

**Getting Their Way, or Getting in the Way?
Presidents and Party Unity in Legislative Voting**

John M. Carey

Washington University
Department of Political Science
jmcarey@artsci.wustl.edu

July 29, 2002 Draft

Abstract

Scholars disagree on what effect, if any, presidential versus parliamentary government has on political parties. In this paper, I measure unity in parties on legislative votes for parties and coalitions in 20 legislative chambers in 18 countries. I then estimate the effects of both regime type and membership in government on parties on legislative voting unity. I find that presidentialism undermines party unity. Furthermore, within presidential systems, parties that control the presidency, and parties allied with the government, do not win any more than do opposition parties, and their losses are more apt to result from breakdowns in legislative voting unity.

Thanks: For research assistance, John Bunyan, Clara Luz, Connor Raso, Gina Reinhart, Sarit Smila, and Jeff Staton. For providing data, Mark Jones (Argentina), Fernando Limongi (Brazil), Daniel Munich (Czech Republic), Guillermon Garcia (Nicaragua), J. Mercik (Poland), Thomas Remington (Russia), Scott Morgenstern (Uruguay), Chris Kam (Australia, Canada, New Zealand). For assistance on field work, Leo Nuñez Arias and Rafael Villegas Antillón (Costa Rica), Margarita Seminario (Mexico City), David Holiday and Alex Chavarría (El Salvador), Guillermo García (Nicaragua). For comments on earlier drafts, Jeanne Giraldo, Michael MacDonald, Jeff Staton, Jeff Smith, and Jeff Weldon. For methodological counseling, Scott Desposato and Andrew Martin. Support for the research was provided by National Science Foundation grant (#SES-9986219).

For presentation at the American Political Science Association meetings, August 2002.

Introduction

Scholars of political institutions regularly make the claim that presidential and parliamentary systems produce different sorts of parties. The conventional wisdom is that parties in parliamentary systems are highly unified, whereas those in presidential systems are more fractious and less disciplined, and that one main product of this is difficulty for presidents in the legislative arena (Bowler, Farrell, and Katz 1999; Hix, Noury, and Roland 2002; Linz 1994; Mainwaring 1999; Shugart 1998). Recently, prominent scholars have countered that the difference between regimes on this count is not all it is cracked up to be. Based on a case study of Brazil, Figueiredo and Limongi (2000) argue that various presidential powers, especially control over the legislative agenda, can provide leverage to control wayward parliamentarians and govern as efficiently as parliamentary governments ostensibly do. Based on a broad crossnational study, Przeworski, Cheibub, and Saiegh (2002) argue that presidents are able to form coalitions and to pass legislation effectively.

In this paper, I address the question of what accounts for levels of party unity in legislative voting, for the rates at which parties win votes, and for their proclivity to lose votes they could have won because of breakdowns in party unity. To give away the store, I find that the conventional wisdom is correct. Presidentialism does undermine party unity. Moreover, within presidential systems, parties that control the presidency and parties allied with the government do not win any more than do opposition parties, and their losses are more apt to result from breakdowns in legislative voting unity. In short, although presidents may have lots of tools at hand to get their way, dominance over legislative parties is evidently not one of them.

In order to address the questions of presidentialism, control of government, and their relationships with legislative party unity, it is necessary to establish a means of comparing the phenomenon of interest across the cases examined here. I present two measures of party unity in legislative voting, as well as some methodological issues they raise. Then I present the empirical data, and show party unity indices based on recorded vote data from all 20 legislative chambers. Next, I draw on the dataset of voting unity indices, as well as other data pertaining to these legislatures, to test a range of hypotheses about levels of party voting unity, focusing primarily on regime type and membership in government. I present the results, and conclude.

2 measures of voting unity

I consider here two different measures of voting unity among legislative parties. The first is familiar to scholars of legislatures, and was developed by Stuart Rice (1925) nearly 80 years ago. Rice scores reflect levels of cross-voting among members of the same party, and are calculated as:

$$\text{RICE}_{ij} = \left| \% \text{Aye}_{ij} - \% \text{Nay}_{ij} \right| \text{ for party } i \text{ on vote } j.$$

Perscent 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 voting Aye and Nay) to one (all members who vote voting together).

The second measure is derived from RICE, but rather than measuring the general level of voting unity, it reflects whether a party suffers a loss on a given legislative vote

due to a breakdown of unity according to the RICE standard. R_{Loser} is calculated as follows:

$R_{Loser_{ij}} = 1$ IF:

- $PREF_{ij} = \text{Approve}$, AND $\text{Outcome}_j = \text{Reject}$, AND $(Y_{ij} + N_{ij}) + (Y_{\text{NOT}ij}) > \text{Approve}_j$, OR IF
- $PREF_{ij} = \text{Reject}$, AND $\text{Outcome}_j = \text{Approve}$, AND $(Y_{ij} + N_{ij}) + (N_{\text{NOT}ij}) < \text{Approve}_j$

where, for every vote, j :

- $\text{Approve}_j = \#$ of votes necessary to approve the measure
- $\text{Outcome}_j = [\text{Approve}, \text{Reject}]$

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

- $PREF_{ij} = [\text{Approve } (Y_{ij} > N_{ij}), \text{Reject } (N_{ij} < Y_{ij}), \text{No Preference } (Y_{ij} = N_{ij})]$

The intuition behind RICE scores is that unified parties more effectively influence policy than disunified ones. This intuition is formalized with respect to specific legislative votes in R_{Loser} . This measure identifies votes on which, *given how all other parties voted*, a party can be thought of as “losing” despite the fact that it could have prevailed had all its voting members voted together

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 ($N=1$) 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, R_{Loser} is calculated only for parties where $N > 2$. R_{Loser} 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 $N \leq 2$, 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 (Desposato 2002). The bias is more severe the smaller the party and the less inclined its members are to vote alike. The problem is that the probability of observing instances of high party unity (e.g. all voting Aye, or all Nay) is higher the fatter are the tails of the binomial distribution of the proportion of “alike” votes. The tails of the distribution are fatter when N is smaller and when the underlying probability of voting together is smaller. Observations in these tails reflect higher RICE unity than the underlying probability of voting alike would suggest, biasing the measure upward. The magnitude of the bias declines rapidly as party size and underlying cohesiveness increase.

Desposato’s (2002) analysis suggests that the potential bias in cohesiveness scores can be corrected by estimating deviance factors for RICE, which are functions of party size and the underlying proclivity of copartisans to vote together, then subtracting that factor from the RICE score.

The process I use is as follows. For any party_{*i*} on vote_{*j*}, one can calculate the proportions of legislators who vote together (T) with most of party, or who vote in dissent (D):

- T_{ij} = maximum [Aye, Nay], as a share of those voting,
- D_{ij} = minimum [Aye, Nay], as a share of those voting.

The RICE score is just $T_i - D_i$. The corresponding weighted and unweighted indices are summations of $T_i - D_i$. The indices, then, reflect estimates of the underlying probabilities cross-voting, or voting “against” the party, D_i . Based on Desposato (2002), I calculate the expected upward bias due to small party size in the RICE index for party i as:

$$\text{RICEdev}_i = D_i / N_i.$$

I then calculate “empirically corrected” index for each party by subtracting a party’s deviance factor from its index. The indices are “empirically corrected” because the estimates of underlying probabilities of D_i are based on the observations of behavior across all votes. The deviance factors grow as the probability of cross-voting (D_i) grows, and shrink as N_i grows. For expositional simplicity, I do not include the word “corrected” each time I refer to the corrected measure, but all indices presented in the paper are corrected for potential bias.

Nonvotes

Interpreting nonvoting is not as straightforward as interpreting Ayes and Nays. Some studies of recorded votes seek to interpret the *motivation* behind nonvotes, 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 action is twice as damaging to my party's prospects on the vote than the former.

In some legislatures, however, thresholds are set in absolute terms. 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, nonvotes – whatever their intent – are equivalent to Nays in their effect on outcomes. For the purposes of calculating RICE and RLooser, my point of departure is to treat them as such. The alternative of discounting nonvotes altogether is not viable, given that any legislator who does not like a measure – whatever its popularity or the position of her party – can oppose it as effectively by not voting as by voting Nay.

This is, admittedly, not a perfect solution, because parties may tolerate nonvoting by members who *could have* been mobilized, if necessary. A nonvoting equilibrium arrangement might be advantageous both to parties, 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 nonvotes as Nays will correctly code the votes of members who would have voted Nay, but will incorrectly code their counterparts.¹

To sum up, in calculating RICE and RLooser scores, I treat nonvotes 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 nonvotes under absolute, versus relative, majority voting rules, however, I replicate all the quantitative analyses reported in this paper dropping the two absolute majority cases: Russia and Nicaragua. Wherever this makes any difference to the results, I discuss it.

The RICE index: Weighting votes by CLOSEness

For any method of scoring unity on individual votes, it will be useful to create an index summarizing the overall tendency toward unity within a given party or coalition across a range of votes. The first problem that presents itself 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 indices. This would

¹ 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 nonvotes 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 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

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 (Cooper, Brady 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.

non-voting. In other work, I will attempt to estimate the extent of this problem and explore methods of addressing it.

This suggests an index calculated as follows:

$$WRice_i = \frac{\sum RICE_{ij} * CLOSE_j}{\sum CLOSE_j}$$

where

$$CLOSE_j = 1 - (1/THRESHOLD * |THRESHOLD - \%Aye|)^2$$

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 $RLoser$ is calculated directly with respect to outcomes (win, lose), I do not weight this measure, but simply report proportions – i.e. on how many votes, out of all votes taken, was a party an $RLoser$.

Cohesiveness vs. discipline: weighted vs. unweighted index scores

“Cohesiveness” and “discipline” are both frequently used to in reference to the voting unity within legislative parties, but it is important to keep in mind the conceptual distinction between the terms (Krehbiel 2000). The former refers to the degree to which the members of a group share similar preferences; the latter to the degree to which group leaders are able to elicit unified voting on the part of the group, regardless of member preferences. Unless there is reason to believe a particular pattern of voting behavior is caused by either cohesiveness or discipline, I use the more generic term, “unity,” to describe the proclivity of copartisan legislators to vote together. I rely on $WRice$ as a

²When 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

summary indicator of party unity, for the reasons stated above. However, it is worth noting that combining the unweighted index, URice (i.e. a party's mean of RICE scores) with WRice can provide leverage on whether it is cohesiveness among copartisans or discipline that accounts for the levels of unity we observe.

Consider first the “discipline-free” scenario. On votes that are consensual across an entire legislature, unity scores will necessarily be high for all parties. As votes diverge from consensus, low party unity scores become possible. Disunity within parties is still not necessary, because lack of consensus at the level of the legislature could be the product of conflict among unified parties, but the presence of dissenting votes at the assembly level allows for the prospect of internal party disunity. The more hotly votes are contested in the legislature overall, the more “room” there is, arithmetically, for disunity within parties. Thus, RICE scores are lower as CLOSE increases, and in the discipline-free scenario, WRice is lower than URice.

Now consider the scenario with party discipline – that is, where party leaders are able to compel their legislators to vote together. RICE scores are still high on consensual votes, by definition. Where votes are moderately contested, there is the potential for disunity within parties. But as votes approach toss-ups (i.e. as CLOSE approaches 1.0), such that pre-vote head counts suggest that a handful of switched votes one way or the other could turn the outcome, party leaders should be increasingly inclined to impose discipline. Thus, where discipline, as opposed to generic cohesiveness, accounts for

passage requires an extraordinary majority, the more general formula still applies. This form of the general equation was suggested to me by Jeanne Giraldo.

levels of unity, we should observe higher RICE scores as CLOSE rises, and therefore higher ratios of WRice to URice.³

The discipline-free scenarios is illustrated by Party A, and the disciplined scenario by Party B for RICE scores and indices across six votes in a hypothetical 300-member legislature, in Table 1. In Party A, RICE declines as votes are contested more closely at the level of the legislature as a whole; thus, the weighted index is substantially lower than the unweighted. Party B experiences divisions on the moderately contested votes, but pulls together increasingly on closer votes, with the effect that its weighted index is higher than its unweighted. Party C experiences only one small instance of dissent on a lopsided vote, such that its weighted index, too, is higher than its unweighted, but not as dramatically

[Table 1]

A relevant statistic, then, is the ratio between WRice and URice. It is worth noting that the ratios are not necessarily related to overall levels of party unity. It is theoretically possible that whatever unity we observe is unrelated to a copartisans' particular proclivity to fall into line on close votes more than on others. That is, we might observe:

³ Groseclose and Snyder (2000) use a variation on this insight to gain leverage on the cohesiveness-vs.-discipline debate on roll call voting in the US Congress. They suggest that, whatever levels of dissent are evident in lopsided votes should nevertheless contain information about legislators' unconstrained policy preferences (and so, about cohesiveness), whereas party leaders' interest in imposing discipline should go to zero on votes that are not expected to be close long before they reach unanimity. On these premises, Groseclose and Snyder calculate ideology scores for individual legislators based exclusively on lopsided votes, then use these to test for the presence of party discipline on close votes.

- high levels of cohesiveness with low ratios – the party is generally unified, but what breaches there were occurred when they most mattered, on close votes, driving the weighted indices down relative to unweighted ones; or
- low cohesiveness with high ratios – pervasive internal dissent, but the party pulls together more on close votes than on lopsided ones, driving weighted indices up relative to unweighted ones.

as well as more intuitive combinations.

Across the cases examined here, it turns out that weighted indices tend to be slightly lower than unweighted, but there is substantial variance. The mean WRice:URice ratio is .94 (Std.Dev. = .12). To determine whether discipline, over and above generic cohesiveness among copartisans, contributes to high unity, I examine correlations between parties' ratios and their basic levels of voting unity. The correlation with the ratio is stronger for WRice (.65) than for URice (.23). Ratios are lower among less unified parties and higher among more unified parties. As unity rises overall, increases in WRice outstrip those in URice. In English, this means that among the more unified parties, the proclivity to vote with one's copartisans is more pronounced on close votes, precisely when party leaders should be watching. This is consistent with the idea that more unified parties are that way at least in part due to discipline, not just innate cohesiveness.

The empirical data: Useful and not-so-useful samples of votes

There is substantial variance across the legislatures for which I have voting data in the overall tendency toward consensus or contestation in votes. 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 ended before votes come to the floor. The total number of votes, along with properties of the corresponding CLOSE scores for the cases examined in this paper are shown in Table 2.

[Table 2]

Mean CLOSE scores summarize the extent to which an “average” voted was contested for each case. Votes were most narrowly won in New Zealand, with a number of other systems close behind. In Mexico, Chile, and Israel, there were enough consensual votes to depress mean CLOSE scores somewhat, but fortunately there are large numbers of votes from these cases, including many hotly contested ones.

The real outliers with regard to mean CLOSE are the Philippine House and Senate, where large numbers of recorded votes turned up virtually no close calls on the floor. Most votes were unanimous, and those that were not were close to it. The sum of CLOSE scores from 147 House roll calls was a mere 2.67; for 525 Senate roll calls, 0.88. In a sense, then, the “effective” number of votes on which weighted indices from either chamber would be based is miniscule, undermining confidence that the index tells us anything important about Philippine legislative behavior and suggesting that the action in the Philippine Congress does not take place on the floor. Because of the lack of real contestation in the Philippine votes, I present those indices initially, for comparison alongside the others, but I do not include them in subsequent analysis.

For related reasons, I do the same thing with the indices from Costa Rica. Although the votes I have are closely contested, an exhaustive search of the Costa Rican legislative archive turned up only 17 recorded votes over the entire 1967-2000 period. Votes are recorded only upon special petition approved by a majority of those present (*Reglamento de la Asamblea*, Art.101). Whatever rare conditions trigger recorded votes are unlikely representative of normal legislative behavior.

Finally, note that with the Philippine Senate dropped, the U.S. Senate is the only upper chamber remaining in the dataset. Note also how closely patterns of voting unity in the U.S. Senate resemble those in the House. Therefore, in order to avoid double counting the U.S. case relative to others, and in the interest of consistency across cases, I drop the U.S. Senate from the statistical models as well.

Indices of party unity in 20 legislatures

Table 3 shows the mean values across parties of the WRice and RLooser indices for 20 legislative chambers in 18 countries. Data from across various legislative periods, where relevant, are pooled, such that summary statistics for each chamber are shown. The cases are rank ordered by level of voting unity – in descending order for mean WRice, and in ascending order for mean RLooser. Those cases for which there is reason to be skeptical about the nature of the samples of available votes are shown in the lower panel. The absolute majority threshold cases are also marked, and both Russian and Nicaraguan parties have low average WRice indices. Nicaragua also has a high RLooser average, but note that Russian parties lost no votes they might have won but for cross-voting, even when nonvotes are counted as Nays.

[Table 3]

At the level of individual parties, across all the cases, the correlation between WRice and RLooser (-.34) is negative, indicating that losses due to cross-voting are more common among parties where cross-voting is more prevalent, as one would expect.

Explaining party unity

Explanations of party unity differ in whether they rely on factors that vary across parties within legislative chambers, or are based on characteristics of legislatures as wholes. The former tend to focus on qualities of particular parties – their size, relationship to the executive, or bargaining strength relative to other parties. The latter type tend to focus on institutional qualities of political systems, such as constitutional design or electoral rules. There are president-based accounts of party unity that fall into both categories. Shugart (1998) and Linz (1994) argue that presidentialism, as a regime type, is conducive to disunity in legislative parties. In contrast, and Amorim Neto (2002), Siavelis (2002), and Weldon (2002) focus on the authorities of the presidency, emphasizing that the resources associated membership in government can elicit unity in legislative parties. The two types of explanations need not be mutually exclusive. Parties in presidential regimes may differ generically from those in parliamentary regimes, and specific properties of parties' within their political systems might exercise an additional, marginal effect on unity.

A first glance at the data on legislative party voting unity reveals support for the systemic level hypothesis that regimes with presidencies differ from those without. Figures 1 through 4 are boxplot graphs illustrating the spread, as well as the central tendency, of WRice and RLooser, for the “good” data cases. Regimes with presidents are shown separately from the pure parliamentary systems. The difference between the presidential and non-presidential systems is striking. The parliamentary systems have compact spreads and scores that indicate high party unity (high WRice, low RLooser); the regimes with presidencies have much fatter spreads and the central tendencies are all over the place.

[Figures 1 & 2]

System-level explanations

The boxplots suggest that presidentialism undermines legislative party unity at the level of the political system. The first two models in Table 4 show the results of OLS regressions of the means for both indices of voting unity on a dummy variable scored 1 if the regime has a popularly elected president, 0 otherwise, across all sixteen chambers for which there are good samples of votes. The coefficient on the constant term is the expected value of the index in parliamentary systems, and the coefficient on the President variable is the expected marginal effect of presidentialism on that value. In Model 1, the estimated negative effect of presidentialism on WRice is more than twice the standard deviation of the WRice index for parliamentary systems. Of 47 parties in parliamentary systems for which I calculate WRice, only three had WRice indices lower than the

expected value for presidential systems. These were the the LSU and LSNS in the Czech Republic's first post-transition parliament, and Canada's Progressive Conservatives, whose nomenclature appears to have captured their approach to parliamentary voting during the 1994-1997 period.

[Table 4]

On RLooser, shown in Model 2, the coefficient is in the expected direction, positive, but falls short of statistical significance. Model 3 reestimates the effect of presidentialism on WRice, but dropping the Nicaraguan and Russian cases, where absolute threshold requirements undermine confidence in the validity of the index. The coefficient on President remains negative and significant.

The other candidates for system-level effects on WRice and RLooser I consider are:

- the age of the regime,
- whether the system is federal,
- whether the survival of the cabinet depends on parliamentary confidence, and
- whether the electoral system provides for intraparty competition among candidates,

It is plausible that the content of party reputations would be subject to greater contention in the earlier years of a regime than later on, and so that regime age (or, more likely, the log of this number, if there are diminishing returns to age) would have a positive effect on voting unity. There are also arguments that the regional organization of parties in federal systems can project regional conflicts onto national-level parties,

undermining unity (Mainwaring 1999; Ames 2002). There is no support for either of these hypotheses across the sixteen cases considered here.

The confidence vote hypothesis warrants more comment. Arguments that distinguish between presidential and parliamentary systems frequently hinge on the logic of the confidence vote. That is, the main imperative for legislative party unity in parliamentary systems is regarded as the need to maintain the cabinet in office (Bagehot 1872; Cox 1987; Diermeier and Feddersen 1998; Huber 1996). Yet the confidence vote provision is not restricted to pure parliamentary systems. The best known case combining a confidence vote provision with a more-than-ceremonial elected presidency is France, but such hybrid arrangements are common among newer regimes.

Theoretically, then, it ought to be possible to distinguish between the confidence vote provision and the simple existence of an elected president as an explanation for legislative party unity. In this sample, however, the only such hybrid case included is Poland, which means that the factors are strongly correlated (-.87), so both variables cannot be included in the same regression without hazard of multicollinearity.⁴ Poland, moreover, happens to be a low-unity case, singlehandedly depriving the Confidence Vote variable of a measurable effect on WRice in a system-level model. (That is, dropping the Polish case, Confidence Vote is positive and significant.) To sum up, the data here suggest that, among system-level variables, it is the presence of an elected president that

⁴ Constitutionally fluent readers will note that the Russian and Peruvian charters also allow confidence votes on cabinets or individual ministers. In both cases, however, the president may ignore votes of no-confidence and retain the cabinet unchanged. Only if the legislatures insist by repeating the no-confidence vote do these constitutions require the removal of the cabinet. And should the Russian or Peruvian legislature cross this Rubicon, the respective presidents have the option of simultaneously dissolving the legislature and calling new elections. Given the restrictions in these two systems, I do

mucks up legislative party unity, rather than the absence of a confidence vote procedure. But this distinction, given the data here, is driven by the Polish case, so it must be regarded cautiously. In particular, more data and more research on hybrid regimes will help to disentangle the president-versus-confidence vote question.

There is a similar problem disentangling the effects of presidentialism from those of electoral systems. Electoral rules that force legislators to compete against copartisans for preference votes generate greater incentives for disunity than where party leaders exercise greater control over which of a party's candidates are elected (Ames 1995; Cain, Ferejohn, & Fiorina 1987; Carey and Shugart 1995). We might expect, therefore, that systems with intraparty electoral competition would exhibit lower WRice indices and higher RLooser on the whole.

Model 4 in Table 4 shows the results of regressing WRice on President and Intraparty Competition across the set of sixteen cases. The coefficient on President remains negative and significant (albeit, only at .08), and that on Intraparty Competition is not discernable from zero. Neither is Intraparty Competition significant when President is not included in the regression (not shown). The effect of Intraparty Competition, however, is particularly sensitive to dropping Russia and Nicaragua, the absolute majority cases, both of which have low mean WRice indices. Model 5 repeats the regression from Model 4, dropping these two cases. The size and significance of the coefficient on President decrease, while they increase for Intraparty Competition. The instability of the coefficients, is a product of multicollinearity. President and Intraparty Competition are positively correlated, which is to say that many of my presidential

not code them as having effective confidence votes. Adopting the opposite code, however, does not change the results.

systems have intraparty competition, but the parliamentary cases do not. The problem is most pronounced when Russia and Nicaragua are absent from the dataset (correlation at .56, sig.=.04), because both are presidential, but *without* intraparty competition.

With respect to the system-level explanations, we can sum up as follows. First, WRice is much lower in presidential than in parliamentary systems. RLoser is higher, but the effect is not statistically significant. Alternative system-level explanations do not fare well, on the whole. Neither federalism nor regime age shows any effect on party voting unity. All analysis at the system level faces the obstacle of small sample size, however.⁵ The ineffectiveness of the Confidence Vote variable is driven largely by the Polish case. The effect of Intraparty Competition is sensitive to the inclusion of Russia and Nicaragua. Therefore, although it is clear that party unity is lower in presidential systems, the results here suggest caution before rejecting the alternative explanations out of hand.

Party-level explanations

Party-level explanations offer potentially greater statistical leverage than system-level explanations because the number of observations is multiplied by the number of parties in each system. On the other hand, it is not appropriate to include system-level variables alongside party-level ones in estimating such models because the number of observations on each system-level variable would effectively be “multiplied” to the total number of party-level observations, despite the fact that the system-level factors are constant across parties within each regime. The statistical effect would be to reduce the

⁵ Collecting and standardizing enough legislative vote data to produce even 16 observations is a daunting task.

standard errors on the system-level variables and inflate estimates of their significance. My solution is to create a variable that interacts the effect of the one effective system-level variable – President/No-President – with the party-level factors. This allows me to determine whether party-level effects operate differently in presidential, as opposed to parliamentary, systems.

A related issue is that a large amount of the system-level variance in the unity indices – indeed, most of it – is not accounted for by the system-level model. In concrete terms, party unity in Brazil is different from that in Argentina for lots of reasons idiosyncratic to both Brazil and Argentina. Throwing observations from both countries into the same model without further controls would force the parameter estimates to absorb that variance, undermining the efficiency of the model. My solution is to include a dummy variable for every country in the model (save one, which becomes the point of reference). The coefficients on the country dummies indicate the difference between each and the reference country, allowing the remaining variables in the model to isolate completely the marginal effects of party-level factors.⁶

The party-level factors examined include the party's age, its share of seats in the legislative chamber, whether it was a part of the government, and whether it held the presidency. The Party Age variable is the log of years since the party's founding, and the rationale is analogous to that for Regime Age – that the more established a party's reputation, the greater the value of the reputation, and thus the greater the incentive to

⁶ It is worth emphasizing that including the absolute threshold cases together with the relative threshold cases in the party-level models presents no problem, because the difference in legislative procedure, and any effects this has on the size of the unity indices, are among the country-specific idiosyncracies picked up by the country dummy variables in the model. In any event, the results of the fixed effects models are entirely robust to whether Russia and Nicaragua are included or dropped.

maintain it through legislative voting unity (Stokes 2001). However, Party Age does not turn up significant in any specification, so I do not include it in the analysis presented in Table 5.

The logic of the Seat Share variable depends on the model. When the dependent variable is one of the weighted unity indices, expectations are less than firm. Parties that encompass a larger share of their chambers may also 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). In the event, Seat Share shows no systematic effect on WRice, so it is dropped from those models. When the dependent variable is a measure of parties' ability to win votes, however, the importance of Seat Share is self-evident.

The relationship between the Government Party and President's Party variables warrants explanation. Each is a dummy coded 1 if the party holds at least one cabinet portfolio (in the case of GovParty) or the presidency (in the case of PresParty), 0 otherwise. In parliamentary systems, this is straightforward. In presidential systems, the relationship between a Government Party and President's Party is usually straightforward, but not always. Most often, the president's party is the only party in government, but there are exceptions. In Poland, 1996-1997, for example, the President Kwasniewski's SLD was in opposition to a Solidarity-led cabinet. In Russia 1996-1997, President Boris Yeltsin had no party affiliation. In other presidential systems, such as Brazil and Chile, presidents' parties are members of governments in coalition with other parties that also hold portfolios. Thus, there are two variables of interest. Government

Party takes observations for all parties under analysis. President's Party is coded only for parties in presidential systems, and takes missing values for all parties in parliamentary systems. The two variables are strongly correlated (.76, sig.=.00), so cannot be included in the same regressions. I use Government Party for models that include results from both presidential and parliamentary systems, and use President's Party to check the robustness of the results for the smaller subset of presidential cases.

The literature on both presidentialism and parliamentarism suggests that membership in government should be an asset to party unity. Membership in government, or control of the presidency, provides party leaders with enormous resources with which to influence legislators, from control over budgetary allocations to access to perks and appointed positions to procedural control over the legislative agenda (Figueiredo and Limingi 2000; Laver and Shepsle 1996). The results from this analysis, however, suggest that the effect of participation in government differs in presidential from parliamentary systems.

In the models in Table 5, the Argentina dummy is dropped from the regressions, so the rest of the country coefficients indicate the expected difference on their respective indices from Argentine parties.

[Table 5]

The first model shows that, beyond the negative effect of presidentialism as a regime type, there is no marginal effect on WRice of being in government. The coefficient on the Government Party variable shows the estimated effect for

parliamentary systems, while the coefficient on GovParty*Presidential shows the difference between government parties in presidential systems relative to those in parliamentary systems. In Model 1, on WRice, the coefficient on Government Party is positive, but not larger than its standard error, and that on GovParty*Presidential is negative, but also not significant. In short, there is no discernible difference between parties inside or outside of government, nor between presidential and non-presidential parties (not shown) in terms of overall levels of cross-voting.

So far, then, we know that parties are less unified in presidential systems, but not much about what accounts for differences in voting unity within regimes. The story gets more interesting when we turn from the overall index of voting unity to the effects of unity breakdowns on winning and losing votes. First, consider overall “batting averages” – the percentages of votes on which parties vote on the winning side. In Model 2, Percent Won is the dependent variable. As expected, the coefficient on Seat Share is positive and significant. For every additional percentage of chamber seats a party holds, its expected batting average rises by half a point. The coefficient on GovtParty shows that, in parliamentary systems government parties win at a much greater rate than do opposition parties – 28% more, over and above the effects of Seat Share. The coefficient on GovtParty*Presidential shows that this entire advantage is wiped out for government parties in presidential systems. The non-effect is the same when comparing presidential parties with non-presidential parties just among the presidential cases; the coefficient on President’s Party is not discernable from zero (not shown). In terms of batting averages then, there is a clear advantage to being in government in parliamentary systems, but none in presidential ones.

Why are government parties in presidential systems not better at the plate?

Models 3 and 4 show that a substantial share of their losses is attributable to breakdowns in unity – cross-voting, in particular – which in presidential systems is systematically higher for parties inside government than outside. In the models with R_{Loser} is the dependent variable. I control for Percent Votes Won, on the grounds that only parties who win votes stand to lose them through breakdowns in unity, and for Seat Share, because a split within a larger party should be more likely to reverse a vote outcome than the same split in a smaller one.

Model 3 shows that being in government in parliamentary systems (Government Party) has no marginal effect on a party's tendency to lose votes it could have won due to cross-voting. Parties in government in presidential systems (GovParty*President), on the other hand, lose due to cross-voting much more frequently than government parties in parliamentary systems, and indeed, much more than non-government parties, period. Model 4 replicates the result for presidential parties. Again, parties' R_{Loser} rates rise along with Seat Share. Even controlling for this, presidential parties expected R_{Loser} rates are 1.5% above those for opposition parties.

Put in perspective against the raw rates of R_{Loser} , these results are even more stark. The mean R_{Loser} rate across all parties in presidential systems is 2.3%. For parties that do not control the presidency, it is 1.5%, but for presidential parties it is 5.8%. Presidential parties are almost four times as likely to lose votes because of cross-voting than are other parties. Much of the difference in the raw figures is due to the fact that presidential parties tend to be bigger than others, and splits in big parties affect vote outcomes more than splits in small parties, but the multivariate analysis controls for this.

More than one third of the difference in RLooser rates is due not to a party's share of seats or its overall batting average (or to any of the idiosyncracies of particular countries, which are also controlled in the fixed effect model), but to holding the presidency. Presidential parties don't win any more than opposition parties. When they lose, moreover, it is often because of disunity.

Conclusion

The conventional wisdom about parties in presidential systems is correct. They are less unified in their voting than parties in parliamentary systems, and it matters to who wins and loses in the legislature. This is, to my knowledge, the first time the effect has been measured empirically across a large number of cases, but the result will come as no surprise to many scholars of comparative institutions.

The more surprising result here is that, within presidential systems, control over the executive is a liability, rather than an asset, to legislative party voting unity. Government parties in presidential systems, and presidential parties themselves, do not win votes at any greater rate than other parties, and the losses they endure are highly likely – much more than for other parties – to be the result of 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 substantially more often because of splits within its ranks.

The effect is particular to presidential systems. Parties in government in parliamentary systems face no analogous voting unity penalty. That is, in parliamentary systems the rate at which parties lose votes due to cross-voting, controlling for country-

specific effects and baseline winning percentages, is no different among parties with cabinet portfolios than for those without.

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. Presidents' parties, and the parties that are allied with them, 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. More startling, the presidency actually undermines discipline in important ways.

Why might the presidency present a liability to party unity? A thorough explanation is beyond the scope of this paper, but I will engage in brief speculation. Perhaps presidents are disruptive because they present a potentially competing source of directives against those of party leaders within the legislature. That is, legislative party leaders in non-government, non-presidential, parties face no competitors in coordinating the actions of their troops. Presidents, in this sense, represent potentially competing principals for legislator loyalty – alternative poles to which they might be drawn. 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 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.

References

- Ames, Barry. 1995. "Electoral Strategy under Open-List Proportional Representation." *American Journal of Political Science* 39(2):
- Ames, Barry. 2002. "Party Discipline in the Chamber of Deputies." *Legislative Politics in Latin America*. Scott Morgenstern and Benito Nacif, eds. New York: Cambridge University Press:185-221.
- Amorim Neto, Octavio. 2002. "Presidential cabinets, electoral cycles, and coalition discipline in Brazil." Scott Morgenstern and Benito Nacif, eds. *Legislative Politics in Latin America*. New York: Cambridge University Press: 48-78.
- Bagehot, Walter. 1872. *The English Constitution*. Garden City, N.Y., Doubleday [1961].
- Bowler, Shaun, David M. Farrell, and Richard S. Katz. 1999. "Party Cohesion, Party Discipline, and Parliaments." *Party Discipline and Parliamentary Government*. Columbus, OH: The Ohio State University Press.
- Brady, David W., Joseph Cooper, and Patricia A. Hurley. 1977. "The Electoral Basis of Party Voting: Patterns and Trends in the U.S. House of Representatives." Louis Misel and Joseph Cooper, eds. *The Impact of the Electoral Process*. Beverly Hills: Sage.
- Cain, Bruce, John Ferejohn, and Morris Fiorina. 1987. *The Personal Vote: Constituency Service and Electoral Independence*. Cambridge: Harvard UP.
- Carey, John M. and Matthew S. Shugart. 1995. "Incentives to Cultivate a Personal Vote: A Rank Ordering of Electoral Systems." *Electoral Studies* 14(4):417-440.
- Cheibub, José Antonio, Adam Przeworski, and Sebastian Saiegh. 2002. "Government coalitions and legislative effectiveness under presidentialism and parliamentarism." Midwest Political Science Association conference paper.
- Cox, Gary W. 1987. *The Efficient Secret*. New York: Cambridge UP.
- Cox, Gary W. and Mathew D. McCubbins. 1993. *Legislative Leviathan: Party Government in the House*. Berkeley: University of California Press.
- Diermeier, Daniel and Timothy J. Feddersen. 1998. "Cohesion in Legislatures and the Vote of Confidence Procedure." *American Political Science Review* 92(3):611-622.
- Desposato, Scott. 2002. "Correcting for bias in roll call cohesion scores." Working paper.

- Figueredo, Argelina Cheibub and Fernando Limongi. 2000. "Presidential Power, Legislative Organization, and Party Behavior in Brazil." *Comparative Politics* 32(2):151-170.
- Haspel, Moshe, Thomas F. Remington, and Steven S. Smith. 1998. "Electoral institutions and party cohesion in the Russian duma." *Journal of Politics* 60(2):417-439.
- Hix, Simon, Abdul Noury, and Gerard Roland. 2002 (March). "A 'normal' parliament? Party cohesion and competition in the European Parliament, 1979-2001." Presented at the annual meetings of the Public Choice Society (San Diego).
- Huber, John. 1996. "The Vote of Confidence in Parliamentary Democracies." *APSR* 90(2) June: 269-282.
- Hurtado Cabrera, Carlos. 2000. Interview with author. Managua, Nicaragua. August 21.
- Jones, Mark P. 2002. "Explaining the high level of discipline in the Argentine Congress." Scott Morgenstern and Benito Nacif, eds. *Legislative Politics in Latin America*. New York: Cambridge University Press: 147-184.
- Krehbiel, Keith. 2000. "Party Discipline and Measures of Partisanship." *AJPS* 44(2):212-227.
- Laver, Michael and Kenneth Shepsle. 1996. *Making and Breaking Governments: Cabinets and Legislatures in Parliamentary Democracies*. New York: Cambridge UP.
- Linz, Juan J. 1994. "Presidentialism or Parliamentarism: Does It Make a Difference?" Juan J. Linz and Arturo Valenzuela, eds. *The Failure of Presidential Democracy*. Baltimore: The Johns Hopkins University Press:1-87.
- Mainwaring Scott P. 1999. *Rethinking Party Systems in the Third Wave of Democratization: The Case of Brazil*. Stanford, CA: Stanford University Press.
- Mainwaring Scott P. and Aníbal Pérez Liñán. 1997. "Party Discipline in the Brazilian Constitutional Congress." *Legislative Studies Quarterly* 22(4):453-483.
- Rice, Stuart A. 1925. "The Behavior of Legislative Groups." *Political Science Quarterly* 40:60-72.
- Shugart, Matthew S. 1998 (January). "The inverse relationship between party strength and executive strength: A theory of politicians' constitutional choices." *BJPS* 28:1-29.

Snyder, James M. and Tim Groseclose. 2000. "Estimating Party Influence in Congressional Roll-Call Voting." *AJPS* 44(2):193-211.

Stokes, Susan C. 2001. *Mandates and Democracy: Neoliberalism by Surprise in Latin America*. New York: Cambridge University Press.

Weldon, Jeffrey A. 2000. "Voting in Mexico's Chamber of Deputies." Latin American Studies Association conference paper.

Table 1. Weighted and Unweighted UNITY indices in a hypothetical legislature.

Tally [Aye, Nay]	CLOSE	Party A		Party B		Party C	
		Tally	RICE	Tally	RICE	Tally	RICE
[270, 30]	.2 1-2* .5-1	[100, 0]	1.0	[80, 20]	.6	[90, 10]	.8
[270, 30]	.2 1-2* .5-.9	[90, 10]	.8	[80, 20]	.6	[100, 0]	1.0
[240, 60]	.4 1-2* .5-.8	[80, 20]	.6	[60, 40]	.2	[100, 0]	1.0
[210, 90]	.6 1-2* .5-.7	[70, 30]	.4	[40, 60]	.2	[100, 0]	1.0
[180, 120]	.8 1-2* .5-.6	[60, 40]	.2	[20, 80]	.6	[100, 0]	1.0
[150,150]	1.0 1-2* .5-.5	[50,50]	0.0	[0,100]	1.0	[100,0]	1.0
WRice		.31		.60		.99	
URice		.50		.53		.97	
WRice:URice ratio		.62		1.32		1.02	

Table 2. Recorded vote data

Country	Chamber	# Votes	Σ CLOSE	Avg. CLOSE	Dates, Assemblies (# votes)	Source
Czech Republic	Lower	9808	4202.86	0.43	January 1993 – June 1996; (5,067) July 1996 – December 1998 (4,741)	Daniel Munich & Elena Mielcova
United States	Lower	4473	2618.72	0.59	January 1991 – October 1998	Keith Poole
	Upper	2803	1641.42	0.59	January 1991 – October 1998	
Poland	Lower	3045	1226.34	0.40	October 1997 – May 1999	J. Mercik & W. Dobrowolski
Peru	Unicameral	1124	717.00	0.56	March 1999 – June 2000; (689) August 2000 – December 2000 (332) August 2001 – October 2001 (103)	Author
New Zealand	Unicameral	777	528.93	0.68	November 1990 – August 1993 (592) December 1993 – November 1994 (185)	Christopher Kam & Author
Brazil	Lower	675	426.2	0.63	January 1989 – December 1990 (57) March 1991 – January 1995 (166) March 1995 – December 1998 (452)	A. Figueireido & F. Limongi
Nicaragua	Unicameral	693	417.39	0.62	January 2000 – September 2000	Author (& Guillermo Garcia)
Canada	Lower	735	395.81	0.54	May 1994 – Dec 1995 (402) February 1996 – April 1997 (333)	Christopher Kam & Author
Australia	Lower	457	307.95	0.67	May 1996 – July 1998	Christopher Kam & Author
Chile	Lower	737	228.06	0.31	May 1997 – January 1998 (215) October 1998 – May 2000 (522)	Author, & Scott Morgenstern
Russia	Lower	356	197.07	0.55	January 1996 – May 1997	Thomas Remington
Israel	Unicameral	386	155.18	0.41	October 1999 – December 1999	Author (& Sarit Smila)
Mexico	Lower	299	113.24	0.38	October 1998 – April 2000	Author & Jeffrey Weldon
Argentina	Lower	103	69.07	0.67	1989-91	Mark P. Jones
Uruguay	Joint	63	38.02	0.603	October 1985 – November 1989 (41) December 1990 – August 1994 (22)	Scott Morgenstern
Guatemala	Unicameral	59	33.37	0.57	December 1994 – April 2000	Author (& Clara Luz)
Costa Rica	Unicameral	17	10.03	0.59	January 1967 – May 2000	Author
Philippines	Lower	147	2.67	0.02	July 1995 – April 1997	Author
	Upper	525	0.88	0.00	October 1995 – February 1998	

Table 3. Rank order of cases by mean WRice and RLooser indices.

	mean WRice		mean RLooser
Australia	.99	Australia	.000
New Zealand	.96	Canada	.000
Israel	.95	Guatemala	.000
Mexico	.91	Russia ^a	.000
Argentina	.88	Israel	.002
Canada	.87	Czech Republic	.004
Czech Republic	.87	Peru	.006
Guatemala	.84	Mexico	.008
Chile	.81	Chile	.011
Peru	.79	Brazil	.012
Uruguay	.79	Argentina	.017
Brazil	.75	New Zealand	.022
United States H.R.	.71	Poland	.024
United States Sen.	.69	Uruguay	.026
Russia ^a	.55	Nicaragua ^a	.060
Poland	.37	United States H.R.	.100
Nicaragua ^a	.35	United States Sen.	.139
<i>“Bad” sample cases</i>			
Philippines Senate	.87	Costa Rica	.000
Costa Rica	.81	Philippines House	.000
Philippines House	.68	Philippines Senate	.000

^a Absolute majority threshold systems. Nonvotes are coded as Nays.

Table 4. System-level models: The effects of presidentialism on voting unity index means across 16 legislatures.

<i>Independent variables</i>	Model 1	Model 2	Model 3	Model 4	Model 5
	<i>Dependent variables</i>				
	WRice	RLooser	WRice	WRice	WRice
Constant	.93*** (.07)	.006 (.011)	.93*** (.06)	.93*** (.08)	.93*** (.05)
President	-.22** (.09)	.018 (.014)	-.17** (.07)	-.20* (.10)	-.07 (.08)
Intraparty Competition				-.04 (.10)	-.18** (.08)
Adjusted R2	.25	.05	.23	.20	.44
	N=16	N=16	N=14	N=16	N=14

*** sig. > .01

** sig. > .05

* sig. > .10

Table 5. Party-level models of legislative voting unity indices.

<i>Independent Variables</i>	Model 1	Model 2	Model 3	Model 4
	<i>Dependent Variables</i>			
	WRice	% Won	RLoser	RLoser
Government Party	.03 (.05)	.28*** (.06)	-.004 (.006)	
Government Party * Presidential	-.05 (.06)	-.25*** (.07)	.020*** (.007)	
President's Party				.015** (.006)
Seat Share		.53*** (.14)	.42*** (.13)	.058*** (.019)
% Votes Won			.001 (.007)	.007 (.009)
Argentina	dropped	dropped	dropped	dropped
Australia	.08 (.12)	-.06 (.15)	-.007 (.012)	
Brazil	-.13 (.09)	.17 (.12)	-.007 (.010)	.012 (.011)
Canada	-.03 (.11)	-.09 (.14)	-.008 (.012)	
Chile	-.07 (.09)	.28** (.12)	-.003 (.011)	.003 (.012)
Czech Republic	-.03 (.09)	.11 (.12)	.002 (.010)	
Guatemala	.04 (.11)	-.09 (.13)	-.010 (.012)	-.008 (.013)
Israel	.05 (.10)	-.02 (.13)	-.001 (.011)	
Mexico	.02 (.11)	.25* (.14)	-.002 (.012)	-.002 (.013)
New Zealand	.06 (.11)	-.21 (.14)	.006 (.013)	
Nicaragua	-.54*** (11)	.21 (.14)	.047*** (.012)	.047*** (.014)
Peru	-.10 (.09)	.17 (.12)	.000 (.010)	-.002 (.012)
Poland	-.51*** (.10)	.41*** (.13)	.015 (.011)	.017 (.013)
Russia	-.34*** (.10)	.42*** (.13)	-.004 (.011)	-.003 (.013)
United State H.R.	-.17* (.10)	.00 (.13)	.072*** (.011)	.068*** (.012)
Uruguay	-.09 (.11)	.19 (.13)	.010 (.011)	.009 (.012)
Constant	.89*** (.09)	.41*** (.11)	-.002 (.010)	-.009 (.012)
Adj.R2	.51	.40	.70	.70
N	160	162	146	113

*** sig.>.01
 ** sig.>.05
 * sig.>.10

Figure 1. WRice indices in parliamentary and presidential regimes.

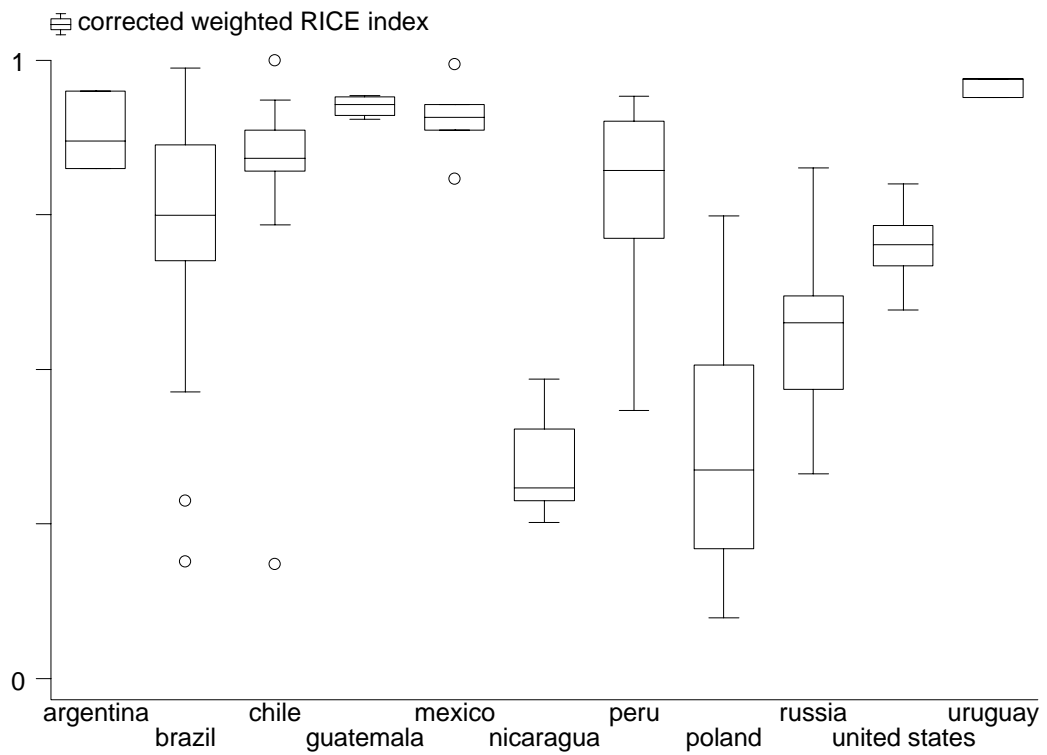
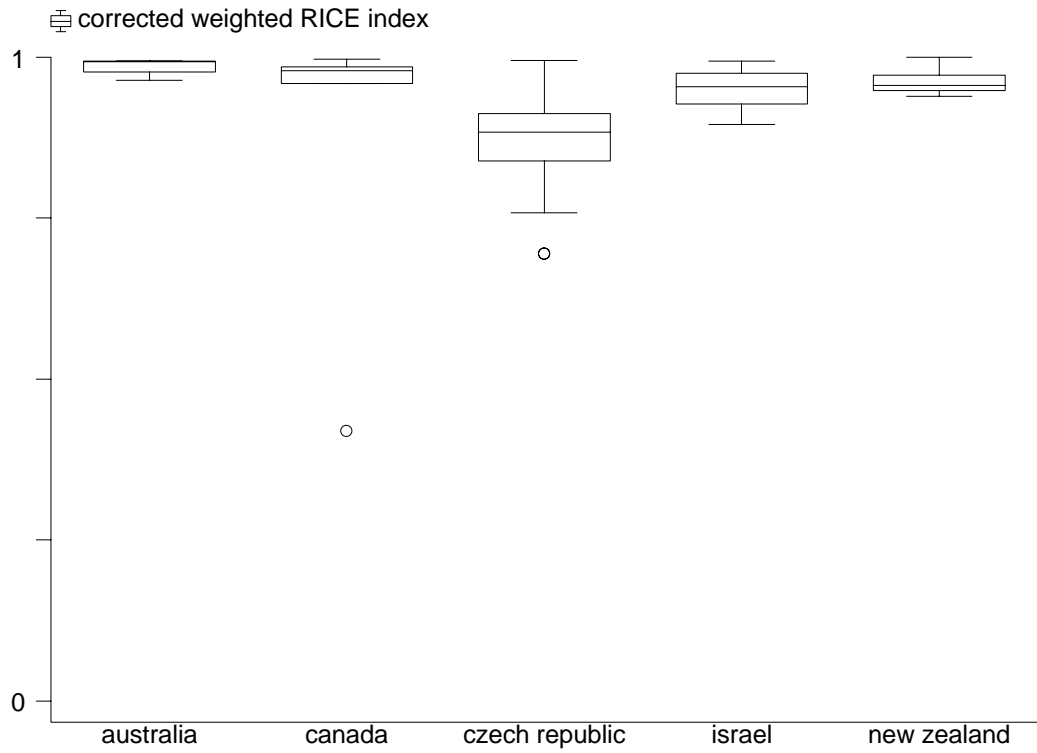


Figure 2. RLooser rates in parliamentary and presidential regimes.

