The Conditional Effect of Electoral Systems and Intra-Party Candidate Selection Processes on Parties’ Behavior

Abstract

How do electoral systems and intra-party candidate selection procedures affect party unity? In this article I distinguish theoretically and empirically between electoral systems and candidate selections, and argue that the influence of selection processes on parties’ behavior is conditional on electoral system (and vice versa). Measuring parties’ unity using Rice and Weighted Rice scores, and applying hierarchical models to a new data-set of 249 parties in 24 countries, I find support for the claim that the influence of selection processes on behavior is greater under electoral systems that encourage personal vote seeking incentives than under electoral systems that encourage party-centeredness.
Introduction

Maintaining a unified party voting record is an important objective for both party leaders and rank and file members. Unified parties aid policy implementation and improve stability in both parliamentary and presidential systems. Without party unity, in presidential systems the president’s base of legislative support becomes less stable and predictable, whereas in parliamentary systems government survival might be threatened. Additionally, a unified party record helps enhance the party’s electoral performance, as it creates a clear brand name with which voters identify. Lastly, within the legislative arena, a unified party record reduces transaction costs in logrolling, increases policy-making capabilities, decreases legislative unpredictability, and amplifies legislative efficiency. Indeed, disciplined-unified parties are regarded as one of the pillars of the Responsible Party Government doctrine (Ranney 1954).

What explains the degree to which parties behave as a unified actor? Scholars have long argued that electoral systems and intra-party candidate selection processes (i.e., the manner by which a party decides who can represent it on its ballot) shape the balance legislators strike between emphasizing their unique personal reputation and the collective reputation of their parties. As legislators seek to maximize their probability of getting (re)elected, they adhere to the incentives and constraints electoral systems and candidate selection procedures produce and choose to either vote with their co-partisans and sustain a unified party voting record or vote against them weakening their party’s unity (Carey and Shugart 1995; Hazan 2000).

This article seeks to examine how extra-legislative institutional arrangements—i.e., electoral systems and intra-party candidate selection processes—affect parties’ behavior and legislators’ tendency to maintain a unified party record. To date, most scholars consider the effect of electoral systems and selection processes separately. It has been argued that the more permissive the electoral system is, the less unified parties will be (see: André, Depauw and Shugart (2014)). Similarly, inclusive and decentralized candidate selection processes have been hypothesized to induce a dis-unified party voting record (Bowler, Farrell and Katz 1999; Hazan 2000; Hazan and Rahat 2006). However numerous examples might cast doubt on this
simplistic depiction.

The Brazilian left-wing parties’ (e.g. the Worker’s Party) high levels of unity present a puzzle. Brazil’s Open List PR system should have, according to the electoral systems’ separate effect hypothesis, induced undisciplined and dis-unified parties. However, whereas some scholars (e.g., Ames (1995)) characterize Brazilian parties as undisciplined, others (e.g., Figueiredo and Limongi (2000)) find highly unified parties, especially within the left-wing (Mainwaring and Linán 1997) (see: Amorim Neto (2002) for discussion about the debate). Why would parties under the Brazilian permissive electoral system enjoy high levels of unity? Mainwaring and Linán (1997, 476) argue that restrictive selection procedures might solve this puzzle and claim that even under Open List PR systems “[i]f central party leaders control the selection process, individual legislators...are more likely to toe the party line”.

Similarly, despite variation in selection procedures used in Argentina (De-Luca, Jones and Tula 2002) and despite expectations for provincial effects on parties’ behavior, Jones and Hwang (2005, 273) find that “no provincial effects are detected”. They explain the seemingly unified parties’ and legislators’ behavior using the negative agenda control thesis presented by the American Cartel Theory (Cox and McCubbins 2005). However, I suggest a different explanation—a conditional theory: given the Closed List PR electoral system Argentina uses, we would not expect local primaries and provincial control to affect legislators’ behavior and parties’ unity levels dramatically.

As a last motivating example I will present Israel. Israel’s parties used over the years numerous forms of candidate selection procedures from the most exclusive and centralized manner, in which one leader (or rabbi) selects the list, to an inclusive selection via party primaries. If the separate effect of selection processes on parties’ unity levels is correct, one should have observed that those parties that select via primaries exhibited lower levels of unity compared to parties selecting in a centralized restrictive way. However this conclusion is not supported by data (Rahat 2007).

To solve these puzzles and explain why other empirical tests of the separate effect of elections and selection on parties’ behavior yield inconclusive support, I suggest a theory about the
combined conditional effect of elections and selections. Both, electoral systems and candidate selection processes have the theoretical separate ability to induce a unified collective voting record. Thus, if the electoral system incentivizes legislators to toe their party’s line, the effect of the candidate selection procedure, and especially democratized processes, will be muted. This is because the electoral system will ensure a unified party record regardless of the type of selection processes a party uses. Under these conditions, therefore, party leaders may afford democratizing candidate selection processes, knowing their negative effect on party unity will be minimal. By the same token, if the manner by which legislators are selected by their parties guarantees they maintain a unified voting record, then the effect of electoral systems on behavior would be minimal. On the other hands, party leaders may use restrictive selection processes to attenuate the effect of electoral systems that encourage legislators to break the party line, and ensure—even under permissive electoral systems—a unified voting record. When selection processes are centralized and restrictive, party leaders may either a-priori choose a party slate that holds similar ideological preferences, or they may threaten to punish reluctant legislators by not re-nominating them in the next election cycle. Hence, restrictive candidate selection processes may overcome the personal vote seeking incentives produced by an electoral system. Therefore, I claim that the influence of selection processes on parties’ unity levels is conditional on the type of electoral system a country has and similarly, that the effect of electoral systems on a party’s voting record is conditioned by the manner by which the party selects its candidates.

After presenting the current state of the literature, which motivates the necessity for the elaborated conditional hypothesis, I test the conditional effect of electoral systems and selection processes on party unity using a varying-intercept varying-slope hierarchical model, where parties are nested within country-sessions. This multi-level structure allows me to account for the fact that selection procedures and electoral systems are distinct institutions which operate usually at distinct levels: candidate selections are (usually) a party-level factor, whereas electoral systems (usually) comprise a country-level characteristic (Shomer 2014). Using a hierarchical model also enables me to account for intra-country variation in the unity of parties,
which use different selection processes. Using a new data-set of 249 parties from 24 countries, I find support for the conditional effect of elections and selections.

The Separate and Conditional Effect of Electoral Systems and Selection Processes on Parties’ Unity Levels

In order to win reelection, legislators must cultivate both personal and party reputations. A personal reputation is achieved by enhancing one’s name recognition, thereby distinguishing a legislator from all other candidates, including others in his own party. Deviation from party leaders’ directions as to how to vote on policy issues may bolster a personal reputation (Sieberer 2006). If legislators are to build reputations they do not share with other members of their party, they must, at least much of the time, look like mavericks rather than loyalists (Bowler, Farrell and Katz 1999; Hazan 1999; 2000). A party reputation, on the other hand, is achieved by emphasizing the collective, unified reputation of the party and adhering to party leaders’ wishes. Hence party reputation distinguishes a legislator from candidates in other parties but not from her co-partisans. A unified voting record might bolster a party’s reputation. Indeed, the existing literature suggests that incentives to cultivate a party vote should drive upwards party unity (Gallagher and Marsh 1988; Hazan and Voerman 2006; Norris 2002).

Parties’ voting record and its level of unity is influenced, among other things, by the institutional context within which they operate. To a large extent, it is a factor of the electoral system (Bowler, Farrell and Katz 1999; Carey and Shugart 1995; Crisp 2007; Mainwaring and Shugart 1997). Electoral rules affect legislators’ incentives to cultivate their personal vote, and as a result, affect the degree to which parties act in unison or not (Ames 1995; Mainwaring and Linán 1997). Carey and Shugart (1995), in their seminal study, rank order electoral systems based on three variables that enhance personal vote seeking by individual members. They argue that the degree of party leadership control over access to and rank on the party’s ballot; the degree to which votes are pooled from the individual legislator to her co-partisans; and whether the voters can cast their vote to an individual candidate, to multiple candidates, or a
single party-level vote, all can influence the degree to which legislators will enhance their own personal reputation at the expense of their party’s collective unified record. Based on Carey and Shugart’s (1995) research, I hypothesize:

**Hypothesis 1: Separate effect of electoral systems:** The more permissive an electoral system is (ballot type, pool and vote encouraging personal vote seeking incentives), the less unified parties’ voting record will be (and vice versa).

The vast empirical research that tried to test the expectations that stemmed from Carey and Shugart’s article that parties under personal vote seeking electoral systems should exhibit lower levels of unity compared to parties in party centered systems yield inconclusive and indecisive results. Scholars used a case study prism to study the effect of electoral systems on legislators’ and parties’ behavior (Desposato 2006; Samuels 1999), while some took advantage of the unique quasi-experimental design mixed member electoral systems facilitate (Crisp 2007; Haspel, Remingron and Smith 1998; Herron 2002; Jun and Hix 2010; Kunicova and Remington 2008; Rich 2014; Sieberer 2010). Still others utilize a cross-country framework (Carey 2007; Depauw and Martin 2009; Sieberer 2006). Yet, all things considered, the empirical analysis provides only a partial support for Carey and Shugart’s arguments.

Thus, for instance, various scholars could not detect differing voting behaviors across parliamentarians who are elected under the PR tier and those elected under the SMD tiers in countries that use mixed member electoral systems (Crisp 2007; Jun and Hix 2010; Rich 2014), while others find only modest support for electoral systems’ effect in a cross-national analysis (Depauw and Martin 2009; Sieberer 2006).

The empirical inconclusiveness might be explained by the effect of party nomination. Party nomination may refer to nomination to ‘mega seats’ (Kam 2009; Martin 2014), nomination to legislators’ post-parliamentary careers (Carey 1996; Hix 2004; Jun and Hix 2010), and nomination within the legislative electoral game, that is candidate selection procedures (Jun and Hix 2010; Preece 2014; Rich 2014). Literature on the first two types of party nominations emphasized they interact with the electoral rules in explaining voting behavior (e.g., Jun and Hix
(2010)). Yet, most of the empirical work that tests the effect of candidate selection processes on legislators’ and parties’ behavior either amalgamate elections and selections, or often regard selections’s effect on parties’ behavior as a separate from and additive to the effect of electoral system (Akirav 2010; Crisp 2007).

In their original article, Carey and Shugart (1995) amalgamated electoral systems and selection procedures, conceiving theoretically and empirically of the later as a partial component of the former. Carey and Shugart’s ballot variable measures the degree to which party leaders control the access to and rank of the party’s ballot. Whereas this characteristic is partially defined by the electoral system, it is also determined by the internal procedures parties adopt to select their lists/candidates.

As a result, empirical analysis that stemmed from Carey and Shugart’s work often completely neglected to account for selection procedures separately, effectively adopting their amalgamation (Carey 2009; Hallerberg and Marier 2004; Shugart 2001; Shugart, Valdini and Suominen 2005). However, electoral systems and selection procedures are two distinct institutions (Shomer 2014). First, they may produce contradictory incentives for legislators and parties: the electoral system may encourage party unity, whereas the selection mechanism may incentivize legislators to emphasize their unique record at the expanse of party unity (Mainwaring and Linán 1997; Preece 2014). To put it in different words, the two institutions may encourage legislators to adhere to differing principals. For example, in a country that uses an open list proportional representation, a party might adopt a restrictive selection process whereby a single party leader decides who is allowed to represent the party on the ballot. Whereas the electoral system’s separate effect is to induce incentives for personal-vote seeking behavior, the separate effect of the selection process is quite the opposite: legislators are faced with incentives to adhere to party leadership and sustain party unity. Only by differentiating elections and selections can we theorize about their contradictory incentives.

Moreover, elections and selections usually operate at different levels: electoral systems usually form a national level characteristic, whereas candidate selection processes operate mostly at the party level. Therefore, conceiving of selection processes as a partial component of
electoral systems does not allow for the possibility of intra-country, cross-party variation in selection processes and therefore in parties’ unity levels.

To differentiate elections from selections I define ballot type as a characteristic of the electoral system, which measures the degree to which party leaders versus voters control the ballot at the general election stage, and define ballot access, which captures the candidate selection processes used by parties. This differentiation enables me to now discuss the effect of ballot access i.e., the candidate selection process on party unity.

Not only are party leaders better able to control the composition of the party’s label if selection processes are centralized (Sieberer 2006)—ensuring a-priori that the party’s legislative fraction will be ideologically cohesive—but they are also provided with disciplinary tools to punish reluctant legislators: they may chastise a legislator who defies the party’s line by not re-nominating him. Thus, researchers have argued that parties that select by party leaders are characterized by high levels of party unity. On the other hands, under more democratized selection procedures (e.g., primaries) parties vote less in unison (Bowler, Farrell and Katz 1999; Hazan 2000; Hazan and Rahat 2006; Pennings and Hazan 2001).

Hypothesis 2: Separate effect of selection processes: the more permissive the selection process is (i.e., ballot access is more democratized), the less unified parties’ voting record will be (and vice versa).

Whereas elections and selections are two distinct institutions they affect parties concurrently. While some scholars regarded elections’ and selections’ combined effect as an additive one (Akirav 2010; Crisp 2007; Crisp, Escobar-Lemmon, Jones, Jones and Taylor-Robinson 2004; Shomer 2009; Sieberer 2006), recently scholars started to theorize about a combined conditional effect of electoral systems and selection processes on parties’ and legislators’ behavior. In trying to explain the null results for the effects of the PR and SMD tiers in the Korean and Taiwanese mixed member systems, although he neither explicitly frames the argument as a conditional effect nor tests for it, Rich (2014) argues that parties’ candidate selection procedures are a ‘contamination’, such that candidates in both tiers, if their selection is con-
trolled by party leaders, will adhere to the party line. This argument effectively constitutes a conditional logic. Cross (2008) argues that the effect of selection processes should be larger under restrictive electoral systems such as CLPR. Nonetheless, he does not provide empirical analysis to support this assertion.

Preece (2014) also argued that elections and selections interact, but her theory suggests selections’ incentives prevail over and above the electoral connection. In other words, she claims that SMD tier Lithuanian MPs who were selected via national party leaders were hypothesized and found to have defected to a lesser extent that PR MPs. Yet, ‘Diversified PR’ MPs (those PR MPs whose win did not result from preference votes received within the SMD tier they ran in, but rather as a results of votes (preferences + party vote) at the more geographically dispersed PR tier) were “free to cultivate a personal vote with the independent base of support around the country” (Preece 2014, 161). However, Preece’s logic rests on the fact that the only reason ‘Diversified PR’ MPs will have an incentive to cultivate a personal vote is because Lithuania’s mixed electoral system does not includes a truly CLPR tier (that is ballot type which is fixed and closed to the voters on election day). Rather it has a weak preferential tier, whereby voters have up to 5 preferential votes. Thus, whereas the conditional hypothesis I present below agrees with Preece’s arguments and findings concerning SMD parliamentarians, I argue, as opposed to her assertion, that when a truly CLPR electoral system interacts with democratized selection processes, the electoral systems’ incentives will prevail and parties will exhibit a unified voting record despite the personalized selectoral connection.

Jun and Hix (2010, 153) argue that “any theory of how electoral systems shape individual parliamentary behavior needs to look beyond the opportunities provided by the electoral rules...to the structure of candidate selection inside parties...” Yet to date, neither the theory nor the empirical analysis was comprehensive and systematic (see also: Hix (2004) and Siavelis and Morgenstern (2008)). To amend this lacuna I theorize that the effect of selection processes is conditional on the type of national electoral system (and vice versa) and test the conditional theory with a large cross-national data-set.
The conditional effect of electoral systems and selection procedures on parties’ behavior

Whereas electoral systems and selection procedures are distinct institutions, which operate at differing levels and may produce contradictory incentives for parties, parties are influenced and affected by both electoral systems and selection processes concurrently. Therefore a theory that explains their combined influence is needed.

Both electoral systems (or more accurately, the degree to which voters versus party leaders are able to modify the ballot in the general elections—ballot type) and selection procedures are potential tools by which parties may maintain legislative voting unity. To the degree to which voters do not control the ballot at the general election stage, candidates do not face incentives to break the party line and lead to disunity. In fact, when ballot type is fixed and closed to voters, the parties collective unified reputation matters to a great extent, as it is one of the critical factors that affect a party’s seat share. A legislator, who wishes to get re-elected is thus incentivized to maximize the number of seats his party receives by ensuring its voting record is as unified and impeccable as possible (Cox and Rosenbluth 1995; Owens 2003; Pablo 2013). Thus, when ballot type is fixed, party leaders are provided with mechanisms to encourage their party members to toe the party line and sustain the party’s unified voting record. All they have to do is remind a rank-and-file member that her electoral prospect is dependent on a unified party voting record. By the same token, to the degree to which party leaders control ballot access that is access to the ballot at the selection stage, they are provided with either tools by which a-priori to assemble a cohesive list, or a mechanism to discipline legislators. Thus, both electoral systems and selection processes can induce a unified party voting record, to the degree to which they endow party leaders (versus voters) with control.

Since control by party leaders of either ballot type or ballot access induces unity, elections and selections are alternatives to one another in their ability to produce a unified voting record. Therefore, under restrictive electoral systems that encourage party-centered behavior, the effect of any selection procedure is almost redundant. The electoral system already ensures that legislators will toe the party line and sustain the party’s unified voting record. Even if
under the restrictive electoral system, legislators are selected by decentralized mechanisms, they are already incentivized to behave in a party-centered manner, as they know that damaging the collective party’s reputation may cost the party votes and seats and therefore endanger their re-election. Thus, under the Israeli CLPR system mentioned in the introduction, parties’ adoption of primaries did not produce lower Rice scores compared to other parties that used more restrictive selection methods. The CLPR system assured a relatively high degree of unity for all parties.

On the other hand, under permissive electoral systems selections processes matter. As the electoral system cannot ensure party-unity, to the degree to which candidate selections give party leaders control over ballot access, we should observe legislators maintaining a unified party record. Thus, even under the Brazilian Open List PR systems with its disincentives for party unity, the Workers’ Party enjoyed high levels of unity, achieved by employing centralized and restrictive candidate selection processes (Mainwaring and Linán 1997).

Thus, whereas under electoral systems that encourage party-centered behavior the influence of selection procedures should be small, when the electoral system encourages personal-vote seeking behavior, selection processes matter. Specifically, the more restrictive the selection process, the more unity we should observe. And by the same token, when selection processes are restrictive and bestow control at the hands of party leaders, parties will exhibit unified voting record irrespective of the electoral system under which they operate. Yet, when selection procedures are permissive, the electoral rules’ incentives should influence party unity, such that if elections are party-centered, they should incentivize unity.

**Hypothesis 3:** The combined conditional effect of elections and selections: The effect of candidate selection procedures on legislators’ behavior should be greater under permissive than under restrictive electoral systems (and vice versa).

Figure 1 portrays a schematic presentation of the additive versus the conditional combined hypothesized effect of elections and selections on parties’ unity levels. In each sub-figure, the two downward lines indicate that in permissive electoral systems, we should anticipate lower
levels of unity, compared to electoral systems with incentives for party-centered behavior. The two lines represent the two extreme types of selection procedures, whereby the solid line represents the most restrictive mechanism (e.g., one national party leader selects), and the dotted line represents the most permissive mechanism (e.g., open localized primaries). In both sub-figures, restrictive selection processes are hypothesized to create incentives for legislators to toe the party’s line and maintain high unity levels. Under both, the additive as well as the conditional hypothesis, we content that if both institutions (elections and selections) are restrictive, we will expect high levels of unity, whereas if both institutions are permissive, we will expect low unity levels, although in the conditional model, the effect of permissive selections will amplify that of candidate-centric electoral systems to lower unity level to a greater extent than predicted by the additive model.

**Figure 1 about here**

The main difference between the additive and conditional hypotheses lies in the mixture combinations. Whereas the supporters of the additive hypothesis believe that under restrictive electoral rules primaries will lower significantly party unity levels even, I hypothesize, that the effect of primaries on unity will be minimal. Hence, there will be almost no difference in unity levels under Fixed Ballot electoral systems across parties that use divergent selections, and all parties will exhibit a relatively high level of unity. Similarly, the conditional hypothesis content that the effect of electoral system on unity will be negligible when selection processes are restrictive and concentrated at the hands of a small group of national party leaders.

Indeed, this conditional effect of candidate selections and electoral systems is portrayed in Figure 1(a) by the varying gap between the solid and dotted lines. By the conditional logic, under electoral systems in which party leaders have strong control over the ballot, the effect of selection procedures should be minimal, and so is the gap between the lines. In permissive electoral systems, on the other hand, selection procedures’ effect should be greater. Thus, in Figure 1(a) we see that the gap between restrictive and democratized selection is wider where electoral systems are permissive than it is where the electoral system induce party-centered
incentives. Figure 1(b) depicts the additive hypothesis which if correct predicts that the gap in party unity levels between selection in the most restrictive and in the most permissive processes should be the same regardless of electoral system. In other words, the effect of selection procedures in constant, irrespective of electoral systems. These theoretical figures are a benchmark to which results from the model can be compared.

Data, Operationalizations and Models

I use party-level data to test the hypotheses. Specifically, I use a two level varying-intercept varying slope hierarchical model, whereby parties are nested within countries. In this model, the response variable is operationalized using both, Rice Cohesion scores (Rice 1928) [Equation 1] and Weighted Rice scores (Carey 2009) [Equations 2, 3], whereby the more lopsided a vote is, the less weight it receives in the final weighted scores.

\[ RICE_{pj} = \frac{|AYE_{pj} - NAY_{pj}|}{AYE_{pj} + NAY_{pj}}, \text{ for party } p \text{ on vote } j. \]  

(1)

where we average across \( j \) to get a party level Rice Score index.

The Average Weighted Rice scores are defined similar to Morgenstern (2004) as:

\[ AWRICE_p = \frac{\sum_{j=1}^{n} RICE_{pj} \times WEIGHT_j}{\sum_{j=1}^{n} WEIGHT_j}, \text{ for party } p. \]  

(2)

where \( RICE_{pj} \) is defined as in Equation 1, and \( n \) is the total number of votes. The weight of vote \( j \)—\( WEIGHT_j \)—is defined as:

\[ WEIGHT_j = 1 - \frac{|AYE_j - NAY_j|}{AYE_j + NAY_j}. \]  

(3)

I have collected an original cross-sectional data-set on 249 parties from 24 countries. Since data on selection processes at the party level is hard to come by, selecting cases randomly was
not an option. Therefore, cases were chosen so as to maximize variation in selection processes and electoral systems. To the best of my knowledge, this is the largest party-level data-set that contains information on unity and selection processes (please refer to the on-line appendix for a coding scheme and a detailed description of the data sources for each country/party).

The main covariates of interest are those that measure electoral systems and those that measure candidate selection procedures. With regard to the electoral system, I use the three variables advocated by Carey and Shugart (1995): ballot, pool, vote as well as the average district magnitude (M) to measure the degree to which an electoral system encourages personal- or party-centered behavior. However, as discussed above, since I propose to distinguish elections and selections, I suggest using ballot type instead of ballot. I conceptualize ballot type to measure the degree to which party leaders versus voters control the ballot at the general election stage. Ballot type is comprised of three categories: fixed lists are located at the party-centered pole and strong preferential ballots are located at the other extreme. In between lies a third, intermediate category—weak preferential—in which the pre-determined list order is important, but preferential voting may limit its effect.

I define vote and pool like the definition provided by Wallack, Gaviria, Panizza and Stein (2003). Pool measures whether votes can be pooled across legislators from the same party. It ranges from 0, where votes are pooled across the whole party, 1 denotes pooling at the sub-party level, and 2 denotes systems in which votes are not pooled. Vote “measures limitations on the number of individuals that voters can support” (Seddon, Gaviria, Panizza and Stein 2002, 12). It ranges from 0 where a voter casts a single vote for a party to 1 where voters cast multiple votes for candidates, to 2, whereby voters have a single vote for a single candidate. District magnitude (M) is measured as a weighted average of all district magnitudes in a country, where the weights are determined by the number of legislators running in each district.

Ballot access, i.e., candidate selection processes, is an indicator of the manner by which legislators “gain permission” to use the party’s ballot. I create an index for selection processes, in accordance with the degree to which they are hypothesized to create personal vote seeking incentives. Hazan and Rahat (2001, 2010) correctly argue that selectorate and decentralization
should be regarded as distinct dimensions for the sake of understanding empirical variation in selection processes. This is because, a party might employ an exclusive yet decentralized procedure (such as a single party leader at each of the geographical constituencies), and by the same token, a party might use an inclusive yet centralize process, whereby primaries are held at a national level with no mechanisms for geographical and/or sectorial representation. However, the aim of the selection index presented below is to classify selection processes in terms of the incentives they produce for candidate- vs. party-centric behavior/responsivness, and both selectorate and decentralization measure this same underlying concept. Indeed, as selectorate becomes more inclusive, parties’ behavior/legislators’ responsiveness becomes more candidate centered (Hazan and Rahat 2010; Hix 2004; Rahat and Sheafer 2007). Likewise, as selection procedures are more decentralized, parties’ behavior/legislators’ responsiveness becomes more candidate-centered, since “politicians are more autonomous from their leaderships if local party organs, rather than national party organs, select them” (Benedetto and Hix 2007, 761). Both, selectorate and decentralization, thus, measure the same underlying concept of candidate-vs party-centeredness, and they are mutually reinforcing. Indeed Crisp et al. (2004) and Crisp, Escobar-Lemmon, Jones, Jones and Taylor-Robinson (2009) theorize and operationalize their ballot access variable in terms of its incentives to create candidate- or party-centeredness. They indeed argue that when party control access (i.e., exclusive selectorate) and the decision making process is centralized, one should expect the greatest party centeredness. on the other hand, they content that where candidates face inclusive selectorate (what they term open access) and/or party decision is decentralized, we should expect to observe candidate centric behavior (Crisp et al. 2004, 829-830).

Given that selectorate and decentralization measure the same underlying theoretical concept of party-vs. candidate-centeredness, and given that they are mutually reinforcing, I present, based on these two dimensions, an eight-point scale, on which the lowest level was ascribed to the most exclusive and centralized selection mechanism. This selection procedure is hypothesized to encourage party centredness to the greatest extent. The next category is selection by national party delegates (e.g., committee or party conference). While the level of
decentralization remains similar to the first category, the selectorate of this selection process is more inclusive. The next two categories depict selection processes where local party leadership functions as the selectorate. In the third category, the decision is subject to the approval of the national party by veto or addition of candidates. The fourth category does not need such an approval. These categories depict a more decentralized mechanism, compared to the first two categories and should hence encourage parties to exhibit more candidate-centric behavior. The fifth and sixth categories depict selection processes in which local party delegates select the candidates. However, in the fifth category, the decision is subject to national party approval, but it is not in the sixth. While the level of decentralization remains similar to that in the third and fourth categories, the inclusiveness of the selectorate increases which should intensify candidate centeredness. The last two categories classify candidates selected via primaries (open or closed), where the highest level was ascribed to the most permissive selection process (primaries with no national party intervention), which is hypothesized to encourage candidate-centered behavior to the greatest extent.

In addition to electoral systems and candidate selection processes, I also control for a party’s governmental status differentiating between governing parties and those that belong to the opposition. Party leaders of governing parties have “plum jobs within the executive itself”, (Bowler, Farrell and Katz 1999, 10) with which they can influence and shape legislators’ behavior towards a more party-centered direction (Owens 2003). Nonetheless, it is interesting to note that previous analysis found opposition parties to be more cohesive then coalition parties (Depauw and Martin 2009; Rahat 2007). In addition, I control for party size, to account for potential collective action problems in coordinating discipline for larger parties. At the country level, I control for regime type. Researchers argue that parties in parliamentary systems should exhibit higher unity levels compared to presidential systems (Bowler, Farrell and Katz 1999; Carey 2009; Diermeier and Feddersen 1998) because in parliamentary systems, the survival of the head of the executive is dependent on the legislature (Lijphart 1984). I also
include a variable that measures countries’ political design as unitary or federal systems, given the hypothesis that federal countries exhibit less cohesion.

Equation 4 presents the party-level hierarchical model \(^7\) (see online appendix for the WinBUGS code).

\[
Rice_p \sim N(\hat{y}_p, \sigma_y^2)
\]

\[
\hat{y}_p = \alpha_{c[p]} + \beta_{select_{c[p]}} \ast Selection_p + \beta_{opp} \ast Opp_p + \beta_{size} \ast Size_p
\]

\[
\begin{pmatrix}
\alpha_{c} \\
\beta_{select_{c}}
\end{pmatrix} \sim N\left(\begin{pmatrix}
\hat{\alpha}_{c} \\
\hat{\beta}_{select_{c}}
\end{pmatrix}, \begin{pmatrix}
\sigma_{\alpha_c}^2 & \rho_1 \sigma_{\alpha_c} \sigma_{\beta_{select_{c}}} \\
\rho_1 \sigma_{\beta_{select_{c}}} & \sigma_{\beta_{select_{c}}}^2
\end{pmatrix}\right)
\]

\[
\hat{\alpha}_{c} = \gamma_0^\alpha + \gamma_1^\alpha \ast Ballot_c + \gamma_2^\alpha \ast Pool_c + \gamma_3^\alpha \ast Vote_c + \gamma_4^\alpha \ast DistM_c
\]

\[
+ \gamma_5^\alpha \ast Regime_c + \gamma_6^\alpha \ast Unitary_c
\]

\[
\hat{\beta}_{select_{c}} = \gamma_0^\beta + \gamma_1^\beta \ast Ballot_c
\]

where \(p\) indicates parties,

and \(c\) indicates the hierarchical level of a country

\section*{Results}

\textit{Rice Scores}

Table 1 presents the results of the party-level model. Since Rice scores are measured between 0 and 1 (or in percentage terms, between 0 and a 100) both assumptions of normality and continuous response variable are violated, and hence using an OLS model might prove to be problematic. Using OLS may also yield out-of-bounds predictions. Therefore, I use a logit empirical transformation (Hox 2002), to transform the Rice scores to a continuous scale: 

\[f(p) = \ln\left(\frac{p}{1-p}\right)\]. I estimate for each country its own intercept, and also let the coefficient of selection procedures vary by ballot type. This step allows for the interaction between the party level covariate—selection—and the country level covariate—ballot type. This interaction enables an estimate of the conditional combined effect of selections and elections on parties’ behavior.
Since the model presented in Table 1 is hierarchical and includes interactions, and since I have applied the empirical transformation on the response variable, basic interpretation of the table is more challenging. Therefore, I use expected values figures. Figure 3 presents the expected values of Rice Scores in parliamentary (Figure 3(a)) and presidential systems (Figure 3(b)). In both systems, the expected values were calculated for a unitary system with a mean district magnitude of 34.2, for an opposition party of 44 members (the mean party size). The selection variable, as well as the variables that measure the electoral systems, all varied across their values. Specifically, pool and vote were assigned the same value that ballot type was (e.g., either all of them received a value of 0, or a value of 1, or all of them were assigned a value of 2). In each panel, expected values are depicted for each of the eight categories of selection procedures. The expected values were inverse logged to bring them back to their original scale.

Figure 3 about here

With regards to the distinct effect of electoral systems on legislators’ behavior, the findings support the hypothesis, for both presidential and parliamentary systems, as is indicative by the negative slope of the lines. Electoral systems with more personal vote seeking incentives exhibit lower Rice scores holding all else constant. This pattern remains for each of the selection procedures we examine. The findings also support the hypothesized separate effect of selection procedures. The more democratized the selection processes is (the higher its value), the lower the levels of unity we observe, holding all other variables constant. This trend remains true irrespective of the electoral system we examine. Differences in behavior are significant under different selection procedures, as demonstrated by Figure 2 in appendix 5 that shows the first differences in expected Rice Scores, while letting selection vary from its most restrictive (1) to its most democratized value (8). It reveals that in both, presidential and parliamentary regimes, the difference in unity levels of parties that select via restrictive processes and those that use primaries are significantly different from zero (at the 90% level).

The conditional combined effect of selections and elections also seems to gain support in
both parliamentary and presidential systems. The gap in Figure 3 between the most democratized and the most restrictive selection procedures (black solid line versus gray dotted line) is wider under electoral systems that encourage personal vote seeking incentives. In fact the empirical figure mimics the theoretical portray of the conditional combined effect presented in Figure 1a. Recall that if my conditional combined effect was not supported by the data, the gap in unity levels between parties that select via primaries and those that select via a small group of party leaders would have remain constant irrespective of electoral system. This is not the case. Indeed Figure 4 presents the expected Rice scores of 4 electoral systems: Closed List PR, Single Transferable Vote, Open List PR and Single Non-Transferable Vote. These electoral systems are arranged on the horizontal axis according to their hypothesized effect on personal vote seeking incentives, as the order mimics the rank order from Carey and Shugart’s seminal work (1995).

**Figure 4 about here**

As is clearly evident, the effect of selection processes is greater and more substantial under OLPR and SNTV systems then it is for CLPR and STV countries. For example, substantively, in presidential countries with CLPR electoral systems, differences in unity levels of parties that select via restrictive processes to those that select via primaries stand on 3.4%. This difference is larger for SNTV countries, whereby a party that selects via restrictive selection processes will have an expected Rice score that is higher by 9.6% than one that selects via democratized mechanisms. In other words, the effect of selection processes on parties’ unity level is stronger under candidate-centered electoral systems than under restrictive electoral systems such as CLPR.

The results for parliamentary systems are similar (though smaller in magnitude). Thus, the gap in unity levels between parties that use primaries and those that use restrictive selections is wider by 1.4% under SNTV electoral systems than under CLPR (the effect of selection procedures under CLPR is 0.6%, where the effect of selection under SNTV systems is 2%).

A difference of 1.4 points on a Rice scale might seem underwhelming. However, one must
remember that these differences are calculated as a percentage of a full Rice score scale (1 till 100). In reality, however, and in the data set I am using, one does not observe parties that exhibit nil unity scores. In face, the lowest level of Rice scores in data is 52%. Hence one should examine how different the gap appears in a more realistic setting. To this end, I calculated the difference in selection effect on Rice scores, that is limited to the inter-quintile range of the data (92.3% till 99.3%). It turns out that when Rice scores are limited to their inter-quartile range the way parties select under SNTV electoral systems has an effect on unity level that is stronger by 20% that the effect is under CLPR.

The analysis thus far demonstrates the conditional effect of elections and selections on party unity. Intra-party candidate selection processes affect parties’ unity levels in candidate-centered electoral systems. Under personalized electoral system, if the party employs primaries, it will exhibit dis-unity, whereas if a small group of party leaders selects the candidates they can use the selection processes to guarantee a unified party voting record. These results explain the seemingly anomaly of the Brazilian Worker’s Party. Even under the Brazilian permissive OLPR electoral system, the restrictive nature of the Worker’s Party’s selection procedures guaranteed a relatively high degree of unity. On the other hand, the results reveal that when the electoral systems is restrictive and by itself incentivizes unified party voting record, the effect of selection processes on unity levels is marginal and minor. Thus, the supported conditional hypothesis helps explain how under the Israeli CLPR electoral system, parties that used primaries and those that selected the list via a Rabbi exhibited similar levels of Rice scores. To put it differently, the analysis reveals that parties that use divergent intra-party candidate selection processes will exhibit greater differences in their unity if they are elected under permissive-personalized electoral systems than if they face a restrictive electoral system. To provide further support for the conditional hypothesis, I use Weighted Rice scores that help overcome the inflation in unity levels that stems from voting on non-divisive lopsided votes.
Weighted Rice Scores

Carey (2009) and Morgenstern (2004) argued that Rice scores overestimate parties’ unity levels by treating all votes, including unanimous votes, the same. To ameliorate this problem I use Weighted Rice scores, a measure which weighs the votes by their closeness. Table 2 presents the results of a varying-intercept varying-slope hierarchical model. I again use a logit transformation as the outcome variable is bounded between 0 and 1.

Table 2 about here

Do the results from the Weighted Rice model provide support for the separate and conditional effect of elections and selection on party unity? To answer this question we can look at Figure 5(a) and Figure 5(b) that depict the expected Weighted Rice scores in parliamentary and in presidential systems (respectively). As before, I calculated the expected level of unity for a unitary country with mean District Magnitude of 34.2 for an opposition party with 44 members. Ballot Type, Pool and Vote, and the selection variable varied across their respective values. Each panel shows expected Weighted Rice scores for each of the 8 types of selection processes presented in Figure 2.

Figure 5 about here

The figure provides striking results for the conditional hypothesis. Recall that if my conditional hypothesis is supported we should observe that there is a minimal effect of selection processes on unity levels for parties that operate in party-centered electoral rules, whereas there is a significant selections’ effect for parties under permissive electoral systems.

The analysis finds support for the conditional hypothesis. Selections significantly effect party unity under candidate centered electoral systems, but they do not matter, and do not influence unity levels under party-centered electoral systems. Therefore, parties’ expected unity levels under Fixed Ballot systems are the same irrespective of their candidate selection processes. For example, in a presidential country, with an electoral system that encourages personal-vote seeking behavior, a party that selects via restrictive processes will have an expected unity level that is higher by 12% then a party that uses primaries. This 12% gap is the
result of the adoption of restrictive processes that helps overcome the personalized nature of the electoral system and ensures a relatively high level of unity (similar to the Brazilian example). Yet, in presidential countries with party-centered electoral systems, this gap is effectively 0%. The rigid structure of the Ballot Type ensures a high unity level no matter what type of selection procedure a party adopts. Note that the 0% effect of selection under Fixed Ballot elections is significantly different than the 12% effect of selection under permissive elections, as is evident by Figure 6(b), which depicts the difference in the gaps.

**Figure 6 about here**

The results are similar for parliamentary countries. When the electoral system is permissive the expected Weighted Rice score of a party that uses centralized selections is higher by 5.3% than a party that uses primaries. Thus, when elections are permissive, selection matters. But such an effect of selection procedures disappears altogether under electoral systems that encourage party-centered behavior, and again the difference in these gaps (between 5.3% and 0%) are significant as is shown in Figure 6(a).

Figure 7 demonstrates the expected Weighted Rice scores in 4 electoral systems: CLPR, STV OLPR and SNTV, which are arranged on the x-axis similar to Carey and Shugart’s rank ordering of electoral systems according to the incentives to cultivate a personal vote. It is evident that while parties under CLPR exhibit similar unity levels irrespective of their selection processes, parties’ unity levels under OLPR or SNTV are affected by the way they select: selecting via restrictive processes help attenuate electoral systems’ encouragement of disunity, and help the party present a more homogenous voting record.

**Figure 7 about here**

Even to a greater extent than the Rice score model, the Weighted Rice score analysis supports the conditional combined effect of electoral systems and candidate selection processes on parties’ behavior. Electoral systems that ensure a unified party voting record minimize the effect of intra-party candidate selection processes on party unity. On the other hand, candidate selections do matter and shape parties’ voting record when the electoral system is permissive and
encourage personal-vote seeking behavior. Indeed, the combination of personalized electoral systems and permissive intra-party candidate selection procedures yield the lowest levels of party unity.

Robustness Checks

Models using both, Rice scores and Weighted Rice scores provide support for the conditional effect of elections and selections on unity levels. In this sub-section I describe various robustness checks I conducted to further validate the results.

Permutations of expected Rice scores

To validate that the expected Rice scores are not dependent on the levels at which control variables are held constant and to verify the support for the conditional hypothesis is robust to permutations, I have calculated the expected Rice scores in both presidential and parliamentary systems with divergent permutations of the key control variables. Specifically, I present in the on-line appendix the expected Rice scores for both opposition and coalition parties, with size of both 7 (the first quartile of size) and 46 (the third quartile), and for federal countries with an average district magnitude of 1 and average district magnitude of 14. The analysis reveals the results are robust and the conditional hypothesis gains support.

Disaggregating the selection index: Selectorate and Decentralization

In this article, I operationalize selections as an 8-point scale, on which selection processes were sorted according to two criteria suggested by Rahat and Hazan (2001): selectorate and decentralization (see: Figure 2). I justified the usage of the scale by arguing that both selectorate and decentralization measure the same theoretical concept of party vs. candidate centric behavior and that they reinforce one another. Thus using the scale effectively theoretically assumes that de-centralization and inclusiveness co-vary in a linear manner. To also ascertain this assumption empirically and as a robustness check, I re-ran the analysis of the Rice scores as
well as the Weighted Rice scores using each of the two dimensions separately. Thus, the models include a 3 category selectorate variable, which distinguishes between selections via a small group of party leaders, selection via party delegates and selection via primary voters. Similarly, the decentralization variable has three categories, differentiating selection at the national level, selection at the local level and selection by both levels. Each, selectorate and decentralization was modeled (in the hierarchical analysis) by Ballot Type, allowing each of the components of selections to interact with elections and test the conditional hypothesis. Figure 8 presents the expected Rice scores in parliamentary and presidential systems calculated from a model in which selectorate and de-centralization are treated as separate components. The figure presents the expected Rice scores for three types of selection procedures: selection via a centralized small group of party leaders, selection via party delegates which involved both national and de-centralized levels, and selection via inclusive-decentralized procedures. Figure 9 presents the expected Weighted Rice scores for the same three types of selection procedures.

Figure 8 about here

Figure 9 about here

Decomposing the selection index into its two respective components further supports the conditional hypothesis (H3) as the expected Rice scores and Weighted Rice scores of parties that select via centralized and exclusive processes and parties that select via decentralized and inclusive selections is almost nil under party-centered electoral systems, and is substantial under permissive electoral systems. This holds true for both presidential as well as parliamentary countries.

Moreover, disaggregating the selection index into its two components also enables me to examine how each component separately interacts with electoral rules, in its effect on unity. In other words, I was able to depict the expected Rice scores, in presidential and parliamentary countries, while holding centralization levels constant, allowing selectorate to vary across its respective categories (Figure 10). Similarly, I present the expected Weighted Rice scores while holding selectorate constant, and letting de-centralization vary across its three levels.
(Figure 11). This analysis reveals once again that the conditional hypothesis gains support: given a level of centralization, parties’ Rice scores are not affected by variation in scope of the selectorate when electoral systems are party-centered, but are significantly affected by selectorate under personalized electoral systems. Similarly, for a given scope of selectorate, parties’ Weighted Rice scores do not differ under party-centered electoral systems, regardless of whether they use centralized, de-centralized or a mixed method to select their lists, but differ significantly in candidate-centered electoral rules. Thus, the decomposed analysis revelas that the support for the conditional hypothesis is robust to the utilization of the 8 point selection scale.

**Figure 10 about here**

**Figure 11 about here**

**Conclusions**

Parties’ voting behavior is shaped to a great extent by the institutional context within which they operate. Electoral systems have long been theorized to shape the incentives and constraints legislators and parties face and influence their representational styles and voting records. In addition, intra-party candidate selection procedures are also hypothesized to influence party unity. Although ample scholarly attention has been devoted to empirically testing elections’ and selections’ influence on parties’ unity levels, the results remained inconclusive. In this article, I test a new theory concerning the combined conditional effect of electoral systems and selection processes on parties’ behavior. I assert that since electoral systems and selection processes are substitutive means for ensuring a unified voting record, the magnitude of the effect of candidate selection processes on unity will depend on the degree to which voters are allowed to disturb the party’s ballot at the general election stage. Where the electoral system endows party leaders with the ability to maintain cohesive, unified parties and incentivizes legislators to toe the party line to preserve the collective party brand-name, the influence of candidate selection procedures will be minimal. On the other hand, under permissive electoral
systems, the effect of selection procedures on behavior should be greater. Put it differently, cross-party variation in parties’ unity levels between those who select in democratized and those who select in restrictive processes should be greater in countries that employ personalized electoral systems than it is in countries with party-centered electoral systems. Similarly, I argue that the effect of personalized electoral systems on unity levels will be mitigated by a centralized candidate selection mechanism that allows party leaders to ensure unity by either a-priori selecting a homogenous group of legislators or disciplining members by threatening to not re-nominate them.

Application of hierarchical models using both Rice scores and Weighted Rice scores as outcome variables, supports the theory concerning the conditional combined effect of electoral systems and selection procedures. The differences in expected Rice scores and expected Weighted Rice scores between parties that select via democratized mechanisms and those who select via restrictive centralized procedures are larger under strong preferential electoral systems, such as the OLPR and SNTV than they are under Fixed Ballot elections, such as CLPR. The results are more striking for the Weighted Rice scores model: under CLPR electoral systems the unity levels of parties that select via a small group of national party leaders, and parties that use primaries are practically the same.

Scholars have long debated whether democratizing candidate selection procedures is beneficial or not (for a full discussion, see Hazan and Rahat (2010)). On the one hand, democratizing candidate selection procedures—decentralizing them and increasing the scope of the selectorate—improves the party’s image as a democratic entity, increases its legitimacy and helps it attract more members (Scarrow 1999). On the other hand, as noted above, researchers argue that democratized candidate selection processes weaken party leaders’ ability to maintain a unified party record by reducing either their ability to assemble an ideologically cohesive list or enforcing discipline on disobedient legislators. The results presented in this article demonstrate that in countries with a candidate-centered electoral system that discourages legislators from toeing the party’s line, party leaders are better off maintaining restrictive candidate selection processes: sustaining the control over candidate selections enables party leaders to maintain
a unified party record even under permissive electoral systems. On the other hand, party leaders in countries with party-centered electoral systems can afford to democratize selection processes: their party may benefit from the democratization and increased legitimacy, while its voting record will remain nearly unaffected by the personal vote seeking incentives the selection produces. The electoral system will still ensure that legislators toe the party line and secure the party’s voting record unity.

Intra-cameral procedures, and positive and negative agenda control, may also be considered means for achieving party unison. Cameral rules and the majority party’s (or coalition’s) ability to exercise negative agenda control and prevent bills that split the majority party from being considered on the House floor (Cox and McCubbins 2005; Gailmard and Jenkins 2007) may counter the effect of permissive elections and selections. Thus, in a country characterized by a permissive electoral system and parties that use permissive-democratized candidate selection processes we might observe restrictive cameral procedures that enable the majority party to control the agenda and prevent divisive issues from reaching the floor (Zubek 2014). Indeed the United States may be such an example. The electoral system to the U.S. House of Representatives coupled with the selection processes parties use to select their candidates fail to provide means by which party unity is maintained. Under these conditions (which are magnified even further by the country’s presidential nature), majority party leaders use cameral rules to control the agenda and maintain a cohesive party voting record. Future research will have to examine whether countries characterized by personal vote seeking incentives induced by both the electoral system and candidate selection processes tend to adopt more restrictive cameral procedures that enable majority and coalition party leaders to prevent divisive issues from reaching the floor.

As the results above indicate the effect of selection procedures should not be considered as a component of the electoral system. Neither should we consider the combined effect of selections and elections to be an additive one. Instead, the results from this analysis support a more convoluted relationship between intra-party candidate selection procedures and parties’ behavior—one that is mitigated by the electoral system. Only by accurately theorizing
about this conditional relationship can we determine the degree to which institutional arrange-
ments shape party unity and, as a by-product, the policy adopted, the representation styles
politicians exhibit, the legislature’s efficiency and the general stability of the political system.

Yael Shomer <yshomer@gmail.com> is an Assistant Professor of Political Science at Tel-Aviv
University, P.O. Box 39040, Tel Aviv 6997801, Israel.
I gratefully appreciate comments and advice from Brian Crisp, Guillermo Rosas, and Andrew Martin. None but the author is at fault for potential errors. This research received funding from the European Community’s Seventh Framework Programme (FP7/2007-2013) under grant agreement no. 276914, and from the Norwegian Research Council grant no. 222442.

1 For example, in the 1992 through 1996 legislative term the Labour party was the only one to use primaries to select its list. All other parties selected candidates in a more restrictive manner. Based on the separate effect logic we would have predicted that Labour’s unity levels to be lower than other parties’. But, whereas Labour’s Rice score during the aforementioned years was 0.95, Likud’s (the second largest party during this term) Rice score was 0.88, and Shas’, which used the most exclusive and centralized way to arrange its list, exhibited a Rice score of 0.94—similar to that of Labour.

2 In addition, district magnitude has an inverse relationship with incentives to emphasize a personal reputation.

3 When discussing party unity in this manuscript, which is a behavioral manifestation, I do not determine whether the unity stem from party cohesion—an ideological homogenous set of preferences—or whether unity is “whipped” via disciplinary measures (sticks and carrots), in the absence of cohesion (Hazan 2006; Krehbiel 1993). The research need not differentiate between restrictive selection processes enabling party leaders to punish their reluctant party members—that is, discipline—and the leadership’s ability to a priori select a more homogenous group. Similarly, I do not distinguish whether permissive decentralized selections cause district voters to punish their legislators if they do not represent voters’ interests at the expense of the party—that is, discipline by the voters—or whether the heterogeneity across the districts in terms of selectors’ preferences and demographics leads to a heterogeneous group of selected MPs. While I acknowledge the differences between cohesion and discipline and the difficulty of differentiating among them in light of empirical equivalence, I focus this article on the explaining party unity based on electoral systems and selection processes, while not determining which of the mechanisms (cohesion or discipline) is at work.

4 Different types and topics of votes may induce different levels of unity. For example, procedural votes are prone to higher levels of discipline compared to amendments in the U.S Congress (Rohde, 2008). Unfortunately, the cross-national nature of the analysis and the scarce data availability prohibits me from accounting for this important topic at this stage. Future research will examine the effect of votes’ types and topics on levels of unity in a cross-national manner.

5 I re-ran the analysis using a separate 3 category variable for decentralization and a separate 3 category variable for selectrorate and obtained the same substantive results. These results are discussed in the robustness section and can be found in the on line robustness appendix.
This measure also helps in artificially “correcting” for the bias smaller parties exhibit in cohesion scores, as Desposato (2005) demonstrated.

Each random effect is drawn from a normal distribution (do not model the correlation between them).

References


### Tables

**Table 1: Party level models: Rice Scores**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Median</th>
<th>90% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>4.45</td>
<td>1.765 : 7.400</td>
</tr>
<tr>
<td>Selection</td>
<td>-0.14</td>
<td>-0.298 : -0.004</td>
</tr>
<tr>
<td>Coalition</td>
<td>-0.41</td>
<td>-0.745 : -0.055</td>
</tr>
<tr>
<td>Size</td>
<td>0.001</td>
<td>-0.002 : 0.001</td>
</tr>
<tr>
<td>Pool</td>
<td>0.09</td>
<td>-0.891 : 1.171</td>
</tr>
<tr>
<td>Vote</td>
<td>-0.98</td>
<td>-2.257 : -0.259</td>
</tr>
<tr>
<td>District magnitude</td>
<td>-0.02</td>
<td>-0.044 : 0.009</td>
</tr>
<tr>
<td>Regime</td>
<td>1.78</td>
<td>0.181 : 3.421</td>
</tr>
<tr>
<td>Unitary</td>
<td>-0.15</td>
<td>-1.656 : 1.339</td>
</tr>
<tr>
<td>Ballot</td>
<td>0.23</td>
<td>-1.142 : 1.473</td>
</tr>
<tr>
<td>Selection*Ballot</td>
<td>0.02</td>
<td>-0.165 : 0.198</td>
</tr>
<tr>
<td><strong>Variance Components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Country Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1.57</td>
<td>0.797 : 2.344</td>
</tr>
<tr>
<td>Selection</td>
<td>0.09</td>
<td>0.009 : 0.270</td>
</tr>
<tr>
<td>Residual</td>
<td>1.42</td>
<td>1.314 : 1.548</td>
</tr>
</tbody>
</table>

**Table 2: Party level models: Weighted Rice Scores**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Median</th>
<th>90% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>3.46</td>
<td>1.67 : 5.17</td>
</tr>
<tr>
<td>Selection</td>
<td>0.02</td>
<td>-0.08 : 0.13</td>
</tr>
<tr>
<td>Coalition</td>
<td>0.58</td>
<td>0.30 : 0.87</td>
</tr>
<tr>
<td>Size</td>
<td>0.001</td>
<td>-0.002 : 0.004</td>
</tr>
<tr>
<td>Pool</td>
<td>1.18</td>
<td>0.56 : 1.76</td>
</tr>
<tr>
<td>Vote</td>
<td>-2.75</td>
<td>-3.68 : -1.70</td>
</tr>
<tr>
<td>District Magnitude</td>
<td>-0.04</td>
<td>-0.05 : -0.002</td>
</tr>
<tr>
<td>Regime</td>
<td>2.46</td>
<td>1.63 : 3.27</td>
</tr>
<tr>
<td>Unitary</td>
<td>-0.71</td>
<td>-1.57 : 0.14</td>
</tr>
<tr>
<td>Ballot</td>
<td>-0.13</td>
<td>-0.45 : 1.33</td>
</tr>
<tr>
<td>Selection*Ballot</td>
<td>-0.08</td>
<td>-0.19 : -0.03</td>
</tr>
<tr>
<td><strong>Variance Components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Country Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.51</td>
<td>0.09 : 1.16</td>
</tr>
<tr>
<td>Selection</td>
<td>0.06</td>
<td>0.01 : 0.17</td>
</tr>
<tr>
<td>Residual</td>
<td>1.04</td>
<td>0.94 : 1.14</td>
</tr>
</tbody>
</table>
Figures

(a) Conditional Combined Effect  
(b) Additive Combined Effect

Figure 1: Conditional versus Additive Combined Effect of Elections and Selections

Figure 2: Selection Processes Index

<table>
<thead>
<tr>
<th>Selection Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: national party leadership up to 10 selectors</td>
</tr>
<tr>
<td>2: national party delegates</td>
</tr>
<tr>
<td>3: local party leadership up to 10 selectors, subject to approval of the national party</td>
</tr>
<tr>
<td>4: local party leadership up to 10 selectors (at the local level)</td>
</tr>
<tr>
<td>5: local party delegates, subject to approval of the national party</td>
</tr>
<tr>
<td>6: local party delegates</td>
</tr>
<tr>
<td>7: primaries subject to approval of national party</td>
</tr>
<tr>
<td>8: primaries</td>
</tr>
</tbody>
</table>
Expected Values in Parliamentary Systems

(a) Parliamentary Systems

Figure 3: Expected Rice Scores in Parliamentary and Presidential Systems.

Expected Values in Presidential Systems

(b) Presidential Systems

Electoral Systems

(a) Parliamentary Systems

Figure 4: Expected Rice Scores in 4 Electoral Systems.
Figure 5: Expected Weighted Rice Scores in Parliamentary and Presidential Systems.

(a) Parliamentary Systems

(b) Presidential Systems

Figure 6: First Differences of the Gaps in Expected Weighted Rice in Parliamentary and Presidential Systems.

(a) Parliamentary Systems

(b) Presidential Systems
Expected Values in Parliamentary Systems

Electoral Systems

Expected Weighted Rice

CLPR
STV
OLPR
SNTV

0.80
0.85
0.90
0.95
1.00

Lines

Restrictive Selection
Permissive Selection

(a) Parliamentary Systems

Figure 7: Expected Weighted Rice Scores in 4 Electoral Systems.

Expected Values in Presidential Systems

Electoral Systems

Rice

CLPR
STV
OLPR
SNTV

0.2
0.4
0.6
0.8
1.0

Lines

Restrictive Selection
Permissive Selection

(b) Presidential Systems

Figure 8: Expected Rice Scores in Parliamentary and Presidential Systems using Selectorate and Decentralization separately

Expected Weighted Rice

Electoral Systems

Weighted Rice

CLPR
STV
OLPR
SNTV

0.85
0.90
0.95
1.00

Lines

Centralized−Exclusive
Middle
Decentralized−Inclusive

(a) Parliamentary Systems

Figure 9: Expected Weighted Rice Scores in Parliamentary and Presidential Systems using Selectorate and Decentralization separately

(b) Presidential Systems
Figure 10: Expected Rice Scores in Parliamentary and Presidential Systems Holding central-ization constant

Presidential Systems

Expected Values in Decentralized Selections  Expected Values in Centralized Selections

Parliamentary Systems

Expected Values in Decentralized Selections  Expected Values in Centralized Selections
Figure 11: Expected Weighted Rice Scores in Parliamentary and Presidential Systems Holding Selectorate constant