Order in Chaos
Intra Party Coordination in Open List PR Systems

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1. Introduction

The purpose of this paper is to study intra-party coordination in open list proportional representation systems. Specifically, we show that political parties play a central role in composing party lists and that, in so doing, they successfully prevent the eruption of all-out competition among co-partisans. We provide evidence of intra-party coordination for contemporary Brazil, which is, arguably, the worst case for finding such evidence.

2. List Proportional Representation Electoral Systems

One of the most fundamental distinctions made when we think about electoral systems is that between majoritarian and proportional principles. As Powell (2000) has argued, these principles inform two different conceptions of elections and representation, which generate distinct ways in which voters, politicians and governments relate to each other. Yet, proportional representation systems (PR) are not all alike, and not simply because they use different formulas for translating votes into seats. One central distinction is that which separates list PR systems that allow for preference vote and those that do not.[1] In the latter voters are presented with and vote for *ranked* and *closed* lists of candidates. If a list gets *n* seats, the first *n* candidates in that list are the ones to whom the seats are assigned. In the former, voters are presented with lists that may or may not be *ranked*, but they are never closed: voters are allowed to express a preference for candidates within the list and, in this way, affect which individual candidate will be elected.

In spite of considerable variation in details, preferential list-PR systems have at least two things in common. First, a collective entity (a party or candidate list) is recognized as the primary recipient of seats. Before seats are allocated to individual candidates in some relation to the number of votes they obtained, they are allocated to the list as a whole. Second, voters are allowed to have a say in allocating seats to candidates within the party once the number of seats for the party has been determined. In some cases this only means the ability to change the order of candidates originally proposed by the party; in others, it means collectively ordering an entire list of unordered candidates. Open-list PR systems, our focus in this paper, belong to the last category; they are an extreme version of preferential list-PR systems in the sense that the rank of candidate within the list is *entirely* determined by voters: if a list gets *n* seats, the *n* most voted candidates are the ones to whom the seats are assigned. Table 1 lists the countries that currently adopt preferential list-PR as the rule for electing their legislatures.

[1] This is a distinction that applies to list PR systems. There are other electoral systems that produce

Table 1 Preferential PR Systems in the World (**bold** = Open List)				
WESTERN EUROPE		EASTERN EUROPE	LATIN AMERICA	ASIA
Austria	Liechtenstein	Bosnia Herzegovinia	**Brazil**	**Indonesia**
Belgium	Luxembourg	Estonia	**Chile**	Japan
Cyprus	Netherlands	Latvia	Colombia	Sri Lanka
Denmark	Norway	**Poland**	**Peru**	
Finland	Sweden	Slovakia		
Greece	Switzerland	Slovenia		

These two features of preferential list-PR are considered decisive for the kind of electoral strategy candidates pursue. They imply that OLPR systems are characterized by double competition: parties compete with one another to maximize the number of seats they will get; candidates, in turn, compete with members of their own parties for the votes that will guarantee that they will be the ones to be elected. For this reason successful candidates cannot simply rely on party labels: success in elections requires that, in addition to, or at the expense of, their parties, they themselves be recognized and chosen by voters. Thus, in order to be successful in OLPR electoral systems, candidates must develop a strong direct link with their districts, which they do by providing particularized goods. Given that districts are multimember, however, the best way to do so is to create de facto single-member constituencies where the link between the politician and voters can be nurtured and sustained without the constant need to distinguish oneself from intra- and inter-party competitors. In this way, politicians operating in open-list PR systems are presumed to behave much like politicians under single-member plurality elections, that is, they focus their actions in office, or the promises they make in order to get into it, on geographically targeted policies and on the provision of services to their constituents (Cain, Ferejohn and Fiorina 1987, Ames 2000). This strategy contrasts with the one pursued by politicians operating in closed-list PR systems, where the incentives for cultivating personal reputations are low and, as a consequence, broad, partisan considerations take a central place in the politicians' behavior and promises.

The corollary is that in open-list PR systems candidates have strong incentives to cultivate personal reputations, injecting the system with a high degree of personalism and with weak political parties. Because politicians must compete with candidates from other parties and with candidates from their own party, competition is individualized and political parties have little or no role to play in organizing the electoral contest. As recent studies have argued, this feature of preferential list PR, but particularly of OLPR, is at the root of a number of important outcomes. For example, Shugart (1999) argues that collective goods at the national level are more easily provided in "party-centered" elections (of which closed-list PR)

than in "candidate-centered" elections (of which preferential PR). Milesi-Ferretti, Perotti and Rostagno (2002) and Nielson (2003) argue that public policies are more narrowly targeted when legislatures are elected through OLPR rules. For Samuels (2004), "nationalizing" electoral systems, defined as systems employing closed-list PR, in moderately large districts enhance accountability (as measured by the change in the share of votes obtained by the incumbent party between two elections). Nicolau (2006), in turn, argues that accountability suffers in OLPR systems because of the way votes are counter and seats distributed in these systems. Carey and Shugart (1995) hypothesize that systems with "party-centered" rules will have lower levels of corruption, voters will vote on the basis of broad policy options, will have a higher overall degree of economic liberalism in trade and industrial policy, and higher levels of legislative party cohesion. Jones and Navia (1999) find that gender imbalance is greater in open- than in closed-list PR systems. Kunicova and Rose-Ackerman (2003) and Persson, Tabellini and Trebbi (2003) find that corruption is lower under open- than under closed-list PR. Chang (2005) and Golden (2003), on the other, hand, argue that much of Italy's pathologies, including its inordinate level of corruption, can be directly traced to the incentives generated by the OLPR system used until 1994. Gingerich (2013), however, argues that what differs across these systems is the type, not the level, of corruption. Finally, Hallerber and Marier (2004) associate OLPR rules with higher budget deficits and Hicken and Simmons (2008) with inefficient public spending.

3. Coordination in Open-List PR Systems: The Current View

We have a good understanding of electoral coordination in majoritarian systems. Electoral coordination – a collective phenomenon – will happen when voters and other political agents individually decide to behave strategically. Strategic behavior in elections, in turn, means that actors take actions "because of their perceived impact on the final outcome of the election, rather than because of any intrinsic value they may have" (Cox 1999: 149). As Cox (1997) has demonstrated, given a majoritarian electoral system, this kind of coordination will happen when some specific conditions are in place, including instrumentally rational voters and shared information about candidate placement Under these conditions, the result of successful coordination is the reduction in the number of candidates or parties competing in any given electoral district to M + 1, where M is the magnitude of the electoral district.

In PR systems, however, M + 1 offers no more than an upper bound for the number of candidates or lists that will compete, a number that is of little, if any, relevance given districts above a certain magnitude (about 5 according to the existing literature; see Cox and Shugart 1996 and Lago 2011). PR formulas applied in relatively large districts are considered to be permissive in the sense that institutional barriers to enter competition are low. The limit to the number of parties and candidates competing for votes in large district-PR systems is sociological; it is a function of the diversity of interests that find collective

expression in the district.[2] Thus, once organized into parties, interests will get seats more or less in proportion to the number of votes they obtain.

Political parties are crucial for the stability of large district-PR systems. Given the system's permissiveness, it is vulnerable to a high degree of fluidity. Party organizations, however, act to prevent fluidity and to prevent conflicts that may lead to defections and the emergence of new parties. Thus, whatever order there is in large-district PR systems, it results from the activity of political parties themselves.

Parties will be able to structure the electoral arena when they have the institutional means to do so. If the electoral system is such that individual or personal incentives obliterate the party, parties will not be able to play the role of organizing the electoral contest. According to the existing literature, this is what happens in OLPR systems and, consequently, this is why parties in such systems are of little relevance. In these systems parties are relatively weak; strong incentives for personalism act to weaken the grip of political parties. Moreover, the fact that votes in OLPR are pooled across individual candidates to determine the share of seats the party will get, makes it in the party's interest to open its list to as many candidates as there are individuals willing to run. In these systems, "the more the merrier" is the motto that guides political parties in forming their candidate list. The dominant strategy is to open the list and to abdicate in practical terms from playing any role in shaping it.

This view, we argue, is incorrect. Using data for the 2010 Brazilian elections for the national Chamber of Deputies, we show that many features of the lists the major political parties present are not compatible with a strategy of "the more the merrier." In fact, we find strong evidence that political parties behave strategically when they compose their lists and actually limit the number of viable candidates they present. Given the focus on Brazil, it is helpful at this point to present the basic features of the country's electoral system.

In 2010 Brazilians went to the polls to choose a new president, the members of the bicameral national legislature, governors for the 26 states plus the Federal District of Brasília, and members of the 27 unicameral state legislative assemblies. This was the sixth time since the end of the military regime in 1986 that the president and all other major government officials were directly elected. Overall there were six simultaneous contexts, involving about 135 million voters, close to 30 political parties, and over 17,000 candidates for the various posts.

The rules governing legislative elections are identical for the national and state-level Chambers and have remained broadly unchanged since they were first introduced in 1946. The Senate is the territorial chamber, representing each of the 27 members of the federation (26 states plus the Federal District of Brasilia). Each unit elects three senators by plurality for an 8-year term. Membership is renewed every four

[2] Other institutions may be appended to the system to impose limits, such as relatively high thresholds of representation

years by 1/3 and 2/3 in alternation, with voters getting two votes when two Senators are to be elected.

The Chamber of Deputies has 513 members who compete in multi-member districts, which are conterminous with the 26 states and Brasília. Thus, in this paper we employ the terms "districts" and "states" interchangeably. The magnitude of each district is determined by population, subject to the restriction that no state can have fewer than 8 or more than 70 representatives. Elections are based on OLPR. Each voter has one vote to cast, which can be given to a list or to an individual. Seat allocation is made in three steps. First, an electoral quota is computed by dividing valid votes in the district by the number of seats to be allocated. Preference and list votes are added and divided by the electoral quota to determine the number of seats each list receives. Second, unallocated seats are distributed through the highest average method. Finally, the allocation of seats to individuals within each list is done according to the number of preference vote each received; if the list got *n* seats, the *n*-top voted candidates are the elected ones. Competitiveness in the PR races, as measured by the ratio of candidates to seat, was high: an average of 9.5 candidates per seat for the national Chamber of Deputies, and 11.9 for the state-level legislatures.

There are two important features of the OLPR system in Brazil. First, the electoral quota varies considerably across the districts. The Chamber of Deputies is highly mallaportioned, with the price of a seat in the most populated states being considerably higher than in the least populated ones. This is the result of the floor and ceiling imposed on the formula for determining the magnitude of the district.

Second, parties are allowed to, and frequently do enter into electoral coalitions when running for seats in the Chamber of Deputies. The legislation treats the coalition as a single list *for purposes of seat allocation*. Thus, a coalition of three parties receives *n* seats, determined by the sum of all the votes given to these parties and their candidates, divided by the district's electoral quota. Coalition candidates are ranked according to the number of preference votes they received and the top-*n* candidates in the list, regardless of party affiliation, are the ones to receive the *n*-seats allocated to the coalition.[3]

Electoral coalitions for proportional elections have been allowed since the first democratic election in 1945, although specific details have varied significantly. One important aspect of the current system, which is different from what existed in the 1946-1964 period, is that coalitions for proportional elections only matter *after* the election, when votes are counted. Parties and candidates for the Chamber of Deputies election do not compete as members of a coalition and voters are rarely aware that a candidate for Federal Deputy belongs to a party that is in coalition with

[3] This aspect of the electoral system has been widely criticized. The fact that the coalition seats are not allocated in proportion to the votes received by each party is thought to distort voters' intentions, since their vote may help elect individuals from parties they do not like (Nicolau, Tafner).

another party. As a matter of fact, the legislation explicitly indicates that each party will only use its own name and/or acronym during the campaign (Lei das Eleições, art.6, paragraph 2).

There is considerable controversy among researchers regarding the reasons for and the effects of the coalition rule in proportional representation elections. For the purposes of this paper, what matters is that parties do not coordinate in the formation of the coalition list. Such list is simply the result of the addition of the lists independently generated by each of the member parties. Whatever coordination there is in the formation of the list, it occurs at level of individual political parties and not at the level of the coalition. We demonstrate this in a different paper (Cheibub, Mesquita and Sin 2014); here we simply note it to justify our focus in the remainder of this paper on individual parties and not coalitions.

4. Why Do Parties Do Not Open Up Their Lists?

To recall, existing arguments about competition in OLPR focus on the pooling of votes across candidates: more candidates equal more votes, which equal more seats. The dominant strategy for parties, therefore, is to allow anyone who so wishes to become a candidate in their list. Personalism permeates the system to the extent that candidates do not care about under which party they will run and who are the other candidates in the party. This results in long, uncoordinated party lists, with as many candidates as the party is legally allowed to have.

Our argument acknowledges that personalism is important and accepts that parties want to maximize seats. We argue, however, that more candidates do not always translate into more seats. The reason is that individual candidates' goal of getting elected creates incentives in the party to limit the number of viable candidates they will allow in the list. To understand this, think of a system such as the one that now exists in Brazil where there are multiple multi-member districts of different size; seats are distributed on the basis of an electoral quota Q = Valid Votes/M, where M = district magnitude. Votes are pooled across all candidates to establish the total party vote Vp. The party gets seats Sp = Vp/Q and seats are given to candidates with most votes. Both parties and candidates have a good estimate of Q: the "price" of a seat in each state is easily estimated on the basis of past elections and voter rolls.

A candidate who gets personal votes that amount to at least one quota is, of course, assured of election regardless of the party he or she belongs to. All other candidates, whose votes are less than Q, will depend on the "party" vote in order to be elected. There are two types of candidates among those whose do not get as many personal votes as Q. *Strong* candidates are those who have a good chance of being elected; *weak* candidates are those that have little chance of being elected. Candidates are strong in the sense that they get a significant amount of personal votes (as a proportion of one district quota), but not sufficient to guarantee their election. We leave the definition of "strong" and "weak" purposefully vague. Candidates know whether they are strong or weak, but they cannot form precise estimates of how

strong they are. They know they are "*bom de voto*," but they do not know how exactly they will be placed with respect to other, similarly strong candidates.

Given these conditions, our argument is simple: the greater the number of strong candidates in a list, the greater the uncertainty these candidates face about who will be the top placed candidate and, therefore, who will be elected. Because they do not have enough votes to reach a quota, strong candidates know their election depends on votes cast to very strong candidates and to weak candidates. But the presence of other strong candidates makes it impossible to know who exactly will benefit from these transfers. For these reasons, strong candidates want to limit the entrance of other strong candidates in the party list. The fewer they are, the more certain it is for those in the list that they will be the ones who will benefit from any vote transfer.

The challenge to this reasoning is the following: because votes are pooled across candidates, any extra vote obtained by t he party makes all candidates better off; adding another strong candidate to the list, thus, considerably increases the chance that the party will get an additional seat and reduces the uncertainty for all candidates. This, however, is not the case. To see why, consider the following hypothetical situation.

Party A has two strong candidates (C1 and C2) and several weak candidates (Cw). C1 expects to win personal votes equivalent to 85% of a quota, plus or minus 10%; C2 expects to win 75% of a quota, plus or minus 10%; and the several weak candidates Cw expect to get, together, 15% of a quota plus or minus 5%. Each candidate can do *well* (that is, they get their maximum expected share of the vote) or *badly* (the get their minimum expected share of vote). Table 2 represents the possible combinations in case each of the candidates performs at their minimum or maximum expected level. It is apparent from this table that the addition of a second strong candidate (or the addition of an n+1st candidate to a list of n strong candidates) will lead to a second seat only in a small fraction of the possible outcomes. In other words, only if all three sets of candidates perform at their maximum expected level will the presence of a second strong candidate in the party list lead to both of them getting elected. In all other circumstances, the party will get only one seat, with great uncertainty about which of C1 or C2 will be elected. In this context, one of the candidates will be better off if she is the only strong candidate in the list: she can be assured that the party will get at least one seat and that that seat will be hers.

Table 2 Hypothetical Party List with Two Strong Candidates and Many Weak Candidates				
C1	C2	Weak Candidates	Quotas	Result
Well (95%)	Well (85%)	Well (20%)	2.00	Party gets 2 seats; C1 *and* C2 elected
Well (95%)	Well (85%)	Badly (10%)	1.90	Party gets 1 seat; C1 *or* C2 elected
Well (95%)	Badly (65%)	Well (20%)	1.80	Party gets 1 seat; C1 elected
Well (95%)	Badly (65%)	Badly (10%)	1.70	Party gets 1 seat; C1 elected
Badly (75%)	Well (85%)	Well (20%)	1.80	Party gets 1 seat; C2 elected
Badly (75%)	Well (85%)	Badly (10%)	1.70	Party gets 1 seat; C2 elected
Badly (75%)	Badly (65%)	Well (20%)	1.60	Party gets 1 seat; C1 *or* C2 elected
Badly (75%)	Badly (65%)	Badly (10%)	1.50	Party gets 1 seat; C1 *or* C2 elected

But, why would the party care about which of the candidates get elected? If there is a possibility, even if remote, that the entry of a second strong candidate may lead to a second seat, the party should let that candidate run. We argue, however, that parties act to limit the entry of additional strong candidates because these candidates can credibly threaten to leave the party. If uncertainty that one's effort will not be rewarded is too high, candidates may choose not to run or they may choose to run under a different party label and be the exclusive beneficiary of whatever resources that party can use to help in his election. It is possible, thus, that failure to coordinate will mean that the party loses both strong candidates.

Finally, parties are able to coordinate because they can use the resources they control to dissuade some candidates from entering or persuade others to enter. These resources include money and direct help with campaign material, provision of volunteers, networking with candidates for different posts, and access to radio and television. It also include the promise of support in other contests, something relevant in a country such as Brazil, where six races took place in 2010. We argue that even in a context such as the one in Brazil, where parties are said to be extremely weak and unable to significantly affect candidates' electoral chances, these resources matter; parties can either threaten to withdraw them fro ma candidate they want to dissuade from running, or to use them to benefit the candidate they want to persuade to run.

If our reasoning is correct and parties do actively coordinate their lists and try to prevent the entry of too many strong candidates, a number of empirical implications should follow.

(1) Since parties do not maximize the number of candidates who run under their lists, party lists should be considerably shorter than the maximum allowed number of candidates in each district.

(2) The number of strong candidates will be close to the number of seats the party expects to win.

(3) There will be a sharp discontinuity between the votes obtained by the *last elected candidate* and those obtained by the *first non-elected* candidate.

(4) Strong candidates in the same list will tend to draw votes that do not overlap geographically. One way the party can reduce uncertainty among strong candidates is to prevent them from raiding each other's electoral base. Thus, we should observe relatively small geographic overlap in the personal votes obtained by strong candidates for the same list.

(5) Coordination if very large districts will be weaker due to greater uncertainty about candidates' number of votes.

In the next section we present evidence that is consistent with these expectations.

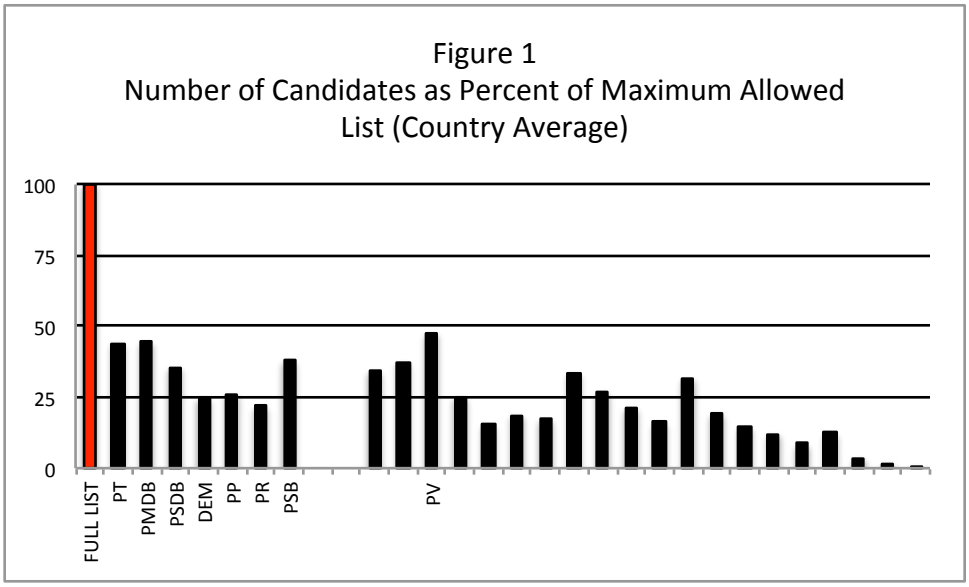
5. Evidence from Contemporary Brazil

As we mentioned before, we use data from the 2010 Brazilian election. It is worth mentioning that Brazil represents a worst-case scenario in the sense that it is widely seen as possessing institutions that reinforce the centrifugal propensity inherent to such large countries. Parties are almost unanimously considered to be weak, if not irrelevant; they are often referred to as "*partidos de aluguel*," parties-for-rent, indicating that they exist merely to meet the legal requirement that candidacies for all posts must be associated with a political party. To maintain a sense of the current view, recall that in 2010 there were 4,887 candidates distributed across 27 parties running for the 513 seats in the Chamber of Deputies. The average level of competitiveness was, therefore, 9.5 candidates per seat.

5. 1. Number of Candidates in party list

The numbers in the last paragraph suggest an exorbitant degree of competitiveness Chamber elections in Brazil. Yet, it is far from what it could have been: most parties present a number of candidates well below the legally allowed maximum.

According to the electoral legislation, the number of candidates each party can present depends on the magnitude of the district. In districts with magnitude smaller than 20 (of which there are 19), parties can present up to twice the number of seats under dispute. In districts with magnitude larger than 20 (the remaining 8), parties can present up to 1.5 times the number of seats under dispute. Overall, therefore, each party can present up to 868 candidates distributed across the states according to the their magnitude. They are, however, far from doing that. Figure 1 displays the maximum allowed number of candidates presented by each party as a proportion of the maximum allowed number of candidates, averaged for all districts.



As can be seen, no party presented more than 50% of the candidates they could have presented. The party with the largest share of candidates was the *Partido Verde* (PV): 366 candidates competing in 26 out of 27 districts, for an average share of 43% of the maximum allowed number of candidates. The next highest was the *Partido dos Trabalhadores* (PT), the party of the incumbent president, who presented on average 39% of the maximum allowed number of candidates. The seven largest parties singled out in figure 1 received together just over 70% of the national vote; these are, presumably, the most competitive parties (almost all of them presented candidates in the 27 districts) and the one who would be in a better position to attract large numbers of candidates if doing so were what they sought to do. Yet, on average, these parties filled only 30% of the places they could have filled in their lists. Clearly, this does not suggest a "the more the merrier" strategy.[4]

As a matter of fact, there is an inverse relationship between the popularity of the party and the number of candidates it presents *per seat won*. The largest parties at the national level present a rather low number of candidates per seats. The ten parties that got more than 3% of the vote each and, together, gathered 83% of the total vote, presented, on average, 8.6 candidates per seat they won. By contrast, the 12 parties that got the remaining 17% of the vote *and* at least one seat presented an average of 67.2 candidates per seat they won. Thus, the parties who presumably had more at stake in the elections were the ones who presented the lowest proportion of candidates per seat won.

Note that the average of 8.6 candidates per seat includes the PV, which, with 3.8% of the national vote and 13 elected, presented 366 candidates, or 28.2 individuals per each candidate elected. The PV is the party with the largest number of candidates

[4] Lest anyone raise this point, the lists composed of parties in coalition – for which the maximum allowed number of candidates is computed differently – does not fill all the places in the list they could have filled (Cheibub, Mesquita and Sin 2014).

and one that clearly adopted a strategy of having large lists, composed of weak candidates. This strategy was based on the hope that vote pooling would give the party at least one seat even though individual candidates would be highly uncertain about who would be the one elected. This is exactly the pattern of "chaos" that is normally used to characterize electoral competition for the Brazilian Chamber of Deputies. But this pattern is not observed in the larges parties, the ones that are mostly characterized as "catch-all," where personalism dominates. Instead, the pattern of opening the list to as many candidates as there are individuals willing to run is observed in the PV, arguably one of the most ideological parties in the country. We suggest that this is precisely the reason that allows this party to adopt a strategy of "the more the merrier:" it is precisely because the party is highly programmatic that individuals accept to run under its label in order to maximize the number of votes *for the party*. Because of its ideological nature, the individual candidate matters less than the fact that there is *someone* from the party elected. The same kind of reasoning, however, cannot be applied to the larger, more competitive parties.

5. 2. *Limit in the Number of Strong Candidates*

Our claim is that although party lists are large, parties limit the number of strong candidates they present. If this is true, then the difference between the number of strong candidates and the number of candidates elected should be relatively small. Small differences indicate successful coordination: the party presents only as many strong candidates as the number of seats it expects to win. Uncertainty is minimized for the strong candidates who run in the list.

We indicate the number of strong candidates by the effective number of candidates (ENC) in the list. Figure 2 illustrates a case of successful coordination: the *Partido dos Trabalhadores* in the state of Paraná, which elects 30 candidates. The *PT* presented 11 candidates out of the 60 candidates it could have presented. The effective number of candidates in the list was 5.7, and the party actually elected 5 candidates. Thus, the party "wasted" about one strong candidate. The distribution of votes across the 11 candidates show that the share of the party vote obtained by the sixth candidate was considerably smaller than the share of vote obtained by the fifth candidate.

Coordination depends on the degree of uncertainty surrounding the performance of strong candidates. Large districts make it harder for parties and candidates to form a good expectation of their performance. Moreover, the number of seats distributed in the remainder stage of seat distribution is relatively large, inducing parties to add candidates who may be able to get a seat then. Coordination, therefore, should be weaker in larger districts. Figure 3 illustrates this for the *PT* in São Paulo, where district magnitude is 70. As before, the party presented a number of candidates considerably below what it could have presented: 57 out of 140. The effective number of candidates was 22 and the party elected 15. The party, thus, presented 7 more strong candidates than the number of seats it actually got. We can still see

some evidence of coordination: most importantly is the fact that there is a marked drop in the number of votes of the sixteenth candidate, whose votes are almost identical to the votes of the seventeenth candidate. In any event, given that *PT* did receive seats in the remainder distribution, the level of uncertainty among the seventh and fourteenth candidates must have been quite high.

Figure 2
Distribution of Candidates' Vote - PT/PR

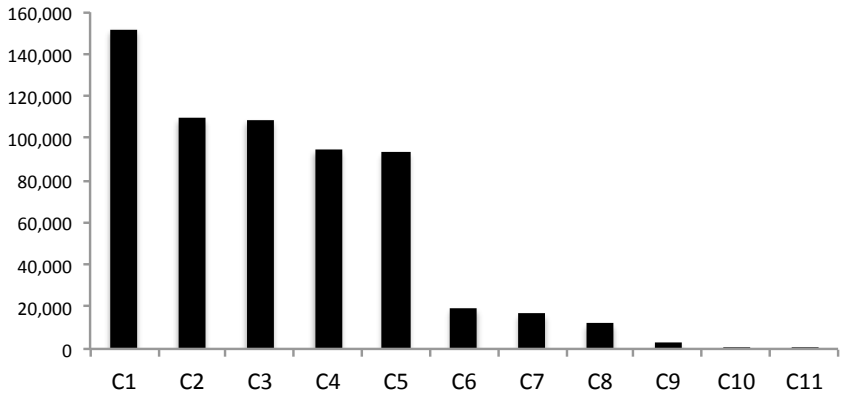


Figure 3
Distribution of Candidates' Vote - PT/SP

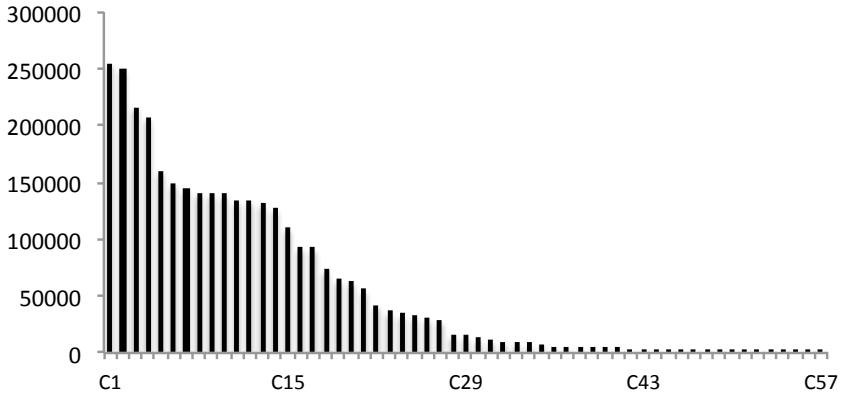


Figure 4 shows the level of coordination among the seven largest parties, averaged across all districts: in no case is the difference between the effective number of candidates and the number of candidates elected larger than 2. The ability of parties to coordinate, as we said, varies across district as a function of magnitude of course. As figure 5 shows, coordination in larger districts is weaker than coordination in

smaller districts. The negative value for the *PR* in this figure results from the fact that it had a candidate – the infamous Tiririca – who got 4.31 electoral quotas and was able to elect three other candidates with him.[5]

Figure 4: Coordination in the Seven Largest Parties
(Country Average)

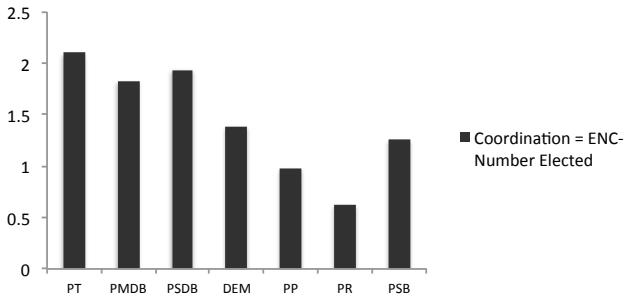
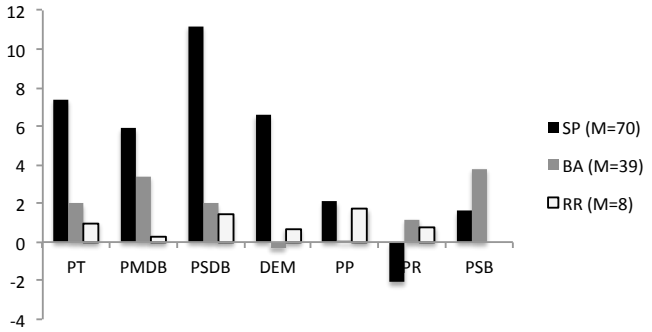


Figure 5: Coordination in Three States



5. 3. Discontinuity in the Intra-list Vote Distribution

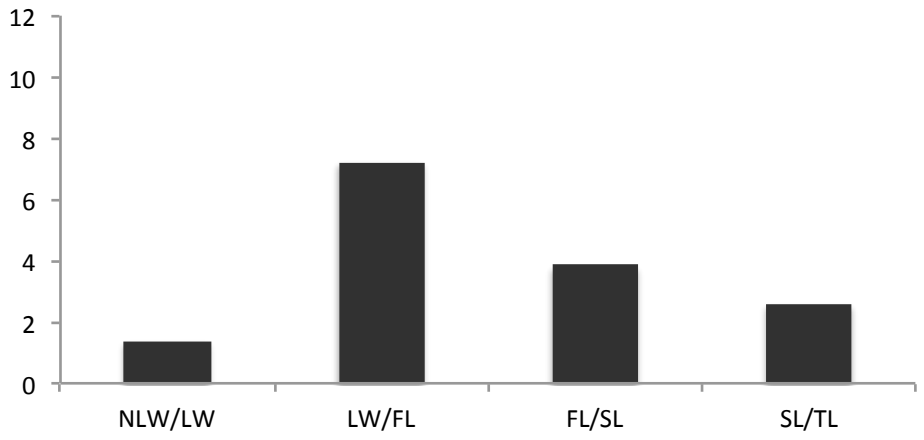
As figure 5 shows, some parties in some districts coordinate well and their lists contain no more strong candidates than the number of seats they expect to gain. Although the absolute number of candidates is higher, the votes they get are small and do not add much to the party total. Intra-list votes are distributed in such a way as to display a sharp discontinuity between the last elected candidate and the first non-elected candidate.

This is a general pattern. To see this, define the following positions in a party list: the last winner (LW) and the first loser (FL). To LW left, we find the next-to-last

[5] A common observation about Brazilian elections is that parties use very strong candidates – such as Tiririca – to elect many others in their tail. Yet, such candidates are rare. In 2010, in addition to Tiririca, only four other candidates obtained more personal votes in excess of two quotas: Anthony Garotinho (PR/RJ, with 3.99 quotas); Manuela D'Avila (PC do B/RS, with 2.43 quotas), and Ana Arraes (PSB/PE, with 2.18 quotas). Overall, there were 34 candidates out of 4,887 who got votes in excess of one quota. Given that the vast majority of these candidates had votes hovering around one quota, it was probably highly uncertain before the election whether they would go over the quota or not.

winner (NLW); to FL right we find the second loser (SL) and the third loser (TL). Coordination means that the ratio LW/FL is larger than the other ratios.[6] If parties limit how their lists will be composed, we should observe a higher LW/FL ratio than the ratios to its left and right. These ratios were computed for every list with a sufficient number of candidates. Figure 6 shows that, on average, the LW/FL ratio, that between the last winner and the first loser, is higher than the other ratios. The general pattern of vote distribution, thus, is one that indicates the presence of coordination by the parties in shaping their list.

Figure 6: Vote Ratios for Different Pairs of Candidates (All Districts)



5.4. Geographic Distribution of Strong Candidates' Votes

[TO BE ADDED]

5.5. Coordination Is Harder in Larger Districts

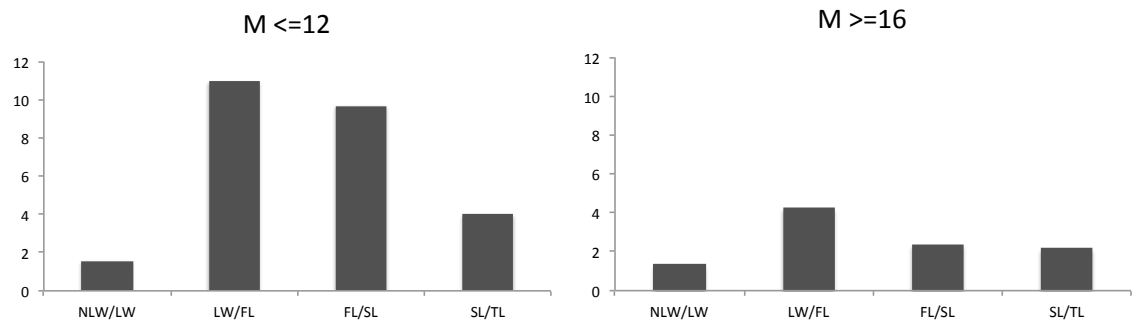
Some of the evidence in support this statement has already been suggested by figure 5. Obtaining a precise assessment of one's performance before the election is more difficult in larger districts as there will inevitably be more factors to take into consideration. Uncertainty is higher and successful coordination, in turn, lower.

Figure 7 shows this by splitting the information about the discontinuity in the intra-list vote distribution into small and large districts. In both cases the patter is as

[6] This is the same as *S* as defined by Cox (1997:xxx).

expected: the ratio between the vote for the last winner to the first loser is higher than those to its left and right. But the pattern is considerably more attenuated in the larger districts than it is in the smaller ones.

Figure 7: Vote Ratios for Different Pairs of Candidates



6. Conclusion

The issue of how parties and candidates assess their strength – past performance, performance in different races.

The evidence we presented raises a number of questions, which we are unable to address here. As we were interested in arguing for the existence of a pattern, we naturally focused on averages. Yet, it would be interesting to explore the variation in intra-list coordination across parties, across districts and across time. In addition to district magnitude, what other factors influence the parties' capacity to successfully limit the number of strong candidates in their list? How do parties coordinate across elections, that is, presidential, gubernatorial, senatorial and legislative?

Another question has to do with the presence in the race of a large number of small, essentially irrelevant candidates. To some extent, these candidates can be explained in terms of local idiosyncrasies: people who want to pay their dues for advancement in the party; who plan to run for local elections in the municipal cycle that occurs two years after the national cycle; or merely people who find it basically costless to add their name to a party list and do it for no apparent rational reason. The fact is that the vast majority of these candidates count virtually nothing for the election of national legislators. Their existence, and persistence over several elections, needs to be explained.

Additionally, it is important to consider alternative ways to measure the party's estimate of its strength. In this paper we used the effective number of candidates; we could also have used simply the number of candidates before the break in the distribution of intra-list votes. Both indicators, however, use the result of the election in order to estimate the number of strong candidates parties will choose to

let into their lists. This is not ideal and we recognize that. We plan to generate alternative indicators, based on candidates' performance in past and/or different races. Yet, we are buttressed in the use of the results by the fact that we do not always find evidence of successful coordination. The danger of using the results of the election we want to study as evidence of pre-election strategy is the circularity that may be built in in the indicator. But we do find considerable variation in the parties' ability to coordinate and find evidence of this ability in the places where we would expect to find it and not in others. We take this as evidence that our indicator does not build-in the expected result.

Finally, there is the existence of so many small political parties and their persistence over time. Unlike other new democracies that have adopted preferential PR systems, the number of parties in Brazil has remained consistently high and displays not signs of going down. If parties are able to coordinate their intra-party list, the question arises of why they are unable to coordinate among themselves and become stronger. We lack a robust rationalist explanation for this phenomenon. Existing attempts tend to focus on only one aspect of the "structure of incentives" and tend to imply that the whole system is ultimately irrational. Other explanations evoke a pervasive and strong sense of individualism in the political class, which would prevent reforms seeking to strengthen political parties and other "collective" institutions from being approved.

Notwithstanding these open questions, the analysis in this paper suggests one important conclusion that is of interest to those concerned with Brazil, and another that is more general about the way we think about coordination across different electoral systems.

Regarding Brazil, part of the sense of chaotic electoral competition that exists among analysts of virtually every persuasion comes from the habit of projecting the dynamics that is observed in São Paulo, the largest electoral district, to the country as a whole. Yet, we can detect some intra-party coordination even in São Paulo; but the magnitude there is so large that it is virtually impossible for candidates to have a good sense of where they stand in terms of votes. Many seats are allocated to parties at the remainder stage of distribution and parties overshoot in order to compete for them. Coordination in smaller districts is considerably higher. Note that the districts in Brazil are never very small: the smallest magnitude is eight. Nonetheless, in these districts, sometimes even in larger ones, we find strong evidence of coordination. Those involved in the perennial debate about political reform in Brazil, thus, should keep in mind that the inability to coordinate does not arise from the OLPR nature of the system per se. Rather, it is the product of the existence of a few mega-districts. The seat distribution mechanism, therefore, should not be seen as the culprit.

At a more general level, our paper suggests that we may be looking for the wrong type of coordination when we approach OLPR systems with the same framework that we employ to analyze majoritarian elections. In the latter, intra-party coordination is less of an issue and the reduction in the absolute number of

candidates to *M+1* is the main measure of successful coordination. "Duvergerian" coordination in PR systems is hard to detect and probably because it does not happen. But other types of coordination may and do happen, including political parties' attempt to compose their lists in ways that reassures relevant strong candidates that their chances of election are not bad. This is true even under very adverse institutional conditions. Thus, in OLPR systems, the reduction in the absolute number of candidates cannot be taken as a measure of successful coordination: this number may remain high even if party coordination is also high.

BIBLIOGRAPHY

[TO BE ADDED]