

**COORDINATION BETWEEN ELECTORAL ARENAS IN  
MULTI-LEVEL COUNTRIES <sup>(1)</sup>**

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At least since the seminal contribution of Duverger (1954), the effects of electoral systems on party system fragmentation have been understood as a matter of electoral coordination. As defined by Cox (2000: 49), “electoral coordination refers to a variety of processes by which groups of voters and politicians coordinate their electoral actions in order to win more legislative seats or executive portfolios”. Every electoral system stipulates a method of translating votes into seats that poses coordination problems for electoral competitors insofar as there are fewer seats to be filled than there are potential candidates wishing to fill them. Those

who win the seats will be those who succeed in amassing a sufficient level of support in the electorate through (1) persuading voters that they are better than the alternatives or, when this is not enough, (2) limiting the number of actual competitors (e.g., via electoral coalitions, joint lists, or *apparentement* of lists), (3) limiting the number of competitors for whom voters actually vote (strategic voting), or (4) mechanisms (2) and (3) at the same time (Cox 1999: 146).

A major result of these assumptions about electoral coordination is that a generalization of Duverger's Laws will hold in either single-member district plurality (SMD), single-member with runoffs, or proportional representation (PR) electoral systems: the number of viable parties or candidates (i.e., all competitors who expect to win a seat and those who are tied for the  $M^{\text{th}}$  seat) in these three systems is equal to the district magnitude ( $M$ ) plus one. Cox (1997: ch. 4) labeled it as the " $M+1$  rule". In particular, when the prospective parties or candidates in a district are all primarily interested in the election at hand (i.e., they are short-term instrumentally rational) and have good information about the relative chances of potential competitors (i.e., they have reasonably accurate and publicly available information on candidate standings), two different  $M+1$  rules apply in any district. First, the number of competitors entering a given race tends to be no more than  $M+1$ . Second, if more than  $M+1$  parties or candidates enter because of a failure of the entry coordination rule, votes tend to concentrate on, at most,  $M+1$  of them. The  $M+1$  rule says that, under specified conditions, strategic voting will reduce the contest with more than  $M+1$  parties or candidates to one in which, at most,  $M+1$  competitors are seriously running for seats: this is a Duvergerian equilibrium. But even if all the preconditions of the model are met, non-Duvergerian equilibria can arise when two or more candidates are tied for second; in this case, neither will be obviously "out of the running" and hence their supporters will have no clear incentives to desert them.

However, in the real world Duvergerian and non-Duvergerian equilibria are unlikely results of electoral competition. Some recent literature on electoral systems and electoral coordination has emphasized different strategic dilemmas faced by party elites within and

across districts for the unexpected increase in the number of competing parties. There are (a) severe collective-action problems when parties cooperate to run the optimal number of candidates in each district (Christensen 1996), or (b) interaction effects in mixed-member electoral systems between proportional representation and single-member district plurality rules (Herron and Nishikawa 2001; Cox and Schoppa 2002; Gschwend, Johnston, and Pattie 2003; Ferrara and Herron 2005), or (c) negative incentives for *party aggregation* the less the degree of political and economic centralization (Chhibber and Kollman 1998 and 2004), or (d) the impact of federalism through the concentration of small parties in some regions, producing, when they are added up, a higher number of parties in the national level (Geddes and Benton 1997; Jones 1997).

With the exception of the research on mixed-member electoral systems, a common assumption in this literature is the homogeneity of the incentives for electoral coordination within countries, be they the representative body, the electoral system, or at the territorial level. But what if in a given country there are distinctive elections for separate parliaments representing different territorial units? This paper addresses a different and more general coordination dilemma, which appears when several elections in different territorial levels are held within a country: how does the national party system evolve when a set of voters are enfranchised to participate in a variety of elections under a diversity of rules? We maintain that, especially in multi-level countries, there are *interaction* or *contamination* effects between national and sub-national electoral arenas that generate, similar to most mixed-member electoral systems, a centrifugal force that pulls up the number of electoral parties in national elections. In these cases, electoral coordination is *not* limited to only one single election at a specific point of time, *nor* does it require the homogeneity of its structure incentives.

By dwelling on the Spanish case, in this paper we make two contributions. On the one hand, we identify a coordination dilemma that appears in those multi-level democracies in which institutional features, in particular decentralization, create multiple opportunities for

voters to render judgments about parties. When parties can win seats in sub-national elections, but not in national elections, they face a dilemma: should they enter the race in elections in which they are not viable, or should they enhance their chances or resources through coordination with a larger party but paying the price of losing their, say, marks of identity? Our main finding is that Duvergerian equilibria are unlikely outcomes in democracies where state and federal or regional parliaments are elected according to significantly different rules. On the other hand, we point out the main causal mechanisms that explain how this dilemma is solved and test their empirical implications.

The paper proceeds as follows. In the next section, we discuss some theoretical approaches and present our hypotheses on the coordination dilemma that parties face in multi-level countries when they compete in elections held at different territorial levels for distinctive representative bodies under different electoral rules. The third section justifies the suitability of Spain as a particularly interesting case, describes the data used, and examines the operationalization of both the dependent and the independent variables. The results of our empirical analysis are presented in the fourth section. The last section concludes.

### **The theoretical setting: approaches and hypotheses**

The mechanical and psychological effects of electoral systems depend on electoral permissiveness: the higher the number of seats to be filled, the less the Duvergerian gravity. The empirical evidence of cross-national analyses is conclusive.<sup>(2)</sup> Once social heterogeneity is controlled, the number of parties is explained by the *strength* of electoral systems, that is, their capacity to constrain party strategies and voters' decisions at the ballot box (Sartori 1994: ch. 3). But the consequences of electoral rules are not as straightforward as most comparative studies present them to be. Besides their expected variation across countries, incentives to electoral coordination can also vary *within* a country. We can conceive of at least two sources of

variation. The first implies that a given single parliament is chosen with different electoral systems; the second occurs when there are two or more parliaments chosen at different territorial levels in a given country with different electoral systems. In both cases, parties and voters are the same. But there are no reasons to expect that their strategic decisions are absolutely independent between those *arenas*.

Let us now examine the basic assumptions of these two sources. As for the first, the most recent literature on mixed-member electoral systems has identified interaction or contamination effects between the proportional representation (PR) and the single-member district plurality (SMD) systems according to which there are a larger number of parties in the SMD tier than the average for pure SMD systems. In mixed-member systems, small parties face a complex situation with difficult, consequential decisions to be made. On the one hand, to do their best in the PR contest, they need to run candidates in every SMD under their own party's banner. But, on the other hand, the decision to enter the SMD race presents small parties with a dilemma, since they face incentives from (either to cooperate (in order to efficiently translate votes into seats on the SMD side of the ballot) or to field their own candidates (in order to avoid the trade-offs related to their cooperation with larger parties). If small parties resolve the dilemma through electoral coordination with a major party to maximize seats in the SMD ballot, the interactive or contamination effects are weaker (Cox and Schoppa 2002: 1049). But if they resolve this dilemma in favor of the “go it alone” approach, the number of parties winning votes in the SMD tier is likely to be higher because of the extra supply of candidates.

Why should small parties field candidates in the SMD contest if they have no realistic chance of winning? Because by placing a candidate in the SMD tier, a small party might heighten voter awareness and potentially gain more votes (and eventually seats) for the PR portion of the election. In addition, by running many SMD candidates, small parties can develop their own internal strategies; for instance, they may fill in the requisites for receiving public funding or decide to test new, aspiring politicians in districts where they expect to do poorly.

Thus, these parties, in contrast with those in pure SMD electoral systems, can place their candidates in the SMD portion of mixed-member electoral systems regardless of their strength. And this decision will create centrifugal tendencies of some relevance in opposition to Duvergerian gravity. Therefore, we should not expect the number of parties in SMD contests in mixed-member systems to approach two because of these contamination or interaction effects, particularly when the proportional component is dominant (Herron and Nishikawa 2001: 69; Cox and Schoppa 2002: 1031; Gschwend et al. 2003: 114; Ferrara and Herron 2005: 17).<sup>(3)</sup>

The second source of variation in incentives for electoral coordination has a different scenario. Instead of parties and voters deciding under two different sets of electoral rules for the same national parliament with a mixed-member electoral system, electoral arenas are now more complex. They are constituted by national and sub-national contests under distinctive electoral systems for separate representative bodies located in different territorial levels of a given country. Although limited, there are a number of studies on the connections or interactions between these two electoral arenas, particularly in federal countries.<sup>(4)</sup> But the questions that arose from the preconditions and outcomes of electoral coordination in these polities remain mostly unanswered. Accordingly, the scant reflections that can be found in the literature are much more intuitive and preliminary. Deschouwer (2006: 292), for instance, has stated that “political parties in multi-level systems face particular problems that are the direct consequences of the organization of the political system”; but then he only mentions the question of parties confronting the choice of participating in elections at only one or at both levels of the polity. Cox (1997: 21) has suggested that, in the American case, “one would hardly expect that the party systems for House and Senate elections would fully adapt to their respective electoral systems, in splendid isolation from one another. If a party can run and elect candidates under the more permissive system, it may decide to run candidates in the other system as well—not to win seats, perhaps, but to keep its electoral organization in good trim, to establish its blackmail potential, or for other reasons”. Park (2003) has also challenged the assumption of the alleged isolation: in Korea, a rather decentralized unitary state whose

legislative elections are run under a single-member plurality electoral system, electoral fragmentation at the district level in local contests is directly related to the degree of electoral multipartyism for legislative elections at district-levels. Similarly, Cox, Rosenbluth, and Thies (2000) have shown that the differences in electoral incentives between Japan's Upper and Lower Houses produce different patterns of factional affiliation. And Blais and Carty (1991: 85) have added that "federal institutions ... may encourage party elites to maintain smaller regional parties rather than fuse with others as Duverger expected".

Of course, many studies have taken into account federalism as a key factor for analyzing the impact of electoral laws in national party systems. Since federalism works as an institutional constraint to coordination, it can produce the failure of Duverger's laws (Cox 1997; Chhibber and Kollamn 1998 and 2004; Magaloni 2000). Gaines (1999), for instance, has claimed that federalism is the main explanation for multipartyism in Canada: more than the standard Duvergerian logic, the most relevant explanatory factors are to be found in the coexistence of different party systems in given sub-national units and the corresponding contamination effects of different electoral arenas. Jones (1997) has shown that the timing of gubernatorial elections has an important impact on the fractionalization in the Argentinian parliament. Samuels (2002a and 2002b) has chosen the Brazilian case to exemplify the coattail effect, according to which candidates for the gubernatorial offices pull up the electoral support of candidates running in concurrent congressional or sub-national elections. In a similar vein, Shugart and Carey (1992: ch. 11) have documented that the timing of presidential elections is also relevant to national legislative elections: the level of parliamentary fractionalization is lower when the gubernatorial and congressional elections are held concurrently than when both elections take place at different times.

Thus, the analysis of electoral coordination should take into account the existence of electoral arenas. In other words, the more decentralized political power is in a multi-level country, the less compelling an analysis will be if it only considers the rules governing *national*

elections. Empirically, decentralization means here both the existence of directly elected *sub-national* parliaments and the analytical necessity of distinguishing between national and sub-national parliamentary elections along a number of indicators. And this distinction directly leads to the research question of considering the interaction between these two electoral arenas and more particularly the potential effect of sub-national elections. In multi-level countries, small parties (i.e., local or regional parties with chances of winning a seat in sub-national elections but not in national ones) face a different strategic dilemma. To do their best in sub-national elections, they need to run candidates in national elections under their own party's banner. But, at the same time, they face incentives to cooperate with a national party (or to coalesce with one or several local parties with the same dilemma) to efficiently translate votes into seats in the national contest. Again, if they resolve this dilemma in favour of the “go it alone” approach, the number of parties winning votes in national elections is likely to be higher because of the extra supply of competitors. And if they resolve the dilemma through electoral coordination to maximize their chances of winning at least one seat in national elections, electoral fragmentation will be lower.

For sub-national parties, any cooperation agreement with national parties has both advantages and disadvantages.<sup>(5)</sup> On the positive side, the advantages of cooperation are obvious. Sub-national parties can increase their probabilities to receive more votes and hence to win a seat in national elections –which seems to be the equivalent, in the theoretical approaches, to the institutional goal of entering the government into the standard nationwide pre-electoral coalitions (Golder 2006: 196-198). On the negative side, sub-national parties face severe risks. In the short run, and in the case of identity-based nationalist parties, substantial segments of their supporters may decry the agreement as their likely concessions directly subvert the very essence of their nationalist ideology, usually in conflict with most if not all national parties. More generally, sub-national parties may lose the opportunity to recruit new voters in high-profile national election campaigns and endanger their presence in national politics. As a consequence, they will see their blackmail potential drastically reduced, as well as

their visibility. In the medium or long-term, sub-national parties face the risk of being absorbed or dispensed with by the national party.

On the other hand, the strategy of non-cooperation entails also clear benefits and costs. Since most regional organizations usually belong to the category of *small* (irrespective now of its actual size) parties, in the short run their decision to participate in national elections is contingent on the ideological reputation, media coverage, and public funding they might eventually enjoy. If they are successful, sub-national parties can obtain nationwide visibility, ideological support, and material resources, a combination that may reinforce their possibilities to win seats. As Lutz (1997: 4) puts it, “it can be useful for a party to participate in an election when their utility of being present in the political arena is higher than the costs of taking part in an election”. However, this short-run perspective may prove inadequate for sub-national parties. Their platforms are obviously dominated by demands of more or less drastic changes for self-government in their respective territories. And the *locus* for these policy goals is national parliaments. If they are able to enjoy representation in the national parliament and may additionally play a pivotal role in national politics for the legislature, particularly with minority governments, their policy success in the medium or long-term is much more likely. Consequently, as de Winter (1998: 211) has shown, “most major [sub-national,] ethnoregionalist parties participate in general elections, in elections for the European Parliament, and in regional, subregional (provincial) and communal elections, [and] tend to focus on increasing their political weight at the level of the national parliament ...”.

On what does the resolution of this strategic dilemma depend? According to Cox (1997: 5-6), the nature of the electoral coordination problem that arises in any given system is defined by three components: electoral institutions, political preferences, and expectations. In our multi-level scenario, these components may be easily translated into incentives for enhancing strategies of electoral competition at the district-level. Consequently, decisions by sub-national parties to either coordinate at their district-level with national parties in national elections or run

under their own flag depend on three incentives. They stem from the electoral rules that govern elections to both national and sub-national parliaments, the strength of the cleavage that presides over the electoral competition among sub-national and national parties, and the expectations they all have about the electoral fortune of their competitors. Those incentives also constitute our hypotheses, and can be presented as follows:

1. *The difference in the permissiveness of electoral rules in national and sub-national elections.* Electoral rules determine the available opportunities for trading votes in order to win more seats. In this regard, their permissiveness is directly related to the size or number of contested seats in the district: as is well known, “magnitude is the decisive factor” (Taagepera and Shugart 1989: 112). Electoral competitors’ incentives to coordinate their actions and resources are given by district magnitude: the less the number of seats to be filled in a district, the higher the necessity of coordination, and vice versa. This implies that, all else equal, the opportunity for electoral coordination between arenas exists when district magnitude is different in both types of elections. As this difference increases, (a) the number of parties facing the dilemma also increases and (b) they are thought to be provided with higher incentives to either prudently withdraw the competition, enter stand-down agreements with other parties, or form broad electoral coalitions. Given that in most decentralized countries sub-national district magnitudes are higher than national ones, particularly in Spain, *the higher the difference in district magnitude between national and sub-national elections, the higher the probability of sub-national parties deciding not to enter the race in national elections under their own party’s banner.*
  
2. *The existence of sub-national or regional cleavages.* Electoral coordination also depends to a large extent on the political preferences of party elites. As the number of distinct ethnic, religious, or linguistic groups in a district increases, the chances of malcoordination increases and hence the number of entrants or parties (Cox, 1999).

After all, party elites define the terms of the cooperation, assess benefits and costs, shape cleavages, hold expectations, implement electoral strategies, and enjoy or suffer the consequences. Their preferences are usually strongly related with the cleavage structure of the party system, and more particularly in our case, with the regional cleavage. For both the sub-national and the national parties, the outcome of the coordination process is contingent upon the distance between their locations along the ideological cleavage and, above all, once again, the regional cleavage. If the distance between parties in both cleavage lines is small, their preferences are more likely to be rather similar and, consequently, the coordination outcomes have more chances to become successful. But the contrary is also right. As Golder (2006: 203) puts one of her stronger findings, “electoral [pre-]coalitions are less likely to form the more ideologically incompatible the potential coalition members”. Since sub-national parties have to coordinate their actions particularly with national parties, the most important incentives in this regard depend on the intensity of the regional cleavage: *the stronger the cleavage, the higher the distance between the preferences of party elites and, therefore, the less the probability of electoral coordination.*

3. *The possession of good information about the relative chances of potential competitors.*

Since candidates and parties decide whether to enter a race primarily on the basis of their chance of winning seats, their expectations about who might or will win under various entry scenarios are obviously crucial in determining who will actually enter. Expectations can be rational (Cox, 1997: chs. 4 and 5), or adaptive, or based on election history (Forsythe et al. 1993; Lago 2007). In general terms, parties can easily ground their electoral expectations in the existing information about voter preferences in each arena by looking at the last pair of national and sub-national elections; other sources generating common knowledge on candidate or party chances are polls, news analyses, candidates’ statements, and other bits of essentially free information (cf. Johnston et al.

1992: 197-211). Therefore, *the clearer the information about the identity of viable parties in national elections, the higher the probability of electoral coordination.*

### **The empirical analysis: the case, the data, and the variables**

The case of Spain is particularly well suited for analyzing electoral coordination between national and sub-national arenas.<sup>(6)</sup> Spain appears to us as an ideal case of multilevel political representation, according to which voters have the opportunity to express their preferences through different layers of representative institutions, and party elites have both strong incentives and strategic dilemmas as to whether to compete or not in some or all of these layers. We can think of at least four reasons. First, the recent and remarkably intense process of decentralization; second, the strength of the regional cleavage both between national and regional or nationalist parties, and among these sub-national parties as well; third, the systemic relevance of both regional parties and regional voting; and fourth, the use PR electoral systems both in national and regional elections, but with a significantly lower district magnitude in the former case.

The very outcome of decentralization is one of the most notable successes of Spain's transition to democracy in the late 1970s, in itself a process with many achievements. The extraordinary process of the construction of the *Estado de las autonomías* replaced in just a few years a highly centralized territorial distribution of power with a *de facto*, asymmetric federal state with 17 Autonomous Communities, each of them enjoying a wide range of institutions, powers, and resources (Gunther, Montero, and Botella 2004: ch. 6). According to the provisions of the new 1978 constitution, all Communities have their own elected parliaments, governments, public administrations, budgets, and resources. As Subirats and Gallego (2002: 3) have summarized, the process of decentralization has converted "a unitary state into one of the most decentralized in Europe. ... In twenty years the Autonomous Communities [have been

created] to administer over one-third of all public expenditures, ... nearly one million employees, ... [and about] three thousand laws ... through institutions that have been directed by two hundred regional presidents and ministers, and over a thousand members of parliaments”.

From the early 1980s, the regional cleavage has been a permanent characteristic of Spanish politics. In most federal states, the dominant pattern is that of a federation-wide party system with occasional variations in the electoral strength of one of the major parties or the eventual presence of third, minor parties. However, some complex multinational states have different party systems at both the national and some sub-national arenas. This has been the case of Belgium over the last twenty years, as is also the case of Spain. Here the interaction does exist among the various components of (i) the national party system, (ii) some sub-national, regional party systems, and (iii) a number of specific national party sub-systems. In the multilayered character of these party systems, parties follow patterns of coordination and competition at different electoral, parliamentary, governmental, and institutional levels. As it should be expected, the structural incentives for electoral coordination are distinct (and more complicated) than even those existing in federal states. Table 1 illustrates this complexity.

[TABLE 1 ABOUT HERE]

As a consequence of the multilayered character of party competition, the regional cleavage has crystallized in major variations of the vote distribution across most Communities. The resulting mosaic has been labelled the “electoral Spains” (Vallès 1991), or more simply the “many Spains” (Gunther, Montero, and Botella 2004: ch. 6), to underline the great diversity of patterns of party coordination and competition in different regions. Table 2 shows basic data for some of these patterns. The so-called *regional voting*, for instance, measures the electoral distinctiveness of each Community. That is, the extent to which its voters support nationalist, regionalist, or local parties and/or the extent to which they give proportional support within the

region for national parties.<sup>(7)</sup> Nearly all the regions have high indices, which have moreover remained remarkably stable. In comparative terms, the Spanish levels of regional voting in national elections are among the highest in Europe (Lee 1968; Hearl and Budge 1996: 172-173; Linz and Montero 2001: 181).

[TABLE 2 ABOUT HERE]

There is still an additional reason for selecting Spain as our empirical case. National and regional sub-national electoral rules create very different incentives for the formation and sustenance of parties. In both arenas the allocation of seats to parties is proportional to the votes following a D'Hondt formula of party list proportional representation. While in national elections there is a 3 percent legal threshold at the district level, in regional elections there are 3 or 5 percent legal thresholds at the district or regional level<sup>(8)</sup>. With the exception of seven districts (out of a total number of 52) in national elections, electoral districts are the same in both arenas.<sup>(9)</sup> Those exceptions will be excluded. Hence, our empirical analysis will be limited to *districts* with the same geographic area in both types of elections.<sup>(10)</sup> The most relevant feature for our purposes is that district magnitude is substantially lower in national elections than in regional ones.<sup>(11)</sup> Figure 1 shows conclusively that the number of seats to be filled in those districts where at least one sub-national party faced the coordination dilemma is *always* higher in sub-national elections than in national ones.

[FIGURE 1 ABOUT HERE]

Our empirical analysis assesses strategic entry at the district level or local electoral coordination in Spanish national elections over the period 1982-2004.<sup>(12)</sup> We are interested in evaluating pre-electoral coordination when parties are viable in sub-national elections, but not in national ones. Should they abstain or participate in national elections? And if they decide to participate, should they contest both elections independently, or in coalition or other forms of cooperation with other parties in national elections? If this latter dilemma is resolved in favor of

the “go it alone” approach, the number of parties winning votes in national elections will be greater because of an extra supply of competitors: only parties that are viable in some arena enter the race in the other, independently of their (bad) electoral expectations. The interaction between electoral arenas would generate a centrifugal force that softens Duvergerian gravity and pulls up the number of electoral parties. But if the dilemma is resolved through electoral coordination to maximize resources or, above all, the number of seats won, then Duvergerian gravity works. Those party elites who foresee that their own candidates will bear the brunt of strategic desertion in national elections are likely to decide that mounting a (hopeless) campaign is not worth the cost, and will seek instead to throw their support behind more viable candidates. To the extent that withdrawals of this sort do occur, the number of competitors will decrease (Cox 1997: 151).

The analysis of entry decisions in national elections entails the selection of one indicator that may reveal whether sub-national parties employ “go it alone” strategies or engage in some form of pre-electoral coordination. The measurement of sub-national parties’ entry decisions at the district level in national elections, our dependent variable, is based on a comparison between strategies in sub-national and national elections. We have created a dichotomous variable, *Entry*. It is coded 1 when in a given district a sub-national party ran candidates alone (i.e., under its own party’s banner) in both national and sub-national elections: the strategic dilemma is resolved in favor of the “go it alone” approach. And 0 when in a given district a sub-national party ran candidates alone only in sub-national elections, whereas in national elections it may choose to withdraw, or to make some type of cooperative agreements with other parties, or to enter into a more or less broad electoral coalition: the strategic dilemma is resolved in favor of electoral coordination.<sup>(13)</sup> All non-national parties are included in the analysis (235 cases according to Table 5), but we control for previous national success, as we will see later. The dependent variable compares sub-national parties’ entry decisions in each one of the districts in national elections to the situation of the immediately preceding sub-national election.<sup>(14)</sup> And as has been already said, our empirical analysis will be limited to *districts* with the same

geographic area in both types of elections. seven districts (out of a total number of 52) in national elections have to be excluded from the analysis because the drawing of districts is different in sub-national elections.

Which are the consequences for the national party system fragmentation of the interaction effects between national and sub-national elections in Spain? As Table 3 makes it clear, the strategic dilemma between electoral arenas is very common in Spanish elections.<sup>(15)</sup> Focused only in viable sub-national parties in regional elections, but not in national ones, a total number of 141 sub-national parties have faced at least once the coordination dilemma in an average of 14 districts per national election. In most of the elections, parties have resolved this dilemma in favour of the “go it alone” approach. Of the 13 parties facing the dilemma in the 1982 election, for instance, all of them entered the race in all 12 districts where they had to reach a decision; the mean share of their vote was 4.42 percent. And in the 1986 election, 20 parties facing the dilemma in 16 districts entered the national race, while only 2 decided not to enter. In the rest of the elections, most sub-national parties did decide to compete with their own flags. Considering the amount of districts in which sub-national parties decided on the entry strategy, there were considerable oscillations between a minimum of 27 percent in the 1982 and 2004 elections, and a maximum of 40 percent in 1993. For those parties, the average support was 5.30 percent, with a minimum of 2.48 in 1989 and a maximum of 7.25 percent in 2000. Given that according to Duvergerian theories these parties wouldn’t compete in the counterfactual world where they are not in the sub-national legislature, an average number of 17 parties per election, receiving a mean of 5.30 percent of the vote in an average of 14 districts, is the extra supply of competitors because of the interaction between electoral arenas in Spanish national elections.

[TABLE 3 ABOUT HERE]

These findings have important implications for the empirical analysis of electoral and party systems. We have demonstrated that the interaction between electoral arenas generates a centrifugal force that softens Duvergerian gravity and increases the number of parties in national elections. That is, the institutional features of multi-level countries generate outcomes in national elections that differ from those that should be observed if only the national arena existed. This is one reason for the lack of Duvergerian or non-Duvergerian equilibria in the real world, even if all the preconditions of the model are met (Cox 1997: ch. 4).

According to our three hypotheses stated before, we have selected three independent variables as the causal mechanisms behind electoral coordination between arenas. The first refers to the electoral systems. Since electoral rules in the Spanish *Estado de las autonomías* are neither *congruent* (between the national and the sub-national levels) nor strictly *uniform* (among the sub-national levels), their variations provide distinct incentives to party elites (Massicote 2000: 102).<sup>0</sup> As we know at least since Rae (1971), the most influential variable to explain electoral fragmentation is district magnitude. To capture the different incentives provided by each district in both types of elections, we use the concept of effective electoral threshold, that is, the proportion of votes that secures parliamentary representation to any party with a probability of at least 50 percent (Lijphart 1994; Taagepera and Shugart, 1989). As the effective electoral threshold increases, the likelihood of strategic behavior among voters and elites rises. The effective threshold is calculated as an average of the inclusion threshold (the minimum percentage of the vote that gives a party a seat under the most favorable circumstances) and the exclusion threshold (the maximum percentage of votes that, under the most unfavorable conditions, is still insufficient for a party to obtain representation<sup>(16)</sup>):

$$T = \frac{50\%}{M+1} + \frac{50\%}{2M} ,$$

where  $M$  is the number of seats in the district. We have created a variable, *Permissiveness* ( $P$ ), calculated according to the following formula:

$$P = T_{\text{National}} - T_{\text{Sub-national}}$$

where  $T_{\text{National}}$  is the effective threshold in a given district in national elections and  $T_{\text{Sub-national}}$  is the effective threshold in the same district in sub-national elections. If  $P > 0$ , the electoral system is more permissive (or weaker) in sub-national elections than in national elections; on the contrary, if  $P < 0$ , the electoral system is more permissive (or weaker) in national elections than in sub-national elections. The mean of the variable, 7.52, and its minimum value, 0 (in 18 districts) and maximum, 16.81, included in Table 5, tells much about its long range, and easily justifies why the coordination dilemma arises in national elections in Spain.

The second independent variable refers to the regional or sub-national cleavage as a political constraint to electoral coordination. As we already know, sub-national party elites enjoy incentives or suffer constraints for their electoral strategies of coordination depending on the distance between parties along this cleavage. Given that sub-national parties coordinate their actions particularly with national parties, the intensity of the regional cleavage is an excellent proxy for indicating the distance among parties. Obviously, the more intense the cleavage, the higher the distance. Our measurement is far from what used to be the most common strategy in the literature. Sociopolitical heterogeneity is usually quantified by aggregate indicators or alternatively by placing individuals into groups and then applying either the index of ethnic or religious fragmentation or the effective number of ethnic or religious groups (for instance, Amorim Neto and Cox 1997). For the Spanish case, we are fortunate to be able to measure instead the *intensity* of the regional cleavage with a survey indicator of national or regional subjective identity. As can be seen in Table 4, this indicator takes the percentage of individuals

who, in each Community, declare feeling more regional than Spanish along a scale that includes the positions of being “only [regional, i.e. Catalan, Basque, etc.]”, “more [regional] than Spanish”, “as [regional] as Spanish”, “more Spanish than [regional]”, or “only Spanish” (Linz 1986).<sup>(17)</sup> We have created an aggregate measure of the intensity of the regional cleavage in each Community, *Preferences*, by simply adding the percentage of individuals who declared they were “only [regional]” and “more [regional] than Spanish” (Lago 2004).<sup>(18)</sup>

[TABLE 4 ABOUT HERE]

Finally, the third independent variable attempts to tap expectations. Since electoral coordination primarily depends on the capabilities to predict the chances of the main competitors, one can expect a reduction in the number of viable competitors through party elites’ coordination only *after* both the general *and* regional founding elections have been held; local and regional party elites will learn who is in condition to win seats in national elections and will decide accordingly whether or not to enter the race (Reich 2001: 1260). Therefore, we have created a categorical variable, *Expectations*, coded 0 when a party decided to entry but did not win seats in the district in the previous national election; 1 when a party won at least one seat in the district in the previous national election; and 2 when a party did not entry previously in national elections (i.e., it has no expectations). Additionally, this variable allows us to control for the size of sub-national parties. As Reed (1990) has shown, parties learn about the electoral game through trial and error. And collective learning is evolutionary.

Descriptive statistics are shown in Table 5. As can be seen, the mean of the dependent variable, *Entry*, is 0.91. This value deserves particular attention, because it means that 91 percent of the time regional parties do run their own candidates in national elections. That is, the strategic dilemma is seldom resolved through electoral coordination.<sup>(19)</sup>

[TABLE 5 ABOUT HERE]

**The results: explaining electoral coordination or strategic entry**

In order to test our hypotheses on strategic entry at the district level in national elections, we have run a logit regression:

$$Entry = \beta_1 + \beta_2 Permissiveness + \beta_3 Preferences + \beta_4 Expectations$$

The results are displayed in Table 6. The model performs much better than a null-intercept-only model, as is clear from the Wald  $\chi^2$  coefficient, statistically significant at the 0.01 level. Our three independent variables have the expected signs. On the one hand, *Permissiveness* and *Preferences* are statistically significant at the 0.05 level. As was hypothesized, the higher the difference in the effective threshold at the district level between national and sub-national elections, the less the probability of sub-national parties entering the race with their own separate flags in national elections. And the stronger the regional cleavage (i.e., the more distant the preferences of the party elites who must coordinate), the higher the probability of sub-national parties fielding their own candidates in national elections. On the other hand, only the category *No expectations* in the variable *Expectations* is statistically significant at the 0.1 level. This means that the probability of entry is lower when parties did not enter previously in national elections (or have no expectations regarding viability) than when they did, winning or not seats. There are no statistically significant differences in the probability of entry between viable and non-viable parties in the previous election. In short, the nature of the electoral coordination problem that arises when national and sub-national elections are considered together is simultaneously a function of electoral institutions, political preferences and, to a lesser extent, expectations.

[TABLE 6 ABOUT HERE]

The parameters of the logit model cannot be interpreted directly, since the model is nonlinear and the effect of a given variable on the probability of entry depends on the values of the other independent variables. To examine the effect of permissiveness and preferences on entry in national elections at the district level, we have used the (statistically significant) estimated parameters to compute predicted probabilities as permissiveness changes for fixed values of preferences, and the other way around. The fixed values of the variables are their means. Figures 2 and 3 include these probabilities. The clear negative (positive) effect of permissiveness is shown by the increasingly small probabilities as we move across the values of the variable. And the other way around happens when the variable *preferences* changes.

[FIGURE 2 AND 3 ABOUT HERE]

## **Conclusions**

In this paper, we have proposed a framework to the electoral coordination literature that in our opinion offers a number of advantages over existing studies. Taking into consideration the interaction effects between national and sub-national arenas in multi-level countries, we have been able to provide some answers to some relevant questions on electoral incentives and dilemmas that party elites have to address when competing in multi-level polities.

This paper has identified a coordination dilemma that the literature had clearly overlooked when attempting to explain the failures of many Duvergerian predictions in multi-level countries. Following standard approaches, some recent studies have considered electoral coordination as a process that (a) takes place during only one single election at a single specific point of time, (b) allows for political parties to behave as short-term instrumentally rational actors only in the electoral campaign at hand, and (c) requires homogeneous incentives regarding the parliament, the electoral system, or the territorial level. But in multi-level

countries these assumptions simply do not hold. Given the existence of elections for different parliaments chosen with different electoral rules at different territorial levels, this complexity expands the opportunity structure for party elites, forces them to make decisions for the medium- or even long-term, and enlarges the number of incentives at their disposal. Electoral coordination may take place between distinctive arenas of national and sub-national elections, which nonetheless are not completely detached from another. In the end, voters are one and the same, and these sets of elections are obviously “connected” (Gaines and Crombez 2004) or at least “contaminated” (Shugart and Carey 1992: 241). In multi-level countries, there are interaction effects between national and sub-national electoral arenas that qualify the dilemmas parties face for coordinating their efforts and resources.

Strictly speaking, this strategic dilemma refers to the decision of sub-national parties to compete or not in national elections when they already have seats, or have at least chances of winning a seat, in regional elections but not in national ones. In this paper, we have elaborated a theoretical assessment of the extent to which sub-national electoral arenas contaminate, or influence, the national ones in multi-level countries through a number of mechanisms that might explain electoral coordination among parties. Using data from Spain, we have hopefully demonstrated that the resolution of this dilemma depends fundamentally on the difference in the permissiveness of electoral rules between both arenas and the existence of intense preferences built around the regional cleavage. Moreover, these dimensions interact with the structure of regional party systems, given the incentives provided by federalism to soften Duvergerian gravity. Expectations regarding viability at the time at which entry decisions must be made also matter, but they play a less important than electoral institutions and political preferences. In sum, the explanation based on the number of parties in a multi-level country has to take into account not only institutional and sociological variables, but also processes of coordination or dis-coordination between electoral arenas: the more perfect this coordination, the higher the precision of Duverger’s laws.

In a similar vein as when Gaines and Crombez (2004: 316-318) finished their article with a plea for more research on the topic, we also take our contribution as a first step. In order to know how widespread this coordination dilemma is, other studies, that are both country-specific and cross-national, are crucial. Since this dilemma depends on the incongruence between electoral systems, it can be researched within either national and sub-national arenas in multi-level countries (as for instance in Belgium, Italy, Germany, or the United Kingdom in Western Europe, and Brazil or Argentina in Latin America), in national and European elections, or even in more general national and local elections. In this regard, processes of coordination between electoral arenas in multi-level countries are, together with mixed-member electoral systems, *also* “crucial experiments”; in Shugart’s (2005: 34) words, “case studies in which the effects of specific electoral rules can be isolated from other variables. ... [And] crucial experiments can lead to accumulation of knowledge”.

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#### FOOTNOTES

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<sup>2</sup> Cf., among many others, Jones (1993); Lijphart (1994); Ordeshook and Shvetsova (1994); Amorim Neto and Cox (1997); and Clark and Wittrock (2005).

<sup>3</sup> The empirical evidence provided by Katz (2001), Herron (2002) or Moser and Scheiner (2004), however, challenges the findings that contamination or interaction effects discourage electoral coordination.

<sup>4</sup> Cf., for instance, among others, Lutz (1997); Brizinski, Lancaster, and Tuschoff (1999); Hamann (1999); Jeffery and Hough (2001); Pallarès and Keating (2003); Park (2003); and Gaines and Crombez (2004).

<sup>5</sup> What follows in the next two paragraphs applies to electoral coordination with national parties. When the response is a coalition between various sub-national (either regional or local) parties, these costs and benefits are lower. Although they can easily maintain their individual weight in national politics, their possibilities to win seats in national elections continue to be lower.

<sup>6</sup> In what follows, we will use sub-national to mean either, or both, regional or local arenas vis-à-vis national ones; more specifically, sub-national parties will generally include nationalist, regional, and/or local parties; and regions will be synonymous with Autonomous Communities. Sub-national parties are defined as parties fielding candidates only in specific regions or districts.

<sup>7</sup> The index is calculated by adding the absolute difference between the percentage of votes received by each party inside each region and the average vote received by it across the 17 Communities, divided by two; see Hearl and Budge (1996: 169) and Muñoz, Boso, and Pallarès (2005).

<sup>8</sup> In The Canary Islands there are two legal thresholds: parties have to win at least the 20 percent of the votes at the district level or, alternatively, the 3 percent of the votes at the regional level.

<sup>9</sup> These seven districts are Asturias, Baleares, Ceuta, Melilla, Murcia, Gran Canaria, and Tenerife.

<sup>10</sup> The only changes in the regional electoral systems have been an increase in the electoral threshold in four Communities from 3 to 5 percent (or 13 districts in our dataset) and in two Communities from 5 to 3 percent (or 8 districts in the dataset). The national electoral system has not been changed.

<sup>11</sup> For short descriptions of the features of each electoral system, see Lago (2004), Linz, Montero. and Ruiz (2005: 1078-1080, and 1084), and Linz and Montero (2001: 185).

<sup>12</sup> There were no regional elections before the 1979 national election. The data set can be obtained at [www.upf.edu/dcpis/](http://www.upf.edu/dcpis/).

<sup>13</sup> In our data set there are no cases of pre-electoral coalitions in national elections between sub-national parties.

<sup>14</sup> The pairs of elections analyzed are 1982/1982, 1986/1986, 1990/1993, 1994/1996, 2000/2000 and 2007/2004 in Andalusia; 1980/1982, 1984/1986, 1988/1989, 1992/1993, 1995/1996, 1999/2000 and 2003/2004 in Catalonia; 1981/1982, 1985/1986, 1989/1993, 1993/1996, 1997/2000 and 2001/2004 in Galicia; 1980/1982, 1984/1986, 1986/1989, 1990/1993, 1994/1996, 1998/2000 and 2001/2004 in the Basque Country; and 1983/1986, 1987/1989, 1991/1993, 1995/1996, 1999/2000 and 2003/2004 in the remaining Autonomous Communities. The first year corresponds to the sub-national elections.

<sup>15</sup> District-level electoral results can be found at [www.elecciones.mir.es](http://www.elecciones.mir.es) (for national elections) and at [www.pre.gva.es/argos/archivo/index.html](http://www.pre.gva.es/argos/archivo/index.html) (for regional elections).

<sup>16</sup> The effective threshold is equal to the legal threshold when the legal threshold is higher than the threshold of inclusion and the threshold of exclusion.

<sup>17</sup> A simplistic application of this indicator would be misleading, since two asymmetric distributions would have the same value. And it is obvious that, for measuring the fragmentation of a regional party system, it is not the same if the distribution in percentages was, for example, 5, 10, 20, 30, and 35, respectively, or 35, 30, 20, 10, and 5. In the latter, there are notable preconditions to organize a nationalist or regionalist party, and consequently the number of competitors in the Community could be high. On the contrary, in the former distribution there is no space for a sub-national party: *ceteris paribus*, the number of competitors in the national and regional level would probably be the same.

<sup>18</sup> These data are only available at the regional level. Since there are no reasons to expect significant differences among the provinces or districts that make up each Autonomous Community, the data have been extrapolated to the district level; see Lago (2004) for further details.

<sup>19</sup> Although party persistence is fairly path dependent, our data analysis takes each pair of elections as an independent observations. The reason for this decision is that using the lag of the dependent variable would imply a very significant reduction in the number of observations and in the reliability of the statistical inference.

**Table 1. Electoral arenas in Spain: Autonomous Communities with parties in the national parliament and in regional parliaments, 2003-2005 <sup>a</sup>**

		Sub-national parties in the Congreso de los Diputados <sup>b</sup>		
		More than one	Only one	None

Sub-national parties in regional parliaments <sup>b</sup>	More than one	Basque Country <sup>c</sup> <b>PNV, EA</b>	Canary Islands <sup>e</sup> <b>CC, PIL-FNC, CC- AHÍ</b>	Balearic Islands <sup>i</sup> <i>PSM-EN, UM</i>
		Catalonia <sup>d</sup> <b>CiU, ERC</b>	Navarre <sup>f</sup> <i>UPN, Aralar,</i> <b>CDN, PNV</b>	
			Aragon <sup>g</sup> <i>ChA, Par</i>	
	Only one		Galicia <sup>h</sup> <b>BNG</b>	Andalusia <sup>j</sup> <i>PA</i>
				Cantabria <sup>k</sup> <i>PRC</i>
				Castile and Leon <sup>l</sup> <u>UPL</u>
				La Rioja <sup>m</sup> <i>PR</i>
	None			Asturias Castile-La Mancha Extremadura Valencian Community Madrid Murcia

<sup>a</sup> General, national election of 2004, and sub-national, regional elections of 2003 in Catalonia, 2004 in Andalusia, and 2005 in the Basque Country and Galicia.

<sup>b</sup> In bold, nationalist parties; in italics, regionalist parties; underlined, local parties.

<sup>c</sup> Partido Nacionalista Vasco, Eusko Alkartasuna.

<sup>d</sup> Convergència i Unió, Esquerra Republicana de Catalunya.

<sup>e</sup> Coalición Canaria, Partido Independiente de Lanzarote-Frente Nacionalista Canario, Coalición Canaria-Agrupación Herrerena Independiente.

<sup>f</sup> Unión del Pueblo Navarro, Aralar, Convergencia Democrática de Navarra y Partido Nacionalista Vasco.

<sup>g</sup> Chunta Aragonesista, Partido Aragonesista.

<sup>h</sup> Bloque Nacionalista Galego.

<sup>i</sup> Partido Socialista de Menorca-Entesa Nacionaista, Unió Mallorcaina

<sup>j</sup> Partido Andalucista.

<sup>k</sup> Partido Regionalista de Cantabria.

<sup>l</sup> Unión del Pueblo Leonés.

<sup>m</sup> Partido Riojano.

**Table 2. Regional voting in national elections (1977-2004) and votes for sub-national parties in general (1977-2004) and in regional elections (1980-2000) (in percentages)<sup>a</sup>**

Autonomous Communities	Vote to sub-national parties		
	Regional voting	in general elections	Vote to sub-national parties in regional elections
Basque Country	47.3	49.9	62.5
Catalonia	34.5	36.4	61.6
Canary Islands	26.2	19.1	35.2
Galicia	22.9	11.7	21.3
Navarre	21.9	21.4	59.0
Andalucía	19.4	4.7	7.1
Balearic Islands	17.0	5.1	17.9
Extremadura	15.2	1.6	5.9
Castile and Leon	15.0	1.6	4.0
Madrid	14.5	0.3	0.6
Aragon	14.5	11.4	24.4
La Rioja	14.2	2.4	6.6
Asturias	14.0	1.5	3.7
Valencian Community	13.4	6.3	9.9
Murcia	13.4	0.5	2.0
Castile-La Mancha	12.8	0.3	0.5
Cantabria	12.8	2.0	22.9

<sup>a</sup> Communities are ranked by their regional voting scores.  
*Sources:* Lago (2004: 29), and Oñate and Ocaña (2005).

**Table 3. Parties, districts, and coordination between electoral arenas in Spain, 1982-2004**

Dilemma		National elections							
		1982	1986	1989	1993	1996	2000	2004	Mean
Entry	Number of sub- national parties making a decision	13	20	13	24	18	18	15	17
	Districts								
	Number	12	16	9	18	15	16	12	14
	(% [calculated on the basis of districts where parties have to make a decision])	(100)	(80)	(69)	(75)	(83)	(89)	(80)	(81)
	(% [calculated on the basis of the total number of districts selected, N=45])	(27)	(36)	(28)	(40)	(33)	(36)	(27)	(32)
Mean vote (in %)	4.42	4.98	2.48	6.59	5.76	7.25	5.61	5.30	
No entry	Number of sub- national parties making a decision	0	2	4	3	6	1	4	3
	Districts								
	Number	12	16	9	18	15	16	12	14
	(% [calculated on the basis of districts where parties have to make a decision])	(0)	(20)	(31)	(25)	(17)	(11)	(20)	(19)
	(% [calculated on the basis of the total number of districts selected, N=45])	(73)	(64)	(72)	(60)	(67)	(64)	(73)	(68)

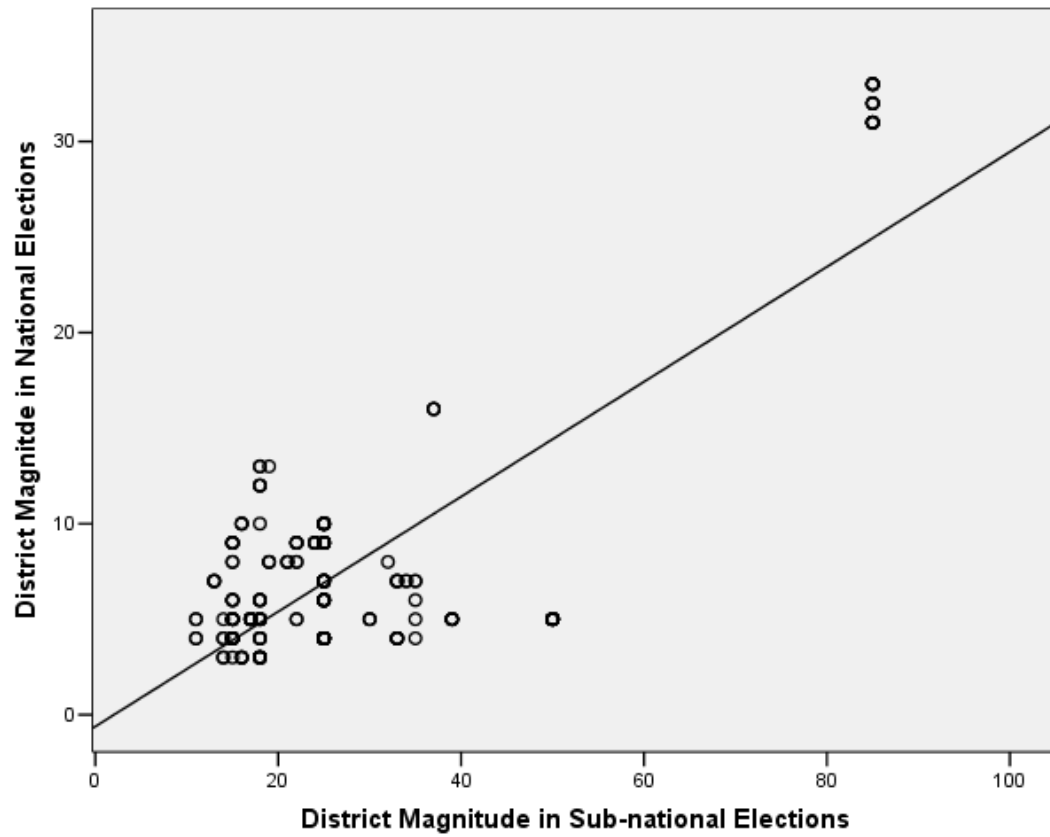


Figure 1. Differences in district magnitudes between national and sub-national elections in Spain

**Table 4. Subjective regional identity in the Autonomous Communities, 1979-2000 (in percentages) <sup>a</sup>**

Autonomous Communities	Elections							
	1979 <sup>b</sup>	1982	1986	1989	1993	1996	2000-04	Mean
Basque Country	38	59	49	54	40	53	48	49
Canary Islands	36			41	43	45	45	42
Navarre			38	45	31	32	48	39
Catalonia	31	30	31	42	45	38	42	37
Galicia	43	28	34	36	31	43	31	35
Asturias	33			28	25	39	29	31
Balearic Islands				17	27	24	21	22
Andalusia	25	28	20	22	14	16	20	21
Aragon	12	13	13	17	14	18	21	15
Valencian Community	27	25	11	9	8	11	10	14
Extremadura	11			16	8	13	12	12
Cantabria				4	7	12	11	9
La Rioja				10	4	12	6	8
Castile and Leon	14			5	4	4	7	7
Madrid	14			6	6	2	5	7
Murcia				7	7	5	7	7
Castile-La Mancha	4			7	4	1	4	4

<sup>a</sup> Includes respondents identifying as "only [regional]" or "more [regional] than Spanish". Communities are ranked by their means.

<sup>b</sup> In this survey the regional identity scale had only four categories (instead of the usual five categories): "more [regional] than Spanish", "more Spanish than [regional]", "both" or "neither".

*Sources:* For 1979 and 1982, DATA Surveys; for the other years, post-electoral surveys included in the Data Archive of the Centro de Investigaciones Sociológicas (CIS).

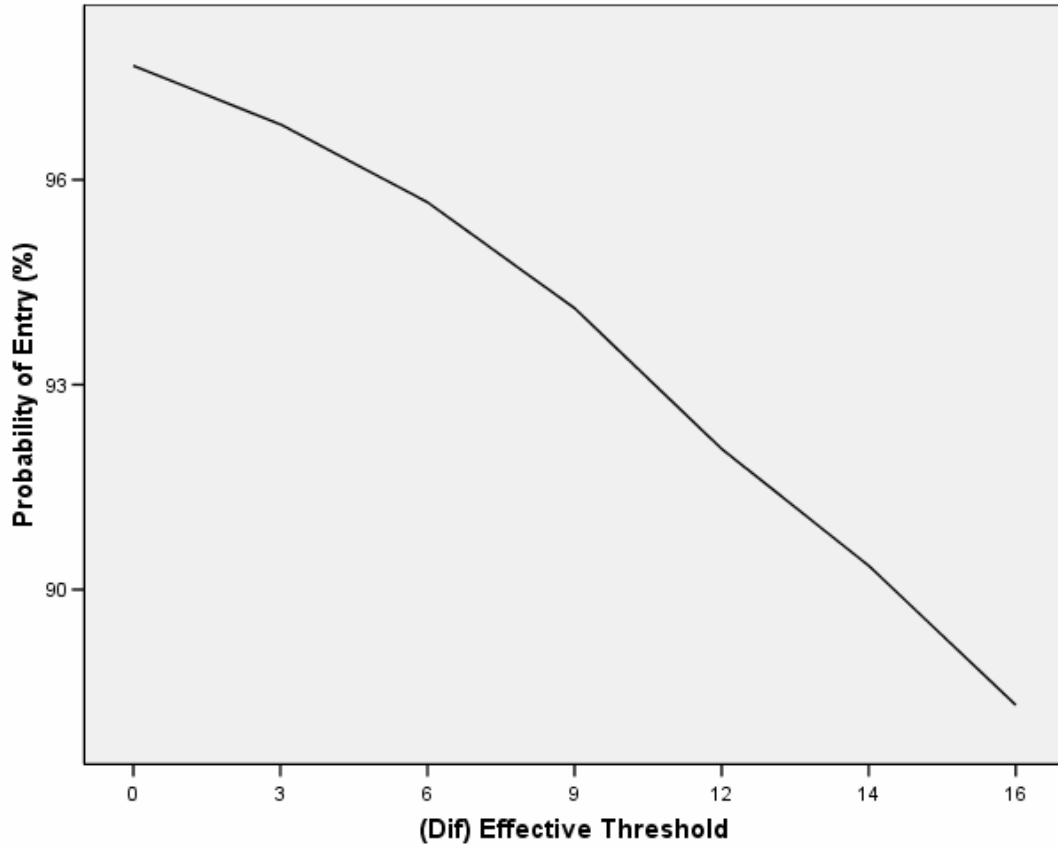
**Table 5. Descriptive statistics**

Variables	Mean	Minimum	Maximum	Standard Deviation	Number of Observations
Entry	0.91	0	1	0.36	235
Permissiveness	7.52	0	16.81	4.30	235
Preferences	34.14	4	59	14.88	235
Expectations	0.61	0	2	0.69	235

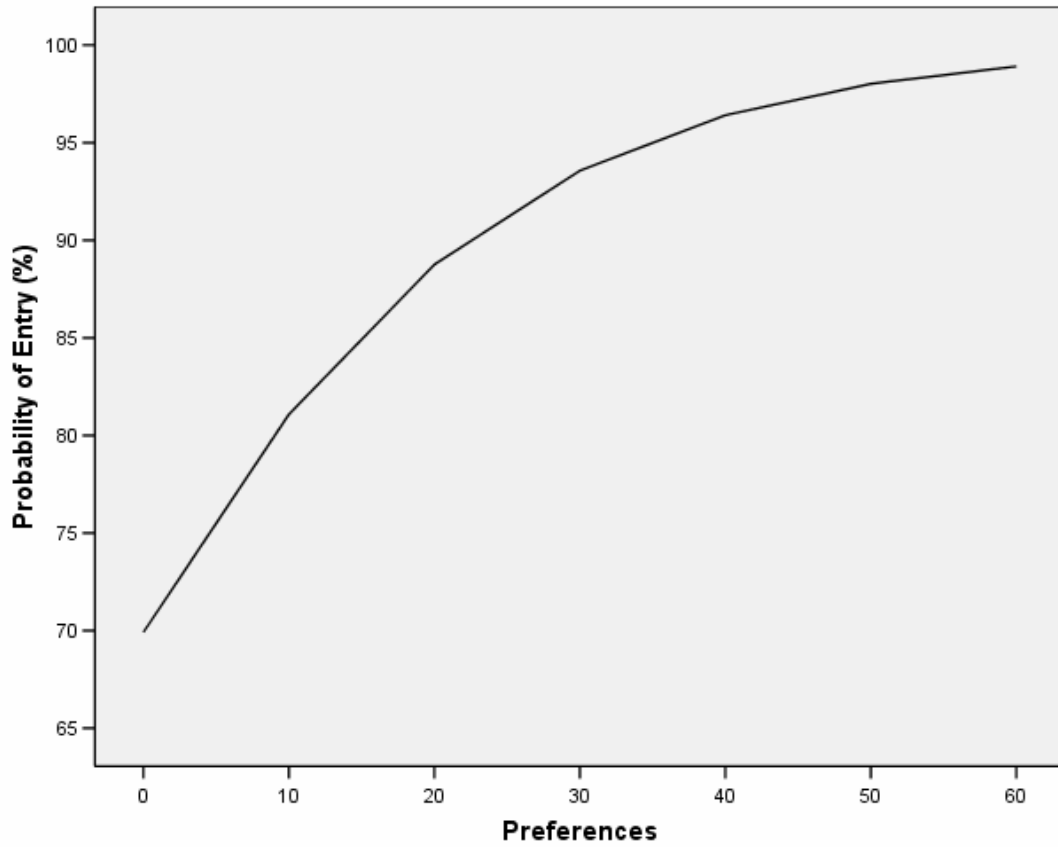
**Table 6. Strategic entry of sub-national parties at the district level in national elections**  
**(Logit Regression Estimates)<sup>a</sup>**

Independent Variables	Model
Permissiveness	-0.11** (0.04)
Preferences	0.06** (0.03)
Expectations: (ref. no seat)	
Seat in the previous national election	1.16 (1.15)
No expectations	-1.04* (0.58)
Constant	1.65** (0.77)
Wald $\chi^2$ (4)	27.13***
Pseudo $R^2$	0.24
% Predicted correctly	91.91%
Number of Observations	235

<sup>a</sup> Estimation is by maximum-likelihood; Robust Standard Errors in parentheses.  
The levels of statistical significance are \*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.1$ .



**Figure 2: The effect of permissiveness on the probability of entry for sub-national parties in national elections**



**Figure 3: The effect of preferences on the probability of entry for sub-national parties in national elections**