive with an independent electoral base and endowed with often considerable arrays of constitutional authorities – budgetary, regulatory, and often the ability to influence the legislative agenda directly (Siavelis 2000; Amorim Neto, Carey, and Shugart 1997). Thus, the effects of being in government ought to push legislative voting unity in opposite directions under parliamentary and presidential systems. In both, legislators in the governing coalition should be subject to greater influence from the executive than those outside it. In parliamentary systems, where legislative and executive leadership is fused, parties in government have more resources to compel voting unity than do those in opposition (Laver and Shepsle 1996).

> H4: Party unity should be higher in governing parties than opposition parties under parliamentarism.

Under presidentialism, the situation is more complex. When the two principals of governing-party legislators concur on a given measure before the assembly, the effect should be similar to that under parliamentarism, providing a boost to unity owing to the additional resources with which the president can pressure legislators. When the

president and legislative party leadership disagree, on the other hand, and pull in opposite directions, party unity should suffer in governing parties. Whether the net effect of competing principals is to generate lower voting unity among governing parties than opposition parties depends on how frequently the principals pull in opposite directions and on their relative influence over legislators. To the extent the principals compete *at all*, however, voting unity in government parties should suffer under presidential systems relative to parliamentary systems.

> H5:   Party unity in governing parties should be lower under presidentialism
>
>   than under parliamentarism.

One further point is worth noting here, with respect to how control over the legislative agenda affects party unity in voting. Governments that dominate the legislative agenda can protect themselves from having new policies imposed against their preferences. A governing party or coalition may be unable to enforce discipline and ensure sufficient voting unity to pass its own agenda through the legislature, but if government party leaders control the institutional gates of access to the legislative agenda, they can prevent votes from occurring on measures that would change the status quo to some new policy less preferred by the party. Amorim Neto, Cox, and McCubbins (2003) show that effective 'agenda cartels' can form, but will not necessarily do so, in presidential systems, and their focus on Brazil opens the question of how prevalent the phenomenon is. The distinction between votes to initiate policy change and those to block change suggests a way to test. Legislative initiatives adopting new policies generally require approval by an 'aye' vote on the measure in question. 'Nay' votes, by contrast, generally defend the status quo. When a party loses a vote, I distinguish

between being 'stuffed' (favoring approval of the measure, but falling short), and being 'rolled' (having an unwanted measure passed over the party's efforts to block). Agenda cartels might experience fatal party disunity on the former, but such divisions on the latter suggest the absence of an effective cartel.

> H6: If effective agenda cartels exist, governing parties may lose votes due to disunity by being 'stuffed,' but they should not get 'rolled.'

Measures of voting unity

I consider here a measure of voting unity among legislative parties, measures of success in winning legislative floor votes, and measures of success contingent on voting unity. The first is familiar to scholars of legislatures, and was developed by Stuart Rice (1925) 80 years ago. Rice scores reflect levels of cross-voting among members of the same party, and are calculated as:

$$RICE_{ij} = |\%AYE_{ij} - \% NAY_{ij}| \text{ for party } i \text{ on vote } j.$$

Percent aye and nay are calculated as proportions of those voting either aye or nay, and so sum to 100%. The RICE score can range from zero (equal numbers vote aye and nay) to one (all members who cast votes vote together).

Next, for each party , i, on each vote, j, I calculate whether it wins, WIN_j. I infer a party's preference on a given measure from the side supported by the majority of its voting members. Thus if most of a party's votes were 'aye' and the measure passed, it counts as a win; if most of it's votes were 'nay' and the measure passed, it counts as a

loss, etc. Among a party's losses, I further distinguish between STUFFs and ROLLs. A party is stuffed when it supports passage of a measure that fails, and is rolled when it opposes a measure that passes.

The last set of measures is derived from RICE, and reflects whether a party suffers a loss on a given legislative vote due to a breakdown of unity. $RLOSER_{ij}$ takes a value of 1 if party i loses on vote j even though, *given how all other legislators voted*, party i could have won had all its voting members voted together. RLOSER, in turn can be broken down into its component STUFFs and ROLLs:

$RSTUFF_{ij} = 1$ IF:

- $PREF_{ij}$ = Approve, AND

- $Outcome_j$ = Reject, AND

- $TotalAYE_j + NAY_{ij} > Threshold_j$,

and

$RROLL_{ij} = 1$ if:

- $PREF_{ij}$ = Reject, AND

- $Outcome_j$ = Approve, AND

- $TotalAYE_j - AYE_{ij} < Threshold_j$

where, for every vote, j:

- $TotalAYE_j = AYE_{ij} + AYE_{NOTij}$

- $Threshold_j$ = number of votes necessary to approve the measure

- $Outcome_j$ = [Approve, Reject]

and, for every party, *i*, on every vote, *j*,

- PREF$_{ij}$ = [Approve (AYE$_{ij}$>NAY$_{ij}$), Reject (NAY$_{ij}$<AYE$_{ij}$), No Preference (AYE$_{ij}$=NAY$_{ij}$)]

Measuring voting unity in small parties

The measures of voting unity confront three types of limitations associated with small parties. First, the RICE score is not relevant for a party with only one member because cross-voting is, by definition, impossible. Thus, RICE scores are not calculated for parties with only one legislator, nor for votes on which only one member of a party participates.

Second, RLOSER is calculated only for parties where N>2. RLOSER is derived from simulated vote outcomes under alternative, "more unified" permutations of a party's votes, given the party's inferred preference on the vote. Where N<=2, the party either has no inferred preference (split 1-1), or is perfectly unified, in which case no alternative, more unified, permutation is possible.

The third consideration is that RICE is subject to upward bias as a combined function of a party's size and the underlying proclivity of its members to vote together. The bias is more severe the smaller the party and the less inclined its members are to vote alike. In calculating indices of RICE scores for each party, I correct for this bias according to a method endorsed by Desposato (2005).

Non-votes

Interpreting nonvoting is not as straightforward as interpreting ayes and nays. Some studies of recorded votes seek to interpret the *motivation* behind non-votes, in order to infer whether they likely represent breaks with party discipline – for example, if legislators were present for some votes in a session, but not others (Haspel, Remington, and Smith 1998; Ames 2002). This approach implicitly attributes analogous meaning to nonvoting and to voting, regarding each as an equivalent action for the purposes of measuring party voting unity. Except under very specific conditions, however – when the threshold for passing a motion is set in absolute terms, as a proportion of the total membership of the chamber – such an approach can mismeasure the *effects* of nonvoting

Consider first the most common scenario, where the threshold to pass a measure is *relative,* set as the proportion of those casting aye or nay votes. If I disagree with my party's position, I might either withhold my support from the party by not voting (whether through abstention, or not showing up, or simply not pressing my button), or I could *not only* withhold my support *but also* give my vote to the other side. The latter is a more visible breach of unity than the former, and does correspondingly more damage to the party's collective brand name; and if the vote is close, the latter is twice as damaging to my party's prospects of winning than the former.

In some legislatures, however, thresholds are set in absolute terms, as a percentage of the full membership of the assembly. Among the cases analyzed in this paper, both the Russian Duma and the Nicaraguan Assembly require approval from majorities of all members to pass any measure. Under such rules, non-votes, whatever their intent, are equivalent to nays in their effect on outcomes. For the purposes of

calculating RICE and RLOSER, my point of departure is to treat them as such.[2] This is, admittedly, not a perfect solution, because parties may tolerate non-voting by members who *could have* been mobilized, if necessary. A nonvoting equilibrium arrangement might be advantageous both to party leaders, as a means of disguising visible displays of internal dissent, and to individual legislators who are beholden to other commitments besides attendance and voting on the floor (e.g. committee work, constituency service, or simply outside professional obligations). If this is the case, then counting non-votes as nays will correctly code the votes of members who would have voted nay, but will incorrectly code their counterparts. [3]

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2 I also calculate RICE scores for such assemblies based on the alternative procedure of discounting non-votes altogether, and I present the average party indices for Nicaragua and Russia by that method below. That approach necessarily overestimates party voting unity as it affects vote outcomes (because any legislator who does not like a measure, whatever the position of her party, can oppose it as effectively by not voting as by voting nay) but it may reflect unity as it affects the party's collective brand name (assuming that passive opposition by non-voting is 'invisible' to citizens, which may or may not be the case). The measures of voting unity that are purely outcome-based (RLOSER, RROLL, RSTUFF) are calculated only counting non-votes as nays.

3 Such paired nonvoting equilibria across parties are, of course, possible in legislatures operating under relative majority threshold rules as well. In fact, relative threshold rules are almost certainly *more* amenable to nonvoting equilibria, because the effects of non-votes are less consequential to outcomes. Such agreements across parties are noted by observers of the British House of Commons, and their existence is asserted in various

To sum up, in calculating voting unity scores, I treat non-votes according to their effects on vote outcomes. They are counted as nays when their effects on outcomes are equivalent to nay votes. Because of ambiguity in the difference between the meaning of non-votes under absolute majority voting rules, I replicate all the quantitative analyses reported in this paper dropping the two absolute majority cases: Russia and Nicaragua. Doing so never affects any of the results reported.

The RICE index: Weighting votes by CLOSEness

Because the objects of my analysis are legislative party groups, it is necessary to aggregate the vote-specific measures of voting unity into indices that summarize, for each party, the overall tendency toward unity across all the recorded votes in a given legislature. I aggregate at the level of legislatures because this is the smallest period for which some of the characteristics of party groups (e.g. share of seats, government/opposition status) are constant. One problem with such indices is that many votes in most legislatures are lopsided, either because they are taken on matters of consensus across parties, or on matters unimportant enough to attract any opposition, or because their outcome is obvious ahead of time and the losers choose not to register their opposition formally through their votes. When votes are consensual in the legislature as a whole, however, cohesiveness scores for any subset of legislators will be high. Counting all votes equally, including lopsided ones, therefore, would inflate unity

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Latin American legislatures in interviews conducted by this author. Such equilibria can undermine the validity of measures of party voting unity that attempt to accommodate non-voting.

indices. This would present a particular problem for cross-national comparisons where there is variance across cases in the average *closeness* of votes owing to characteristics of legislatures entirely unrelated to party unity. For example, if rules in legislature A require recording votes on every motion, the vast majority of which are perfunctory and consensual, whereas in legislature B only votes on substantive (and potentially divisive) motions are recorded, then unweighted indices from the two legislatures would show higher unity in A, even in the absence of any real effect on legislative decisionmaking.

The conventional response in studies of recorded votes is to establish some criterion for throwing out votes that are too consensual to be considered relevant to party unity. Established criteria in studies of the two-party U.S. Congress focus on whether the majorities or the leaderships of the two main parties oppose each other on a given vote (Brady, Cooper and Hurley 1977; Cox and McCubbins 1993). In the multiparty environment of most other democracies, however, such criteria are of little use. Which votes meet the selection criterion would vary according to which parties' majorities or leaderships are considered. Another approach is to include all votes on which some minimum proportion of legislators vote on the losing side (Mainwaring and Liñán 1997; Figueiredo and Limongi 2000). But such thresholds are necessarily arbitrary, and they count all votes, no matter how far above threshold, equally, contradicting the basic intuition behind selection criteria in general: that the sternest test of unity is whether members of a party or coalition vote together when doing so matters to legislative outcomes, and therefore that the more hotly contested a vote is, the more relevant it is to a measure of unity.

This suggests an index calculated as follows:

$$WRice_{i=} \qquad \sum RICE_{ij} *CLOSE_j / \sum CLOSE_j$$

where

$$CLOSE_j \qquad = \qquad 1 - (1/THRESHOLD * |THRESHOLD - \%AYE|)^4$$

for legislature as a whole on vote j.

The $WRice_i$ index is a summary statistic for voting unity in party *i*, weighting votes according to how closely they were contested, according to the basic intuition that, for a party seeking to influence outcomes, unity is more critical the more likely it is that defection that any member(s) will be pivotal. Given that my other indices of voting unity – RLOSER, RROLL, and RSTUFF – are calculated directly with respect to outcomes (win, lose), I do not weight them, but simply report proportions – i.e. on how many votes, out of all votes taken, was a party an RLOSER.

Data

I collected data on recorded votes from 21 legislative chambers across 19 countries in all, of which 17 chambers in 17 different countries are suitable for analysis.[5]

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[4]When the threshold for passing a measure is a simple majority of those voting, the formula can be written as: $CLOSE = 1 - (2 * |50\% - \%AYE|)$. However, when passage requires an extraordinary majority, the more general formula still applies. This form of the general equation was suggested to me by Jeanne Giraldo.

[5] In both the Philippines House and Senate, the hundreds of votes I collected were so overwhelmingly consensual that there were effectively no contested votes to analyze (the sum of CLOSE was 2.88 and 0.77, respectively). The legislative action in the Philippines appears to happen somewhere besides the floor of Congress. In Costa Rica, although

All chambers included in the analysis are lower chambers. The unit of analysis is the party group during a given legislature, and I calculated voting unity indices for each party in each legislature that it enjoyed representation (WIN%, ROLL, STUFF), or where its group consisted of 2 or more legislators (WRICE), or 3 or more legislators (RLOSER, RROLL, RSTUFF).

Only for the United States are all recorded votes publicly available in machine-readable format. Some other assemblies post vote records online as lists of names that, with some work, can be prepared for analysis. In other cases, I traveled to the assemblies themselves and collected hard copies of whatever votes were recorded, or else contracted with local assistants to collect the information. In a few cases, other scholars who had collected vote data in similarly painstaking fashion generously shared (or traded) data.[6] In some cases(e.g. United States, Uruguay), my sample of votes represents all recorded votes during complete legislatures. In other cases (e.g. Chile, Israel), the costs of data collection prohibited collecting all votes in a given legislature, so my sample includes all votes between specified dates. The dates, the total number of votes, and properties of the corresponding CLOSE scores for the cases examined in this paper are shown in Table 1.

what few recorded votes exist are contested, almost no votes are recorded in the first place – only 17 over 33 years – so the data there are similarly sparse. Finally, without the Philippines, the only upper chamber remaining was the U.S. Senate, which I dropped it so as not weight the U.S. unduly in the cross-national analysis.

6 All the data for this project are to be made available for public use online at [website information suppressed]. Every scholar who shared or traded data agreed the information should be an open resource for scholarship.

There is substantial variance across the legislatures for which I have voting data in how many votes are recorded, and thus available for analysis of party unity. There is also variance in what information is available about each vote (e.g. origin of the initiative, issue area, whether final passage or not). The only information available for every vote in every chamber is date, threshold for approval, and how each member of the assembly voted (e.g. aye, nay, abstain, or no vote). Finally, there is some variance in the overall tendency toward consensus or contestation in votes. Mean CLOSE summarizes the extent to which an average vote was contested for each case. Votes were most narrowly won in New Zealand, Argentina, and Guatemala; less so in Ecuador, Chile, and Peru. In all legislatures, some votes are consensual, but in most there are deep divisions on many votes as well – enough that we can be confident that the real fights over policy have not all ended before votes come to the floor.

Table 2 presents descriptive statistics for the system-level explanatory variables and for two key indices of party voting unity, averaged across all parties and all legislatures, for each country. The system-level variables are those that describe characteristics of constitutions or electoral systems and do not vary across parties within a legislature. Similarly, the mean WRICE and RLOSER indices sum up system-wide patterns of party voting unity. Note that mean WRICE is unusually low in both Nicaragua and Russia when non-votes are coded as nays (the default approach), but jump to high levels when non-votes are simply dropped in calculating RICE scores. The absolute majority threshold for approval in these assemblies allows legislators to cast an effective dissenting vote from their party's position by doing nothing, depressing rates of

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explicit dissent. If Nicaragua and Russia operated under the more common relative threshold format, WRICE indices would almost certainly be in between the values calculated in Table 2. The RLOSER indices reported are based only on votes cast, so are conservative. Dropping the Nicaraguan and Russian cases does not change any of the statistical results reported here.

[Table 2]

Figures 1 presents WRICE indices for the parties in each country according to whether the constitution includes a confidence vote provision and whether assembly elections provide for competition among candidates from the same party. In the bottom left panel are systems with the confidence vote and without intra-party competition. By and large, voting unity as measured by WRICE is high, with the averaging over .90. Canada and Israel each has a derelict outlier, but in each case it is a two-member parties in which a 1-1 split vote would drive the RICE score to zero. Overwhelmingly, the legislators in these parliamentary systems voted together with their copartisans.

[Figure 1]

The bottom right panel shows the one case of a confidence vote system with intra-party competition, Poland. WRICE is extraordinarily low. Poland's open-list proportional representation may contribute to individualism among members of the Sejm. The Polish presidency may also contribute to disunity. It is worth noting that, of eight parties in the Sejm, President Kwasniewski's Social Democrats (SLD) had the lowest WRICE index, consistent with a competing principals account of presidentialism. We should be cautious about drawing inferences based on this case, however. The Polish vote data are from a 20-month period following the adoption of a new constitution, and

the inauguration of a new government facing an opposition president. The rules of the game, and the party system itself, were relatively young, and voting in subsequent periods may show increased unity. Nevertheless, the Polish data at hand are consistent with the propositions that intra-party competition, and alliance with the president, can generate drags on party unity.

The top left panel of Figure 1 shows the non-confidence vote (i.e. pure presidential) systems without intra-party competition. Nicaragua and Russia are very low of course, but WRICE indices there must be eyed warily in light of their absolute majority threshold voting rules. Elsewhere, levels of WRICE are higher – a bit lower than under parliamentarism without intra-party competition, but generally in the .8 to .9 neighborhood. Finally, the top right panel shows systems without confidence votes and with intra-party competition, and the indices suggest more modest levels of voting untiy overall, averaging in the .7 to .8 neighborhood, and with considerable spreads.

Figure 2 presents the same set of boxplots for the RLOSER index, and here the pattern is similar, although Poland is less extreme. Among the pure parliamentary cases without intra-party competition, parties almost never lose votes they could, but for party disunity, have won. In Poland, the median party lost about 2% of all votes due to such divisions. (It should be noted, that this party, the Peasant Party (PSL), was on the winning side of 92% of all votes, so its losses due to disunity accounted for a quarter of all its losses.) At any rate, caution is again in order in drawing inferences about this particular combination of institutional variables from the Polish data alone. The top left panel shows pure presidential systems with no intra-party competition, again a showing a larger spread of values and slightly greater disunity overall than in the analogous pure

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parliamentary cases. Finally, the top right shows the pure presidential systems with intra-party competition and, as expected, exhibits the greatest incidence of lost votes due to disunity. The United States is the outlier, with a median value of around 9% of all votes lost due to disunity, but values in the 2%-5% range are not unusual in Peru and Uruguay, and indices run still higher in Brazil.

[Figure 2]

On the whole, the data suggest that parliamentarism increases party unity and that intra-party competition in legislative elections depresses it. The substantial variance within legislatures, however, suggests that system-level factors alone explain only part of party voting unity. The statistical analysis below combines system-level with party-level variables in an effort to shed light on the relative impact of each.

Models

The structure of the data presents some challenges in testing the hypotheses listed above. One issue is heteroskedasticity in the indices of voting unity, as demonstrated by the different spreads across panels in the boxplots. I address this problem by relying on White-corrected standard errors in my regression models, using the 'robust' option in Stata. Another is covariance in the system-level variables. As noted, the data include only one hybrid constitution – combining a popularly-elected and powerful president with a confidence vote provision for the cabinet – Poland. Otherwise, the Presidential and Confidence Vote variables are perfect complements of each other, making it difficult to separate the effect of presidentialism from that of the confidence vote. Ideally, vote data from more hybrid systems will become available, so that Presidential and

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Confidence Vote can vary independently to a greater degree.   In the meantime, however, there is a key difference between the logic of the variables Confidence Vote and Presidential variables that affords some leverage in testing their effects. The confidence vote argument applies system-wide in that the confidence provision (or the potential to invoke it) raises the stakes of votes for all parties. The competing principals story associated with presidentialism, by contrast, distinguishes more starkly between parties allied and those not allied with the president, based on their susceptibility to pressure from a principal besides their legislative party leadership. In the regression analyses, I include Confidence Vote as a system-level variable, then include Presidential only as an interaction with whether a party included in the governing coalition or not.

A final challenge is the nested structure of the data, with parties as the units of observation, nested in groups within countries (or, more precisely, legislative chambers) at which the system-level variables operate. As long as the system-level variables account for the variance across countries, this does not present a grave problem for estimation, and an examination of the squared residuals from the models below suggest it is not. Nevertheless, in the interest of caution, I also run fixed-effect models, including a dummy variable for every country, save one, which becomes the point of reference. The fixed-effect specification controls for all country-level characteristics of each party system, allowing the remaining variables in the model to isolate completely the marginal effects of party-level variables. In the event, the estimated party-level effects are broadly consistent in the fixed-effects models and those that combine system-level with party-level variables, providing an additional check on the robustness of the estimates.

The basic statistical model is regression with robust standard errors, as follows:

Voting Unity Index   =   a(Constant)

                + b1(Confidence Vote)

                + b2(Intra-Party Competition)

                + b3(Federal)

                + b4(Government Party)

                + b5(Government Party * Presidential)

                + b6(Seat Share)

where:

Voting Unity Index is one of the various indices of legislative voting unity: WRICE, RLOSER, RROLL, or RSTUFF.

Confidence Vote is coded 1 if the constitution provides for legislative votes to be subject to confidence provisions on the survival of the cabinet; 0 otherwise.

Intra-Party Competition is coded 1 if the electoral system requires that candidates for the assembly compete against their own co-partisans for preference votes; 0 otherwise.

Federal is coded 1 if the country has a federal constitution, and sub-national units are meaningful arenas of political competition and the distribution of political resources; 0 otherwise.

Government Party is coded 1 if the party holds at least one cabinet portfolio in the current cabinet; 0 otherwise.

Government Party * Presidential (Gov*Pres) interacts Government Party with a dummy coded 1 if the country has a popularly-elected presidency endowed with substantial constitutional powers; 0 otherwise.

Seat Share is the percent of seats in the assembly held by that party.

I also regress the straightforward 'batting average' variables (WIN%, ROLL, STUFF) on the party-level independent variables in order to generate a clearer picture of what characteristics of parties contribute to winning and losing votes, what sorts of votes, and under what conditions, regardless of voting unity. It would not make sense to include the system-level independent variables in these regressions because, unlike rates of party unity, there is no reason to expect rates of winning/losing to vary across systems – all non-consensual votes pit some winners against some losers. In the absence of the system-level variables, I run these models only in the fixed-effects specification, which isolates the marginal effect of party-level factors within each country with greater precision.

The logic of the independent variables and expectations about their effects, are mostly straightforward from the hypotheses section, but a few comments are in order. Government Party estimates the marginal effect on the dependent variable of being in government in parliamentary systems, and Gov*Pres picks up the difference in that effect between presidential and parliamentary systems.

Seat Share is included as a control variable, but its logic depends on the dependent variable. When the dependent variable is a simple measure of parties' ability to win votes (e.g. WIN%, ROLL, or STUFF), expectations regarding Seat Share are clear-cut – a greater share of seats should lead to more wins, and correspondingly to fewer rolls and stuffs. When the dependent variable is WRICE, expectations are less firm. Parties that comprise larger shares of their chambers may encompass more diverse

viewpoints, and thus be subject to disunity. On the other hand, increasing seat shares

generally provide increasing access to the legislative resources that party leaders employ

to elicit compliance among their rank and file (Hurtado 2000). Finally, when the

dependent variable is an index of vote losses due to disunity (RLOSER, RROLL,

RSTUFF), the effect of Seat Share should be positive, notwithstanding the fact that

bigger parties win more, because a split within a larger party should be more likely to

reverse a vote outcome than the same split in a smaller one.[7]

Results

Table 3 presents the results of seven regression models, each run in the standard

(top panel) then fixed-effect specification with country dummies supplanting the system-

level independent variables (bottom). The number of observations varies because RICE

scores are not generated for one-member party groups, and RLOSER and its cousins,

RROLL and RSTUFF are not generated for groups smaller than three members.

[Table 3]

Model 1 strongly supports Hypothesis 1, showing a large and significant negative

effect of intra-party competition on voting unity measured by the weighted RICE index.

Parties in systems where electoral laws provide for competition against co-partisans can

be expected to have indices .09 – about a half a standard deviation on WRICE – lower

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7 I also ran the models on vote loss due to disunity controlling for WIN%, on the grounds that only parties

that win votes stand to lose some through breakdowns in unity. That is, if a party's winning percentage is

zero or close to it, we might reasonably expect that it is merely in perpetual and futile opposition, rather

than that it *might* have won, say, three percent of those lost votes but for internal splits. This turns out not to

be the case, however; the coefficient on WIN% was never close to significant.

than analogous parties in systems with closed lists, or single-member districts and no primaries. The model offers no support for Hypotheses 2 or 3, showing no measurable effect of either federalism or the confidence vote provision on WRICE. There is support for the competing principals account of divergent pressures on governing-coalition legislators under parliamentarism versus presidentialism in Hypotheses 4 and 5. The residual category here is all legislators in parties not holding cabinet portfolios. The coefficient on Government Party in Model 1 suggests that membership in the governing coalition under parliamentarism boosts WRICE by .11 – more than half a standard deviation – whereas this effect is more than offset among government parties under presidentialism, which are actually less unified than those outside government, according to WRICE. The corresponding estimates in the fixed effects models tell the same story about the difference between presidentialism and parliamentarism. The coefficient on Government Party is positive but negligible, whereas parties in presidential governing coalitions have lower WRICE than those in parliamentary coalitions by .06, implying a net drag relative to non-governing parties – even controlling for all country-specific characteristics – of .05.

The models estimating winning percentages shed more light on the differences between governing parties in parliamentary and presidential systems. Beginning with the Seat Share control variable in Model 2a, the coefficient is positive and significant. For every additional percentage of chamber seats a party holds, its expected WIN% rises by half a point. The coefficient on Government Party shows that, in parliamentary systems government parties win at a much greater rate than do opposition parties – 31% more, over and above the effects of Seat Share. The coefficient on Gov*Pres shows that this

advantage is wiped out almost altogether for governing parties under presidentialism. Under presidentialism, in fact, once country-specific characteristics and seat share are controlled, the difference in WIN% between governing and non-governing parties is not significant (not shown).

Models 3a and 4a break down WIN% (or rather, its complement, losing percentage) to estimate whether the factors contributing to rolls are different from those contributing to stuffs. The key difference between roll and stuff rates is in the effect of Seat Share. Government-versus-opposition effects aside, small parties get rolled more than large ones. For every additional percentage of assembly seats held, expected roll rates decline half a percent. But Seat Share has no measurable effect on stuff rates. This suggests that there is a difference between votes to change the status quo and votes to defend it. Large parties are as inclined as small ones to support proposals that may or may not fly, and to suffer occasional defeats in doing so, but smaller parties are more apt to have proposals approved over their objections. That said, the effects of being in and out of government, and the differences between parliamentary and presidential systems, are the same for ROLL and STUFF. Governments in parliamentary systems are effective agenda cartels, in that their parties are rolled less frequently than are opposition parties. They are also effective initiators, being stuffed less often. Both advantages are entirely offset among governing parties under presidentialism. Presidential systems, on the whole, show no tendency toward effective agenda cartels among government coalitions.

Why are government parties in presidential systems not more effective at winning votes? The next set of models indicate that a substantial share of their losses is attributable to breakdowns in unity. First, note that the Seat Share variable is strong and

significant in all the models estimating causes of disunity-induced losses. Splits in large

parties are more consequential to vote outcomes than analogous splits in small parties.

Once Seat Share is controlled, Model 5 shows that RLOSER jumps by about a percent-

and-a-half with intra-party competition, and an additional .7% with federalism, consistent

with Hypotheses 1 and 2. The estimated effect of ConfidenceVote actually runs counter

to the expectation from Hypothesis 3 – confidence vote systems generate higher rates of

vote losses due to disunity than do systems without the provision. This effect is offset

among governing parties in parliamentary systems, which show a corresponding decrease

in such losses. The decrease, in turn, is more than offset among governing parties in

presidential systems. These parties not only lose due to disunity significantly more than

do governing parties in parliamentary systems (Models 5 and 5a), they also can be

expected to lose 1.1% more votes in this manner than opposition parties in presidential

systems (not shown). One percent more losses may appear to be a nominal

disadvantage, but consider that governing parties, even under presidentialism, win 78%

of all votes (as against 84% for governing parties in parliamentary systems), so

membership in government can be expected to boost a party's overall rate of floor losses

by around 5% just through its effect on RLOSER.

Models 6 and 7, together with and 6a and 7a, indicate some differences between

rolls and stuffs due to disunity having to do with federalism and the confidence vote, but

the effects of the other independent variables are consistent. Intra-party competition

boosts both sorts of disunity-induced losses. Federalism and the confidence vote, in

contrast, contribute to disunity stuffs, but not to disunity rolls. Under federalism, for

example, parties can be expected to lose about half-a-percent more votes due to disunity,

but these failures should be concentrated on new initiatives. Parties in federal systems are no more likely than those in unitary systems to have initiatives passed over their objections on account of voting defections. The same can be said for parties in confidence vote systems. Government parties in parliamentary systems are marginally less likely to suffer either kind of disunity loss, but government parties in presidential systems are more likely to do so, and the effect is actually more pronounced for disunity-induced rolls than stuffs. Again, the agenda cartel model allows that governing parties might endure stuffs as they float legislative initiatives that fail to garner sufficient support for appoval, but posits that effective cartel leaders should prevent votes on initiatives that could split the governing coalition and pass over its objections. Both the incidence of rolls and the proclivity of voting disunity to produce them suggests that presidentialism militates against effective agenda cartels.

Discussion

Table 4 summarizes the empirical evidence regarding the six hypotheses on voting unity presented above. H1 is strongly supported, as intra-party electoral competition diminishes party voting unity, measured either by the WRICE index or any of the disunity-loss indices, in any model specification. Federalism has no measurable effect on WRICE, increases disunity losses, but only those in which a party fails, due to disunity, to pass an initiative it supported. Federalism does not affect the incidence of parties being rolled owing to disunity. The confidence vote similarly has no measurable effect on WRICE, and boosts disunity losses, but only stuffs, not rolls. This, however, is in limited antithesis to H3, rather than limited support. H4 and H5 fare better, being

supported on all three counts. In parliamentary systems, governing parties are more unified in voting, according to WRICE, they win more than their share of votes, and they lose less on stuffs (and no more on rolls). Governing parties in presidential systems, by contrast, are less unified than their counterparts under parliamentarism according to WRICE, they win at lower rates, and when they lose is it more likely to be due to internal disunity. Presidentialist governing parties, in fact, appear to be at no legislative advantage even relative to their own opposition. Controlling for seat share, they are marginally less unified, win at no higher rate, and suffer disunity losses more often. Finally, there is no support for the presence of agenda cartels by the criterion of H6. Under parliamentarism, governing parties endure fewer losses of both roll and stuff variety equally, and enjoy greater immunity from disunity-induced stuffs than rolls. Under presidentialism, governing parties enjoy advantages on neither type of vote, and are actually slightly *more* susceptible to disunity-induced rolls than stuffs.

[Table 4]

Taken together, these results support what I characterize as the competing principals approach to legislative representation, the basic idea of which is that almost all legislators are subordinate to party leaders within their assembly, and the extent to which party groups are unified or cohesive depends on whether other principals, with competing demands, also control resources to pressure legislators. To the extent that such competing principals elicit responsiveness from legislators, they drive wedges into party groups, which we observe in vote patterns and vote outcomes. I look for sources of competition among principals in the constitutional and electoral rules that govern

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legislative politics, and in how these rules interact with the status of parties inside and outside government.

The results here confirm a number of arguments about institutional effects on legislative party unity that have either been derived theoretically, or advanced on the basis of evidence from a smaller number of cases, or both. They are based on a broader cross-national dataset than any previous study, which affords for greater leverage in estimating system-level effects and for disentangling these from party-level effects. For example, a number of scholars have attributed disunity within parties to intra-party preference voting (Cain, Ferejohn, and Fiorina 1987; Mainwaring and Perez Linan 1997; Garman, Haggard, and Willis 2001), whereas others rightly cautioned that, in the absence of evidence from legislative voting itself, inferring levels of party cohesiveness from voting rules alone was premature (Figueiredo and Limongi 2000). The results here should dispel uncertainty on this count. Similarly, federalism has been identified as a drag on national-level party unity in case studies of Brazil (Weyland 1996; Mainwaring 1999), although the most sophisticated study to date of legislative voting in that country's Chamber of Deputies estimates the effect to be relatively small (Desposato 2004). The results here are consistent with that conclusion, but extend its empirical reach considerably.

The most important new results are the differences between parliamentary and presidential systems on party unity. The differences reported here do not have to do with the presence of absence of the confidence vote provision, which is at the center of many discussions of party discipline. Rather, they relate to the effects on party unity of being in government. Under parliamentarism, membership in government is a legislative asset,

as one would expect given the additional resources available to government leaders to sway their legislative allies. By contrast, there is no evidence that membership in government is an asset in presidential systems, and it appears to be a liability in terms of inducing losses on votes owing to breakdowns of legislative party unity. Take two parties of the same size, hand one the presidency, and you can expect it to lose legislative votes more often because of splits within its ranks.

Studies of the presidency in specific countries frequently conclude that the office is unusually strong, even dominant over the legislature. Like students in Lake Wobegon, who are all above average, or cups of coffee at Starbuck's, where you can't order a medium (much less a small), presidents appear in the literature to be an unusually potent breed. The results here suggests reassessing this verdict. Parties allied with presidents do not do any better on the floor of the legislature than others. Presidents may dominate their local political theatres in lots of ways, but not by directing the actions of unified battalions of legislators.

Presidents are disruptive to party unity because they present a potentially competing source of directives against those of party leaders within the legislature. Legislative party leaders in parties outside government need not contend with such a formidable competitor in coordinating the actions of their troops. The incentives for presidents to stake out positions 'above' politics and to carry themselves as supra-partisan actors, even when they have won election on the basis of party support, buttress this effect. And the resources – political and material – that presidents command in most systems provide them ample currency with which to curry legislative favor. By this account, it is not presidential weakness, *per se,* that is the source of party disunity, but

presidential power. Power can only be understood as a source of party disunity, however, if one begins by taking legislative parties, independent of presidents, as actors worth modeling in the first place. This is a step that scholars of presidentialism do not always take, but I suggest it is a necessary one in order to develop a fuller understanding of presidential power, and its limits.

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Table 1. Recorded vote data

Country	Dates, Assemblies	# Votes	Sum CLOSE	Mean CLOSE
Argentina	December 1984 – December 1986	20	12	.62
	December 1987 – September 1989	20	14	.71
	December 1989 – December 1991	65	39	.60
	December 1991 – December 1993	27	14	.53
	December 1993 – December 1995	64	35	.55
	December 1995 – November 1997	21	16	.77
Australia	May 1996 – July 1998	457	308	.67
Brazil	January 1989 – December 1990	57	33	.57
	March 1991 – January 1995	166	104	.63
	March 1995 – December 1998	452	291	.64
Canada	May 1994 – April 1997	735	398	.54
Chile	May 1997 – January 1998	215	59	.27
	October 1998 – May 2000	522	167	.32
Czech Republic	January 1993 – June 1996	5,067	2149	.42
	July 1996 – December 1998	4,741	2075	.44
Ecuador	July 1998 – June 2002	22	5	.25
Guatemala	December 1994 – November 1995	10	6	.58
	February 1996 – January 1999	42	21	.51
	January 1999 – April 2000	7	5	.75
Israel	October 1999 – November 2000	598	205	.34
Mexico	October 1998 – April 2000	299	113	.38
New Zealand	November 1990 – August 1993	592	384	.65
	December 1993 – November 1994	185	145	.78
Nicaragua	January 2000 – September 2000	693	417	.62
Peru	March 1999 – June 2000	689	430	.33
	August 2000 – December 2000	332	227	.26
	August 2001 – October 2001	103	129	.09
Poland	October 1997 – May 1999	3045	1226	.40
Russia	January 1996 – May 1997	356	197	.55
United States	January 1991 – December 1992	901	495	.55
	January 1993 – December 1994	1094	666	.61
	January 1995 – December 1996	1321	836	.63
	January 1997 – December 1998	1157	622	.54
Uruguay	October 1985 – November 1989	41	28	.68
	December 1990 – August 1994	22	10	.47

Table 2. Descriptive statistics for key variables, by country

Country	President	Confidence Vote	Intra-party competition	Federal	mean WRICE	Rloser
Argentina	Yes	No	No	Yes	.83	.003
Australia	No	Yes	No	Yes	.99	0
Brazil	Yes	No	Yes	Yes	.75	.012
Canada	No	Yes	No	Yes	.82	.001
Chile	Yes	No	No	No	.82	.003
Czech Republic	No	Yes	No	No	.87	.006
Ecuador	Yes	No	No	No	.92	.006
Guatemala	Yes	No	No	No	.83	0
Israel	No	Yes	No	No	.88	.002
Mexico	Yes	No	No	Yes	.84	.011
New Zealand	No	Yes	No	No	.96	.018
Nicaragua	Yes	No	No	No	.36 (.96)[a]	.038
Peru	Yes	No	Yes	No	.80	.006
Poland	Yes	Yes	Yes	No	.40	.026
Russia	Yes	No	No	Yes	.55 (.94)[a]	.010
United States	Yes	No	Yes	Yes	.70	.119
Uruguay	Yes	No	Yes	No	.79	.037

[a] Weighted RICE index not counting non-votes as nay votes for shown in parentheses.

Table 3. Regressions with White robust standard errors.

Independent Variables	Dependent Variables						
	WRice	**%Won**	**Roll**	**Stuff**	**Rloser**	**RRoll**	**RStuff**
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Intraparty Competition	-.11*** (.03)				.016*** (.003)	.006*** (.002)	.010*** (.002)
Federal	.01 (.03)				.007** (.003)	.001 (.002)	.006*** (.002)
Confidence Vote	-.02 (.04)				.007** (.003)	.001 (.002)	.006*** (.002)
Government Party	.11*** (.03)				-.008* (.004)	-.003 (.002)	-.005* (.003)
Government Party * Presidential	-.15*** (.05)				.015** (.007)	.009** (.003)	.006* (.004)
Seat Share	.07 (.07)				.073*** (.013)	.038*** (.007)	.034*** (.008)
Constant	.83*** (.03)				-.011** (.003)	-.003 (.002)	-.008*** (.002)
N	260				212	212	212
R^2	.10				.44	.34	.38

Fixed-effects models (country dummies not shown)

	Model 1a	Model 2a	Model 3a	Model 4a	Model 5a	Model 6a	Model 7a
Government Party	.01 (.02)	.31*** (.05)	-.15*** (.05)	-.16*** (.02)	-.003 (.003)	.000 (.001)	-.003* (.002)
Government Party * Presidential	-.06* (.04)	-.25*** (.06)	.12** (.06)	.13*** (.03)	.015*** (.005)	.009*** (.003)	.006* (.003)
Seat Share	.12 (.08)	.51*** (.12)	-.54*** (.10)	.02 (.06)	.034*** (.012)	.015** (.007)	.019** (.009)
Constant	.76*** (.10)	.35** (.16)	.49*** (.12)	.16*** (.05)	-.027*** (.008)	-.027*** (.009)	-.000 (.001)
N	260	371	371	371	212	212	212
R^2	.42	.43	.53	.47	.72	.62	.61

Table 4. Summary of hypothesis tests

Hypothesized effect	WRICE	Win/Lose	Disunity Loss
H1: Intra-party electoral competition reduces unity	Support	N/A	Support
H2: Federalism reduces unity	No effect	N/A	Support (re: stuff, not roll)
H3: Confidence vote increases unity	No effect	N/A	Reverse (re: stuff, not roll)
H4: Parliamentarism increases unity in governing parties	Support	Support	Support (re: stuff, not roll)
H5: Presidentialism decreases unity in governing parties	Support	Support	Support
H6: Agenda cartels prevent government-party rolls, even if not stuffs	No effect	No effect	No effect

Figure 1: Boxplot of WRICE indices by confidence vote and intra-party electoral competition.

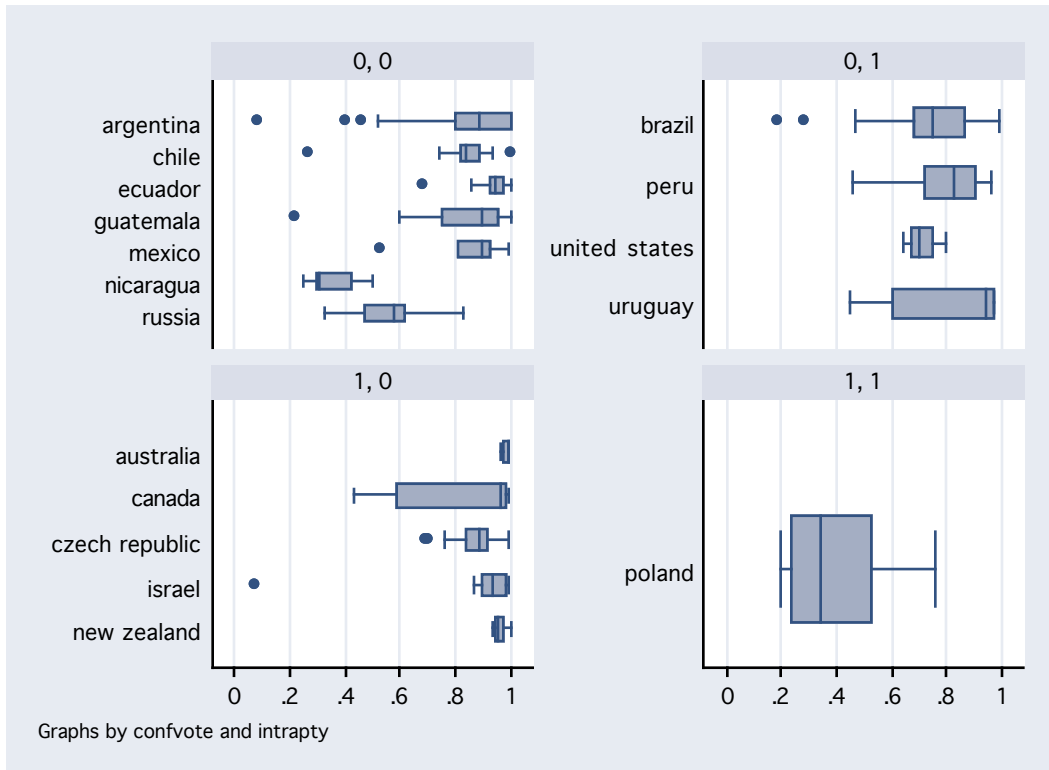Graphs by confvote and intrapty

Figure 2: Boxplot of RLOSER indices by confidence vote and intra-party electoral competition.

Graphs by confvote and intrapty