Coordination Between Electoral Arenas In Decentralized Countries: Empirical Evidence From Spain *

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Abstract: This paper shows the existence of a coordination dilemma in decentralized countries that hold elections in different territorial levels. Using the Spanish case, our analysis identifies *interaction* or *contamination* effects between national and subnational electoral arenas that generates, just as in mixed-member electoral systems, a centrifugal force that might increase the number of electoral parties in national elections. The incentives that would solve this coordination dilemma faced by small local parties and voters are discussed and tested.

Keywords: Cleavages, coordination, electoral system, party system, Spain.

At least since the seminal contribution of Duverger (1954),[52] the effects of electoral systems on party system fragmentation have been understood as a matter of electoral coordination. Electoral coordination refers to a variety of processes by which groups of politicians and voters coordinate their electoral actions in order to win more legislative seats or executive portfolios (Cox 2000: 49). 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 amassing a sufficient level of support in the electorate through (1) the persuasion of voters that they are better than the alternatives or, when this is not enough, (2) the limitation of the number of actual competitors (e.g. via electoral coalitions, joint lists, or *apparentement* of lists), (3) the limitation of the number of competitors for whom voters actually vote (strategic voting), or (4) mechanisms (2) and (3) at the same time. The process of limiting entry or vote fragmentation rests on the coordination of actions of more than one person (Cox 1999: 146).

A major result of these assumptions on electoral coordination is that a generalization of Duverger´s Laws (in plural)[53] will hold in single-member simple majority, single-member with runoffs, and proportional representation 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 Mth seat) in these three systems is equal to the district magnitude (M) plus one. Cox (1997: ??) 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. reasonably accurately and publicly available information on candidate standings), two different M+1 rules apply in an M-seat 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 a

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[52] Although Duverger discusses only implicitly electoral coordination; see Riker (1986) for a revision of the previous analyses to Duverger.

[53] As it is well-known, Duverger´s Laws state that (1) "the simple-majority single-ballot system favors the two-party system" and that (2) "the single-majority system with second ballot and proportional representation favors multipartism" (Duverger 1954: 217 and 239). Although the first tendency is termed "law" and the second is called "hypotheses", Duverger (1986: 69-70) has clarified later that both theses share the status of a "law".

failure of entry coordination rule, votes tend to concentrate on at most M+1 of them.[54] 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.

How to explain the non-Duvergerian equilibria in the real world? Some recent literature on electoral systems and electoral coordination has emphasized different strategic dilemmas faced by party elites and voters within and across districts for the increase in the number of competing parties. There are severe collective-action problems when parties cooperate to run the optimal number of candidates in each district (Christensen, 1996), or *contamination* or *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 negative incentives to *party aggregation* the less the degree of political and economic centralization (Chhibber and Kollman 1998), or 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). These factors operate as centrifugal forces, as they were, that soften the Duvergerian gravity towards coordination and increase the number of competitors.

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 the territorial level. But what if in a given country are there distinctive elections for separate parliaments representing different territorial units? This paper addresses a different coordination dilemma, which appears when several elections in different territorial levels are held within a country: how the national party system does 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 decentralized countries there are *interaction* or *contamination* effects between national and subnational electoral arenas that generate, similarly to mixed-member electoral systems, a centrifugal force that pulls up the number of electoral parties in national elections. This implies that one of the key behavioral assumptions underlying the basic story of district magnitude in Duvergerian-based theories does not simply hold: neither the incentive structures for electoral coordination in national and subnational elections are independent, nor actors are short-term instrumentally rational only in the election at hand. Given the opportunity to boost their vote and seats in national parliaments by competing in national elections, small parties (in our case, subnational parties with chances of winning seats in regional elections, but with more limited chances in national elections) are likely to hesitate before dropping out of the contest, merging with a national party, or engaging in any other form of electoral coordination. Therefore, these small, subnational parties might follow a medium or long-term, albeit still instrumental, strategy and in national elections refuse to coordinate either entry or voters in districts on the basis of their local viability. Thus, decisions about strategic entry and withdrawal in a district in national elections are influenced by the incentive structure in subnational elections. In short, electoral coordination is not limited to only one single election at a specific point of time, and does not require either the homogeneity of its structure incentives. As Gaines (1999: 851) rightly put it, it is an error to expect rules in one electoral arena (national elections) to operate independently from rules in other arenas (subnational elections). Voters whose behavior is being conditioned by these institutional environments are one and the same. Party systems can be hybrids in which Duverger´s laws are in competition, particularly when parties' fates are intermingled at different territorial levels or when voters tend to form attitudes about parties distinguishing their different territorial branches.

In this paper we analyze how the interaction between different electoral rules and territorial levels affects electoral competitors´ incentives to coordinate their efforts and resources. This paper provides thus an assessment of the extent to which subnational electoral competition can have an influence on the national one, and aims at identifying the main causal mechanisms that might explain electoral coordination in decentralized countries. The structure of the paper is as follows. In the next section, we discuss some theoretical approaches and present our hypotheses on the coordination dilemma that parties and voters face in decentralized countries when they compete in elections held in different territorial levels for distinctive representative bodies under different electoral rules. The third section

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[54] This is of course the field of strategic voting; in this case, the M+1 rule concerns the equilibrium degree of vote concentration in multi-candidate contests, not the number of candidates who enter.

justifies the suitability of the Spanish case as a particularly interesting decentralized country, describes the data used, and examines the operationalization of both the dependent and the independent variables for the empirical analysis of the coordination process between national and subnational elections. Their results are presented in the fourth section. 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 analysis is conclusive.[55] 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). But the consequences of electoral rules are not so straightforward as the comparative studies present. Besides their expected variation across countries, incentives to electoral coordination can also vary *within* a country. We can conceive at least of two sources for variations. While the first implies that a given 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. In both cases, parties and voters are the same. But there are no reasons to expect that their strategic decisions were 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 is a larger number of parties in the SMD tier than the average for pure SMD systems. In all mixed-member systems, interactive or contamination effects present small parties with a dilemma. 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, they face incentives to cooperate to efficiently translate votes into seats on the SMD side of the ballot. If they 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: 1.049). And 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, e.g. filling in the requisites for receiving public funding or testing new, aspiring politicians in districts where they expect to do poorly. Thus, parties, in contrast with 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 mixed-member systems to approach two because of these contamination or interaction effects, and more particularly so when the proportional component is dominant (Herron and Nishikawa 2001: 69; Cox and Schoppa 2002: 1.031; Gschwend et al. 2003: 114; Ferrara and Herron 2005: 17).[56]

The second source of variations for incentives to electoral coordination has a different scenario. Instead of parties and voters deciding under two different set of electoral rules for a national parliament with a mixed-member electoral system, electoral arenas are now constituted by national and subnational contests under distinctive electoral systems for separate representative bodies located in different territorial levels of a given country. In this case, the scant reflections that can be found in the literature are much more intuitive and preliminary. Cox (1997: 21), for instance, has suggested that "one would hardly expect that the party systems for house and senate elections would fully adapt to their respective electoral

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[55] Cf, among many others, Jones, (1993); Lijphart (1994); Ordeshook and Shvetsova (1994); Amorim Neto and Cox (1997); and Clark y Wittrock (2005).

[56] The empirical evidence provided by Katz (2001) or Herron (2002) or Katz (2001), however, challenges that contamination or interaction effects discourage electoral coordination.

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". 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 it works as an institutional constraint to coordination, making Duverger´s laws fail (Cox 1997; Chhibber and Kollamn 1998; Magaloni, 2000). Gaines (1999), for instance, demonstrates that federalism is the main explanation for multipartism in Canada. Jones (1997) shows that the timing of gubernatorial elections has an important impact on multipartism in Argentinian parliament. And Shugart and Carey (1992) document that the timing of presidential elections has a similar relevance on national legislative elections: the level of electoral multipartism in the parliament is lower when the gubernatorial and congressional elections are held concurrently than when both elections take place at different times.

Thus, the more decentralized political power is in a country, the less complete an analysis will be if it only takes into account the rules governing national elections. Empirically, decentralization means here both the existence of directly elected subnational parliaments and the possibility of distinguishing between national and subnational parliamentary elections along a number of indicators. And it also implies the analytical questions of considering the interaction between these two electoral arenas and more particularly the potential effect of subnational elections.[57] In these countries, small parties (in our case, local or regional parties with chances of winning a seat in subnational elections but not in national ones) face a different strategic dilemma.[58] To do their best in subnational 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 one or several local ones that count on the same dilemma) to efficiently translate votes into seats on 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 greatest because of the extra supply of competitors. If they resolve the dilemma through electoral coordination to maximize their chances of wining at least one seat in national elections, electoral fragmentation will be lower.

A cooperation agreement has both advantages and disadvantages for subnational parties.[59] In the negative side, subnational parties face severe risks if they decide to coordinate with a nationwide party. On the short run, and in the case of identity, nationalist parties, substantial segments of their supporters may decry the agreement as it directly subverts the very essence of their essentialist ideology, usually in conflict with one or another national party. More generally, subnational parties may lose the opportunity to recruit new supporters in high-profile national election campaigns and endanger its presence in national politics. As a consequence, they will see their blackmail potential drastically reduced, as well as their visibility. On the medium or long-term, it faces the risk to be absorbed or to be dispensed with by the national party. But, on the other hand, the advantages are obvious. Subnational parties can obtain nationwide visibility, material resources, and ideological support, whose combination may reinforce their possibilities to win seats and to play a pivotal role in national politics for the legislature.

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[57] In the other way round, general, parliamentary elections can contaminate subnational elections with national issues. Magaloni (2000) shows that in federal systems concurrency with presidential elections might increase the number of parties at the subnational level, especially when not all parties are evenly spread across the country and smaller opposition parties do not have national presence, but tend instead to concentrate their support on some regions. The reason is that parties competing for the executive offices at the national level will tend to get votes nationwide, even from regions where they normally do not compete, thus increasing the effective number of parties in those regions.

[58] As we will see later, this coordination dilemma is further exacerbated by the existence of ideological, religious, or above all regional cleavages. *]*

[59] What follows in this paragraph applies to electoral coordination with national parties. When the response is a coalition between various subnational (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.

On what does the resolution of this strategic dilemma depend? In our opinion, the response to this coordination dilemma depends at least on six incentives; they would also constitute our hypotheses, and can be presented as follows:

1. *The difference in the permissiveness of electoral rules in national and subnational elections.* The opportunity for electoral coordination between arenas only exists when district magnitude is different in both types of elections. *The higher this difference, the higher the number of (small) subnational parties that can win seats in regional elections, but not in national elections.*[60] The sign of this effect is not too clear, however. But it is more likely that, when the number of parties facing this dilemma increases, one of them engages in electoral coordination. Therefore, we expect a positive, although weak, effect.

2. *The existence of national or subnational cleavages.* Since the electoral coordination problem depends on the preferences of the elites and mass actors who are actively engaged in politics (Cox 1997: 5), *the more intense the national or subnational cleavage, the less the probability of electoral coordination.*[61]

3. *The possession of good information about the relative chances of potential competitors.* Expectations are crucial in any game of coordination, and electoral coordination is no different (Cox 1997). Therefore, *the clearer the information about the identity of viable parties in national elections, the higher the probability of electoral coordination.*

4. *The competitiveness of national elections.* Since electoral coordination is an instrumental behavior, the incentives to cooperate depend on the number of votes (and seats) that can be decisive for winning national elections (and for becoming influential in the process of government formation). *Therefore, the higher the electoral competitiveness in national elections, the higher the probability of electoral coordination.*

5. *The degree of political and economic centralization.* When national governments centralize power and make policies that affect subnational areas in substantial degrees, subnational parties have greater incentives to coordinate with national parties, as well as voters have greater incentives to shift from subnational parties, because of its weak probability to win seats at national elections, to national parties (Chhibber and Kollman 1998). Therefore, *the higher the degree of political and economic centralization, the higher the probability of electoral coordination.*

6. *The concurrence of national and subnational elections.* As we already know, the timing of subnational elections has an important effect on multipartism, similar to the impact that the timing of presidential elections has on national parliamentary elections. That is, the concurrence of national and subnational elections would tend to decrease the effective number of parties in subnational levels given the widespread importance of national issues. Therefore, *when there is a concurrence between national and subnational elections, the probability of electoral coordination is higher.*

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 subnational arenas. We can think of at least three reasons. First, the recent and remarkably intense process of decentralization; second, the strength of the regional cleavage not only between national and regional

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[60] In most descentralized countries, the level of voting support that has to be amassed to win a seat is usually lower in subnational elections than in national ones. Therefore, in this hypothesis what counts is not the mere difference in district magnitude between the two electoral arenas, but its size.

[61] In any case, it is well-known that electoral coordination at the elite level does not tell us the whole story. The six incentives we are discussing also encourage coordination at the voters' level via strategic voting: individuals can decide to abandon subnationally competitive but nationally noncompetitive parties. Thus, strategic voting reinforces as well coordination between electoral arenas.

or nationalist parties, but also among these subnational parties as well; and third, the systemic relevance of both regional voting and regional parties.[62]

The very outcome of decentralization is one of the most notable success of the transition to democracy in the late 1970s, in itself a process with many achievements. For centuries, the Spanish state has been a source of many political problems given the basic contradiction between its early state-building process and the countless protests against its attempts for centralization (Linz 1973). The protracted regional conflicts have been responsible for much political violence and instability, and figured high among the contributors in the 1930s to the breakdown of the Second Republic and the civil war. The lasting authoritarian regime reinforced even more the strongly unitary and rigidly centralized state. When Francisco Franco died in 1975, it was clear to all political elites and citizens that political transition from dictatorship would have to be accompanied by a parallel transition to a decentralized state based upon regional autonomous governments. 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 resources, powers, and institutions (Gunther, Montero, and Botella 2004: chapter 6). According to the provisions of the new 1978 constitution, all Communities have their own elected parliaments, governments, public administrations, budgets, and resources. All of them have also established parliamentary systems in which governments are politically responsible to regional parliaments and adopted proportional representation systems. Regional elections are hold on the same day as municipal elections are held, except for the Basque Country, Catalonia, Galicia, and Andalusia. As Subirats amd Gallego (2202: 3) summarize, 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 over a thousand members of parliaments".

Spain is a multicultural, multinational, and multilingual society that in some respects is even more complex than other heterogeneous countries such as Belgium or Switzerland. There are six Communities (Galicia, Catalonia, the Comunidad Valenciana, Baleares, the Basque Country, and Navarre) within which distinct languages are spoken. With the exception of Comunidad Valenciana, these regions have also relevant political parties and social movements grounded on their linguistic and cultural distinctiveness. In the Basque Country and Catalonia, national parties compete with subnational, nationalist parties ranging from extreme left to conservatism and demanding from independence to mere regional policies. And in the Basque Country political terrorism by ETA and its supporting groups has posed a threat to the stability of the new regime, which is being even worsened by the semi-loyal stance towards violence taken by the main nationalist parties.

From the early 1980s, the regional cleavage is thus a permanent characteristic of Spanish politics. While in some regions subnational issues evolved through not very much contentious strategies, nationalist and regionalist party leaders have skilfully activated, shaped, and manipulated the regional cleavage in the Basque Country, Catalonia, Navarre, Canary Islands, and Galicia. Its translation into party competition has produced a remarkable systemic feature, namely, the coexistence of the national party system with distinct subnational party systems in some of these Communities (Linz and Montero 2001). 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 subnational 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 subnational, regional party systems, and (iii) a number of specific national party sub-systems. In the multilayered character of the Spanish party systems, parties follow patterns of coordination and competition at different electoral, parliamentary, governmental, and institutional levels. As it should be expected, the structure incentives for electoral coordination are distinct and more complicated than even those existing in federal states. Figure 1 illustrates this complexity.

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[62] In what follows, we will use subnational as to mean either, or both, both regional or local arenas vis-à-vis national ones; more specifically, subnational parties will generally include nationalist, regional, and/or local parties; and Regions will be synonymous to Autonomous Communities.

Figure 1. Arenas of electoral coordination: Autonomous Communities with parties at the Congreso de los Diputados and at regional parliaments, 2003-2005 [a]

		Subnational parties at the Congreso de los Diputados [b]		
		More than one	Only one	None

Subnational parties at
 	
regional parliaments [b]
	More than one	Basque Country [c]
		PNV, **EA**
		
		Catalonia [d]
		CiU, **ERC**
			Canary Islands [e]
			
			  CC, *PIL-FNC, CC-AHÍ*
			
			Navarre [f]
			  UPN, **Aralar**,
			  CDN, **PNV**
			
			Aragon [g]
			  ChA, *PAr*
				Balearic Islands [i]
				  PSM-EN, UM

	Only one		Galicia [h]
			
			  BNG
				Andalucía [j]
				  PA
				
				Cantabria [k]
				  PRC
				
				Castile and Leon [l]
				  UPL
				
				La Rioja [m]
				  PR

				Asturias

			Castile-La Mancha
None			Extremadura
			Valencian Community
			Madrid
			Murcia

[a] General, national elections of 2004, and subnational, regional electios of 2003 in Catalonia, 2004 in Andalusia, and 2005 in the Basque Country and Galicia.

[b] In bold, nationalist parties; in italic, regionalist parties; underlined, local parties.
[c] Partido Nacionalista Vasco, Eusko Alkartasuna.
[d] Convergencia i Unió, Ezquerra Republicana de Catalunya.
[e] Coalición Canaria, Partido Independiente de Lanzarote-Frente Nacionalista Canario, Coalición Canaria-Agrupación Herrereña Independiente.
[f] Unión del Pueblo Navarro, Aralar, Convergencia Democrática de Navarra y Partido Nacionalista Vasco.
[g] Chunta Aragonesista, Partido Aragonesista.
[h] Bloque Nacionalista Galego.
[i] Partido Socialista de Menorca-Entessa Nacionaista, Unió Mallorquina
[j] Partido Andalucista.
[k] Partido Regionalista de Cantabria.
[l] Unión del Pueblo Leonés.
[m] Partido Riojano.

There is still an additional reason for selecting Spain as our empirical case. As a consequence of the multilayered character of party competition, the regional cleavage has crystallized in major variations in the vote distribution across most Communities. The resulting mosaic has been labelled the "electoral Spains" (Vallès 1991), or the "many Spains" (Gunther, Montero, and Botella 2004: chapter 6), to underline the great diversity of patterns of party coordination and competition in different communities. Table 1 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 proportionate support within the region for national parties.[63] Nearly all the regions have high indices, and have moreover remained remarkably stable. In comparative terms, the Spanish levels of regional voting in national elections are among the highest in Europe (Hearl and Budge 1996: 172-173; Linz and Montero 2001: 181). Naturally, regional voting is especially high in those Communities with nationalist or regionalist parties, whose strength in both national and subnational elections is also shown in Table 1. No European region (apart the quite exceptional case of Northern Ireland) surpasses the levels of the Basque Country or Catalonia, and no European country has as many regions in which subnational parties are as significant as in Spain.[64]

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[63] The index is calculated by adding the absolute difference between the percentage vote received by each party inside each region and the average vote received by it accross the 17 Communities, divided by two; see Hearl and Budge (1996: 169).

[64] In Spain there is also an important evidence of the so-called *dual voting* (i.e. transfers of votes between regional and national parties depending on whether the election is regional or national). But we do not think that it was a relevant variable to explain electoral coordination. Since dual voting usually has an impact on major parties at the local level, it has not a significant effect on vote dispersion. Let´s see the data. Dual voting has particularly appeared in Catalonia, Aragon until 1996, and Navarre until 1996, and more weakly in Canary Islands, Basque Country, and Cantabria until 1993 (Pallarés 1995). Their mean coordination ratios (see later for this measure) of -0.2, 0.3, 25.2, 10.4, 0.9 and 27.0, respectively, reject the existence of a causal pattern.

Table 1: Regional voting in national elections (1977-2004) and vote to subnational parties in general (1977-2004) and regional elections (1980-2000) (in percentages)

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

Sources: Lago (2004: 29) and Oñate and Ocaña (2005).

It is time now to provide information about our data and variables. For the empirical analysis of the determinants of electoral coordination between different arenas in Spain we have chosen as unit each pair of regional (or subnational) and general (or national) elections held in each Autonomous Community from 1977 to 2000. Our decision for selecting electoral contests as units of analysis instead of Autonomous Communities rests on three reasons. First, it allows us to increase the number of observations from 17 to 88 and thus facilitates the statistical inference. Second, the number of regional elections taken into account ranges from six in Andalusia, Catalonia, and the Basque Country to five in the remaining cases; taking elections as unit of analysis also allows us to avoid unwanted consequences from this differences. And third, some hypotheses depend on time and therefore can only be tested when individual elections are analyzed: the selection of the Autonomous Communities as units of analysis would imply the aggregation of the different elections in only one value and then the evolution of party systems could not be known .

Our dependent variable is the degree of electoral coordination between regional and general elections. It is measured through a *coordination ratio*,

$$EC = 100 \, (ENEP_{reg} - ENEP_{nat}) \, / \, ENEP_{nat},$$

where ENEP is the effective number of electoral parties in regional (*reg*) and national (*nat*) elections in each Autonomous Community[65] according to Laakso and Taagepera´s index (1979)[66] As we will see in

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[65] Since most of the Autonomous Communities are divided in various districts in both national and subnational elections, the vote and seat shares of each party in every district have been aggregated as if the Community were composed by only one constituency.

[66] The index of course consists of the well-known formula $N = \dfrac{1}{\sum_{i=1}^{ni} p_i^2}$, where p_i^2 is party *i´s* vote share.

detail later, district magnitude is always higher in regional elections than in national elections in Spain (Table 2). Therefore, all else equal, the number of parties entering the race should be higher in regional elections. Thus, when EC > 0 (i.e. electoral fragmentation is higher in subnational than in national elections), there has been some process of coordination between electoral arenas. The logic is clear. If parties and/or voters do not respond to the different incentives provided by electoral rules, the number of parties would be identical in both arenas (EC = 0). In other words, this would imply the rather implausible assumption that neither parties nor voters at both territorial levels would take into consideration the degree of decentralization, the articulation of social cleavages, the level of competitiveness of national elections, the informational signals about potential winners and losers, or the consequences of each electoral system. This identical fragmentation would also mean, on the one hand, that parties resolve the dilemma in favor of the "go it alone" approach, since they enter the race in national elections independently of their viability; and, on the other, that voters do not behave strategically. However, and given the higher number of seats to be filled for regional parliaments in regional elections (Table 3), the higher number of parties in subnational elections (again, EC > 0) conveys a clear indication that parties and/or voters actually respond to the limitation of incentives for entering the race in national elections: actors (or at least some of them) resolve their strategic dilemmas through electoral coordination in one degree or another. On the contrary, if EC < 0, then electoral fragmentation is higher in national than in subnational elections. This would be an unexpected result.

By dividing the gap ($ENEP_{reg} - ENEP_{nat}$) by $ENEP_{nat}$ and multiplying it by 100, we can get a measure of party system *inflation* in regional elections on a percentage basis. If EC is 20, for instance, the effective number of parties is 20 per cent higher in regional elections than in national elections in a given Autonomous Community. The higher the ratio, the more fragmented the regional electoral party system is in comparison with the national electoral party system**.** The ratio is based on the comparison between a given regional election and the most immediate national election Since electoral coordination depends on the incentives regional and local parties face in general elections once subnational elections have been held, we have matched each one of the regional elections with the immediately subsequent national election.[67]

There is evidence of electoral coordination between electoral arenas in Spain (Table 2). The mean for the 17 Communities and the 88 elections is 8,00: the effective number of electoral parties in regional elections is 8 per cent higher than in national elections. In only 3 Communities (Castile-La Mancha, Catalonia and Madrid) EC is negative.

Table 2: Coordination ratio between electoral arenas in Spain, 1977-2000 [a]

Autonomous Communities	Matching of paired national and subnational elections						
	I	II	III	IV	V	VI	Mean
Andalusia	30,4	23,1	14,8	18,5	11,1	3,7	16,9
Aragon	-11,4	5,3	0,0	37,0	20,7		10,3
Asturias	-18,8	2,8	9,7	10,7	7,4		2,4
Balearic Islands	9,1	12,1	3,4	20,7	44,0		17,9
Canary Islands	-15,9	21,7	27,8	12,1	6,5		10,4

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[67] We have matched each one of the regional election with the immediately subsequent national election in each Community. As a consequence, the pairs of elections analyzed are 1982/1982, 1986/1986, 1986/1989, 1990/1993, 1994/1996, and 2000/2000 in Andalusia; 1980/1982, 1984/1986, 1988/1989, 1992/1993, 1995/1996, and 1999/2000 in Catalonia; 1981/1982, 1985/1986, 1989/1993, 1993/1996, and 1997/2000 in Galicia; 1980/1982, 1984/1986, 1986/1989, 1990/1993, 1994/1996, and 1998/2000 in the Basque Country, and 1983/1986, 1987/1989, 1991/1993, 1995/1996, and 1999/2000 in the remaining thirteen Autonomous Communities.

Cantabria	-6,7	16,7	12,1	72,0	40,9		27,0
Castile and Leon	-15,6	9,4	7,4	8,3	13,0		4,5
Castile-La Mancha	-7,4	0,0	-4,0	0,0	0,0		-2,3
Catalonia	54,3	-8,8	-17,9	-15,8	5,7	-18,4	-0,2
Extremadura	4,0	14,8	4,0	12,5	4,3		7,9
Galicia	31,4	5,9	18,5	0,0	0,0		11,2
Madrid	-23,5	-8,1	0,0	0,0	-4,0		-7,1
Murcia	-11,1	3,2	15,4	4,2	9,1		4,2
Navarre	12,5	33,3	8,3	28,9	42,9		25,2
Basque Country	6,8	-24,0	-9,5	0,0	1,9	30,0	0,9
La Rioja	-7,4	13,8	0,0	4,0	4,3		2,9
Valencian Community	-16,1	2,7	16,7	10,7	12,0		5,2

[a] The ratio, EC, is equal to 100 (ENEPreg – ENEPnat) / ENEPnat. For the matching of national and subnational elections see footnote 16.

Source: Own calculation based on Ocaña and Oñate (2000) and Oñate and Ocaña (2000).

The independent variables that represent the causal mechanisms behind electoral coordination between arenas are seven. The first refers to the electoral systems. As we know at least since Rae (1971), the most influential variable to explain electoral fragmentation is district magnitude. The difference between the permissiveness of electoral rules in regional and national elections is calculated according to the formula

$$P = 100 \ (\text{Mean DM}_{reg} - \text{Mean DM}_{nat}) / \ \text{Mean DM}_{nat}$$

where DM is the mean district magnitude of the regional and national electoral system in each Autonomous Community. Again, if P > 0, the number of seats to be filled is higher in regional than in national elections. On the contrary, if P < 0, the number of seats to be filled is higher in national elections than in regional elections This difference is measured on a percentage basis. If P is 10, for instance, the number of seats to be filled is 10 per cent higher in regional elections than in national elections. The expected sign of this variable is positive.

With the exception of Murcia in some elections, in which P = 0, regional elections are held under more permissive rules than national elections (Table 2). The mean number of seats to be filled in the 88 elections regional elections is 280 pr cent higher than in national elections.

Table 3. Difference in district magnitude between regional and national elections 1977-2000 (in percentages) [a]

Autonomous Communities	Matching of paired national and subnational elections						
	I	II	III	IV	V	VI	Mean
Andalusia	85,1	82,7	80,3	75,6	75,6	75,6	79,2
Aragon	368,1	418,6	418,6	418,6	418,6		408,5
Asturias	66,7	66,7	66,7	66,7	66,7		66,7
Balearic Islands	125,0	146,7	111,4	111,4	111,4		121,2
Canary Islands	32,3	22,9	22,9	22,9	22,9		24,8
Cantabria	600,0	680,0	680,0	680,0	680,0		664,0
Castile and Leon	116,3	121,4	121,4	121,4	119,0		119,9

Castile-La Mancha	120,0	135,0	135,0	135,0	135,0		132,0
Catalonia	186,4	186,4	193,9	186,4	193,9	193,9	190,2
Extremadura	490,9	490,9	490,9	490,9	490,9		490,9
Galicia	161,8	176,5	189,2	198,4	198,4		184,9
Madrid	184,8	190,9	197,1	202,9	200,0		195,1
Murcia	7,5	0,0	0,0	0,0	0,0		1,5
Navarre	900,0	900,0	900,0	900,0	900,0		900,0
Basque Country	257,1	257,1	257,1	296,8	296,8	296,8	277,0
La Rioja	775,0	725,0	725,0	725,0	725,0		735,0
Valencian Community	241,4	241,4	241,4	230,0	230,0		236,8

[a] The ratio, P, is equal to 100 (Mean DM_{reg} – Mean DM_{nat}) / Mean DM_{nat}. For the matching of national and subnational elections see Table 1.

The second independent variable refers to the regional cleavage as a political constraint to electoral coordination. Our measurement is far from the most common strategy in the literature. Sociopolitical heterogeneity is usually quantified by placing individuals into groups and then applying the index of ethnic or religious fragmentation or the effective number of ethnic or religious groups. In Spain, we measure the intensity of the regional cleavage with an indicator of national or regional subjective identity, which takes the percentages of individuals who in each Community declare in public opinion surveys to be "only [regional, i.e. Catalan, Basque, etc.]", "more [regional] than Spanish", "as [regional] as Spanish", "more Spanish than [regional]" or "only Spanish" (Linz 1986). The application of the cited indexes in this case 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 that the distribution in percentages was, for example, 5, 10, 20 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 subnational party: *ceteris paribus,* the number of competitors in the national and regional level would probably be the same. Therefore, we have created an aggregate measure of the intensity of the regional cleavage in each Community, REGIONAL IDENTITY, simply adding the percentage of individuals who declared to be "only or more [regional] than Spanish" (Lago, 2004); the results are displayed in Table 4.[68] The expected sign of this variable is negative.

Table 4. Subjective regional identity in the Autonomous Communities, 1979-2000 (in percentages) [a]

Autonomous Communities	**Elections**							
	1979 [b]	1982	1986	1989	1993	1996	2000	*Mean*
Andalusia	25	28	20	22	14	16	20	21
Aragon	12	13	13	17	14	18	21	15
Asturias	33			28	25	39	29	31
Balearic Islands				17	27	24	21	22
Canary Islands	36			41	43	45	45	42
Cantabria				4	7	12	11	9

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[68] Since it has been not possible to find reliable data for some Autonomous Communities in different years, we have extrapolated the data to the immediately subsequent or previous elections to complete the series when it has been necessary.

Castile and Leon	14			5	4	4	7	7
Castile-La Mancha	4			7	4	1	4	4
Catalonia	31	30	31	42	45	38	42	37
Extremadura	11			16	8	13	12	12
Galicia	43	28	34	36	31	43	31	35
Madrid	14			6	6	2	5	7
Murcia				7	7	5	7	7
Navarre			38	45	31	32	48	39
Basque Country	38	59	49	54	40	53	48	49
La Rioja				10	4	12	6	8
Valencian Community	27	25	11	9	8	11	10	14

a Includes respondents identifying as "only [regional]" or "more [regional] than Spanish".

b 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, postelectoral surveys included in the Data Archive of the Centro de Investigaciones Sociológicas (CIS).

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Third, since electoral coordination primarily depends on the possession of good expectation about parties chances, one can expect a reduction in the number of viable competitors through party elites coordination or strategic voting *after* the first pair of regional and general elections: local and regional parties will learn who is in conditions to win seats in national elections and will decide accordingly whether or not to enter the race. Therefore, we have created a dummy variable, TIME, that identifies the first pair of elections held in each Autonomous Community for the fixation of electoral expectations. The expected sign of this variable is negative.

Fourth, the association of local or regional parties with national ones can be related, as has been hypothesized, to the political and economic centralization. In Spain, the strong and sustained decentralization process started in the 1980s has progressively given more powers to Autonomous Communities without inverse periods of centralization. Thus, national governments exert less and less political and economic control over subnational areas. However, this decentralization process is asymmetrical: since some Autonomous Communities have more powers than others, these tendencies could provide different incentives to party aggregation. Therefore, we have created a dummy variable, RESOURCES, that gives the value 1 to the Communities (Andalusia, Canary Islands, Catalonia, Galicia, Navarre, the Basque Country and the Valencian Community) with jurisdictions over health and education —representing more than a half of total regional spending (Aja 1999)— during the analyzed years, and 0 to the ten remaining. The hypothesis is straightforward: the higher the regional resources, the less electoral coordination. The expected sign of this variable is negative.

Fifth, electoral competitiveness should encourage electoral coordination of elites and voters. COMPETITIVENESS is simply measured as the difference between the percentage of votes of the two major parties in the national level: the higher the value, the less the competitiveness. The expected sign of this variable is negative. There is, however, an exceptional point in our series of national elections. Belonging to the category of critical and realigning elections, the 1982 contest combined an extremely high degree of volatility (indeed, the highest in the post War European elections), with dramatical changes in the Spanish party system and a radical alternation in government (Linz and Montero 1986; Gunther and Montero 2001). The 1982 elections manifested also the least competitive until now, the difference between the government and the main opposition party arriving at 21.9 percentage points in electoral terms, and 27.1 points in parliamentary seats. For what matters here, the consequences were that in the following years party elites embarked themselves on frantic processes of electoral coordination in each ideological bloc (Lago 2005). Since this election would clearly distort the effect of competitiveness as it has been coded above, we have therefore added a dummy variable, 1982 ELECTION, to isolate this election (1 for 1982 election, 0 for the remaining elections). The expected sign of this variable is positive.

Sixth, in the 2000 general elections the anti-system, Basque party Euskal Herritarrok (EH, a coalition of social and political organizations set up for participating in Basque politics as the political wing of the terrorist group Euskadi ta Askatasuna [ETA]) decided not to compete in according to political/ideological reasons and not due to its electoral expectations. Since *ceteris paribus* the immediate consequence of this withdrawal was an artificial reduction in the electoral fragmentation in general elections (or, alternatively, a higher electoral coordination) in the Basque Country and Navarre, we have introduced a dummy variable, EH, to discount it. The expected sign of this variable is positive.

Finally, since the concurrence of national and regional elections might encourage electoral coordination through the increase of the importance of national issues over local or regional ones, we have created a dummy variable, CONCURRENCE, that gives the value 1 to the cases where national and regional elections were held concurrently or when various regional elections are held jointly, and 0 to the remaining. Thus, elections in Catalonia, Galicia, the Basque Country and, in some cases, in Andalusia[69] receive the value 0 because they deliberately follow their own electoral calendar. The expected sign of this variable is positive.

Table 5. The independent variables: descriptive statistics

Variables	Mean	Minimum	Maximum	Std. Deviation	Observations
Electoral coordination	8.00	-24.0	72.0	16.95	88
District magnitude	280.50	0	900	255.95	88
Regional identity	21.35	1	59	15.58	88
Time	0.19	0	1	0.40	88
Competitiveness	10.18	1.40	22.10	6.60	88
1982 election	0.04	0	1	0.21	88
Resources	0.44	0	1	0.50	88
EH	0.02	0	1	0.15	88
Concurrence	0.78	0	1	0.42	88

The results: explaining electoral coordination

Social and political theories rarely specify a linear functional form between the dependent and the independent variables. Consequently there are not reasons to prefer one procedure to another or to be confident that linear relationships hold globally. Nonetheless, the use of linear regression is typically invoked by default. This *linearity by default* is also present in the research on the political consequences of electoral laws, and is dominant in the field of electoral studies as well. While a necessary condition of effective statistical data analysis is for statistical models to summarise the data accurately, it is thus possible that the OLS estimators were biased and inconsistent, and that conventional inference was invalidated (Beck and Jackman 1998; Fox 2000; Jacoby 2000).

Instead of opting for linearity by default, we wan to avoid these problems by making parametric and nonparametric exploratory analyses to determine the functional form of the relationships between our variables. First, we have made a nonparametric graphical analysis fitting a smooth curve in a scatterplot that shows the relationship between the dependent variable and each one of our three continuous independent variables (district magnitude, subjective regional identity, and electoral competitiveness). The technique we used is the so-called *Loess* or *Louvess* procedure. Briefly, to each data point in a sample, we fit a locally weighted polynomial regression. It is a local regression since we use only the subset of observations which lie in a neighbourhood of the point to fit the regression model; and it is also weighted so that the observations further from the given data point are given less weight. The curve does follow the central tendency of the *Y* variable values across the range of the *X* variable without any prior specification about the functional form of the relationship. Since the least squares method is very sensitive to the presence of even a few outlying observations, we have selected a robustness option; that is, outlying observations are given relatively less weight in estimating the coefficient of the regression. This technique

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[69] The 1982, 1986, 1996, and 2000 regional elections in Andalusia were held concurrently with general elections.

allows us to detect and deal with nonlinearity in regression analysis (Beck y Jackman 1998; Fox 2000; Jacoby 2000; QMS 1997).

Second, for each curve we have employed the *Regression Specification Error Test* (RESET) proposed by Ramsey (1969). The RESET is a general test for the following types of specification errors: (i) omitted variables: *X* does not include all relevant variables; (ii) incorrect functional form; some or all of the variables in *y* and *X* should be transformed to logs, powers, reciprocals, or in some other way; and (iii) correlation between *X* and ϵ, which may be caused by measurement error in *X*, simultaneous equation considerations, combination of lagged *y*-values, and serially correlated disturbances. Under such specification errors, OLS estimators will be biased and inconsistent, and conventional inference procedures will be invalidated. In testing for incorrect functional form, the nonlinear part of the regression model may be some function of the regressors included in *X*. However, since this test does not require an alternative specification, it does not help us to select a better alternative. The null hypothesis is that the specification of the model is correct. If the F statistic is significant, we can assume that the functional form is not appropriate.

According to the results of these two analyses, we can accept that the relationship between electoral coordination and DISTRICT MAGNITUDE (Figure 2) is linear, but not in the case of REGIONAL IDENTITY (Figure 3) and COMPETTIVENESS (Figure 4). The Loess curves show in these two cases that relationships are far from being linear, as the F statistic or the Ramsey´s RESET test (statistically significant at the .05 and .01 level, respectively) confirms. Therefore, REGIONAL IDENTITY has been redefined as REGIONAL IDENTITY and REGIONAL IDENTITY[2] to depict the two segments of the slope, while COMPETITVENESS has been operationalized as 1/COMPETITIVENESS in order to try some interactions*]*. The substantive interpretations of these definitions are as follows. The existence of a weak regional cleavage in Communities such as Aragon or Balearic Islands facilitates the emergence of local competitors but, at the same time, does not hamper the cooperation between them and national parties or the coordination of voters on nationally competitive parties. In contrast,, in the Communities in which the regional cleavage is intense and actively manipulated by regional party elites (e.g. the Basque Country, Canary Islands, Catalonia, or Galicia), there are little incentives for coordination, even if by doing so they could win more seats: the preferences of party elites and voters are very different. On the other hand, all else equal, as competitiveness decreases, the incentives for electoral coordination also decrease, although in a non linear way. The expected signs of REGIONAL IDENTITY, REGIONAL IDENTITY[2], and 1/COMPETITIVENESS are now positive, negative, and positive, respectively.

Figure 2.Loess curve fitted to district magnitude and electoral coordination
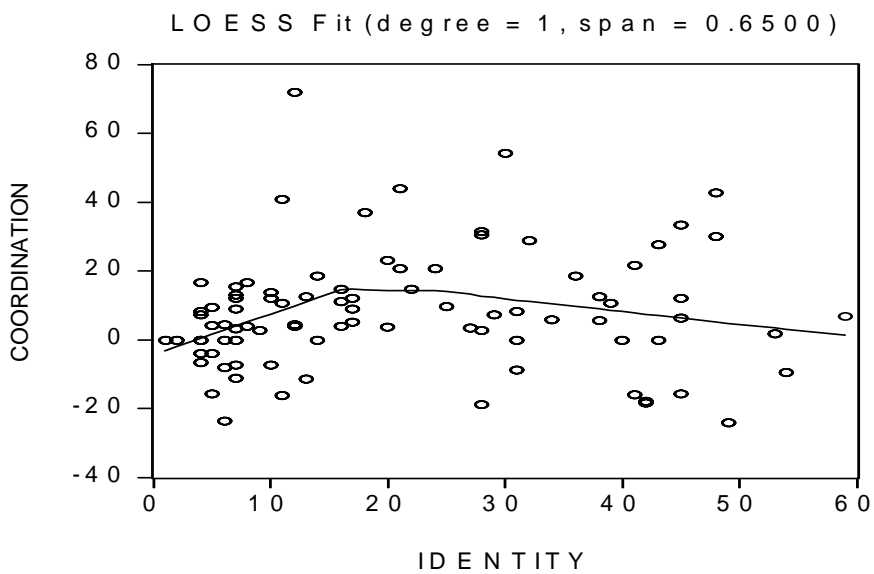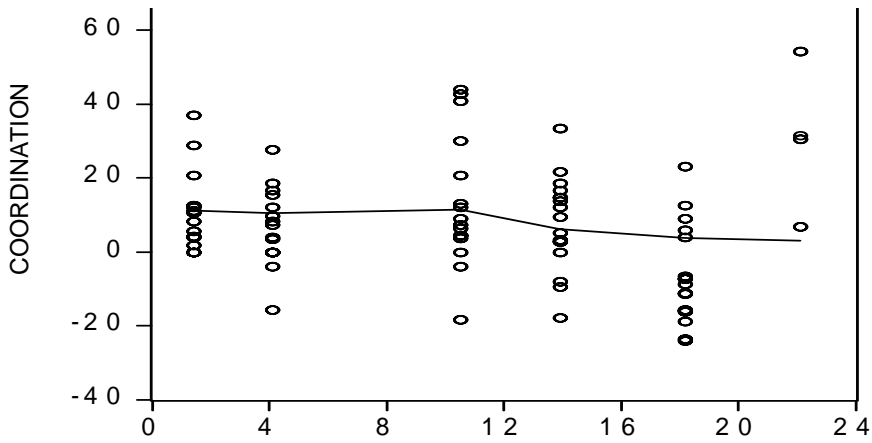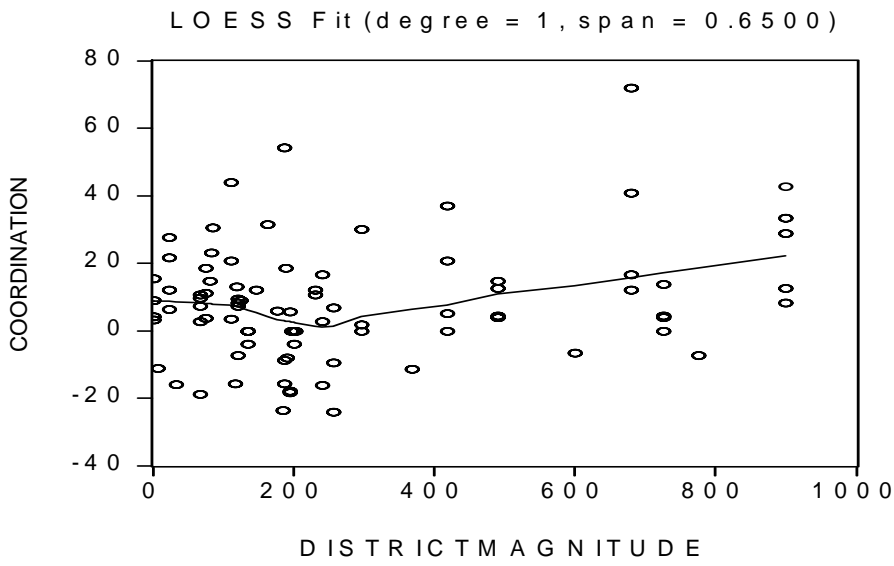
F Ramsey's RESET test: 1.21; p = 0.31

L O E S S   F i t   (d e g r e e   =   1 ,   s p a n   =   0 . 6 5 0 0)

D I S T R I C T M A G N I T U D E

Figure 3. Loess curve fitted to

L O E S S   F i t   (d e g r e e   =   1 ,   s p a n   =   0 . 6 5 0 0)

I D E N T I T Y

data on regional identity (in percentages) and electoral coordination
F Ramsey's RESET test: 2.83; p = 0.04

Figure 4: Loess Curve Fitted to Electoral Competitiveness and Electoral Coordination
F Ramsey's test: 9.32; p > 0.00

In the analysis of the determinants of electoral coordination between regional and general arenas in each Community, we have run five models to contrast the causal mechanisms that might come into play. The first model follows a pure institutionalist specification, with variables pertaining to the regional and national electoral systems; the second model adds a variable tapping into social heterogeneity to the previous specification; and finally the third model combines institutional, sociological, and political variables.[70] A fourth specification has been separately run for Catalonia, Galicia, and the Basque Country (model 4), and an additional one for the remaining thirteen Communities (model 5). The first three Communities have a tradition of competitive left-wing and conservative nationalist parties integrating distinctive party systems al least since the Second Republic, in the 1930s, and obviously also since the first elections after the transition to democracy in the mid-1970s. Although federalism provides incentives for the competition of new parties representing local interests, one can expect a negative response to the coordination problems once expectations are clearly known in Catalonia, Galicia, and the Basque Country. The reason is that, contrary to regional parties, non-viable nationalist parties in national elections have no incentives to coordinate their actions with national parties: they give absolute priority to their nationalist demands and fear that their eventual coordination with national (i.e centralist and/or anti-nationalist) parties will actually damage their image, reputation, or ideology.

The main results are displayed in Table 6.[71] The first model, with only DISTRICT MAGNITUDE and the dummy that identifies the elections in which EH decided not to compete, explains about 9 per cent of the variance of electoral coordination between national and subnational arenas. Both variables are statistically significant (at the .10 and .01 level, respectively) and have the expected signs. Each additional point in percentage terms of difference between the number of seats to be filled in regional and national elections (in favor of the regional arena) produces 0.014 per cent more effective electoral parties in regional than in national elections. On the other, in the last pair of general/regional elections in the Basque Country and Navarre, the withdrawal of EH raised electoral coordination. The fit of the second model, which adds to the first the regional cleavage, is substantially better: about 17 per cent of the variance of the dependent variable is explained when institutional and sociological factors are

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[70] We also have run an interactive specification in which a multiplicative term between DISTRICT MAGNITUDE and IDENTIY was added to the model 1. But the interaction was not statistically significant and did not produce a better fit.

[71] In Table 6 robust standard errors have been calculated following the method proposed by White (1980). On the basis of the rule of thumb originally suggested by Klein (1962) and presented by Greene (1997: chapter 9), we should not be concerned about multicollinearity.

combined. The linear and the quadratic functional forms of REGIONAL IDENTITY are statistically significant at the .01 level. Their signs are the expected: negative and positive, respectively. Weak regional cleavage encourages electoral coordination, while a strong regional cleavage hampers it. The coefficients and significance of MAGNITUDE and EH do no suffer important changes.

The third model, which adds to the previous ones different political variables, increases the explained variance by 32 per cent. TIME is statistically significant at .01 level and has a positive sign. This means that electoral coordination between general and regional elections was lower in the first pair of elections in each Community (which were held at the beginning of the 1980s) than in the remaining. That is, the possession of clear expectations or information about party chances crystallizes in a better adaptation to conditions of electoral competition conditions, which for their part lead to a reduction in the number of competitors. The dummy variables that identify the 1982 election and the concurrence of national and regional elections are also statistically significant at .01 and.05 level, respectively. Both variables have a positive sign. As it was hypothesized, coordination was particularly important in the 1982 national election by both parties and voters. And similarly relevant is the concurrence of either national and regional elections or regional elections themselves. COMPETITIVENESS and RESOURCES are not statistically significant, but only the first one has the expected sign.

The fourth model, in which the previous specification has been run only for Catalonia, Galicia, and the Basque Country, reduces the coefficients of DISTRICT MAGNITUDE and REGIONAL IDENTITY to insignificant values, while producing a substantial and statistically significant positive coefficient for TIME and COMPETITIVENESS. In these three Communities, there is a worse coordination after the first pair of elections, as it was predicted. Moreover, it has to be stressed that the constant is now positive, although no statistically significant, when in the previous specification was negative. The fit of the model, with an adjusted R^2 of .67, is the best. Finally, the last specification, focused on the remaining thirteen Communities, is quite similar to model (3). This implies that, in contrast with the previous estimation, in these Regions electoral coordination tends to be higher once actors have clear expectations about the chances of potential competitors.

Table 6. The determinants of electoral coordination (dependent variable) between regional and national elections [a]

Independent variables	*Models*				
	1	2	3	4	5
District magnitude	0.014*	0.014*	0.014**	0.090	0.015**
	(0.007)	(0.007)	(0.006)	(0.058)	(0.006)
EH	24.67***	30.51***	33.37***	39.23***	21.29***
	(3.57)	(5.25)	(4.81)	(5.80)	(6.56)
Regional identity		1.36***	1.37***	-1.37	1.12**
		(0.41)	(0.29)	(4.51)	(0.45)
Regional identity[2]		-0.026***	-0.027***	0.001	-0.018*
		(0.008)	(0.005)	(0.053)	(0.010)
Time			-18.01***	38.09**	-18.73***
			(3.13)	(14.01)	(3.24)
			10.37	20.07*	8.47
1/Competitiveness			(6.52)	(9.23)	(7.8)

1982 election			49.46***	(dropped)	35.40***
			(7.72)		(4.14)
Resources			1.41	(dropped)	0.01
			(3.50)		(3.28)
Concurrence			11.48**	(dropped)	-5.33
			(4.44)		(4.08)
Constant	3.63	-7.20***	-18.22***	24.90	0.04
	(2.40)	(3.49)	(5.31)	(97.91)	(5.61)
Adjusted R^2	0.09	0.17	0.49	0.67	0.44
Number of observations	88	88	88	17	71

[a] Estimation is by ordinary least squares. White Heteroskedasticity-Consistent Standard Errors & Covariances in parentheses. Levels of statistical significance are the following: ***$p<0,01$; **$p<0,05$; *$p<0,10$.

Conclusions

This paper has identified a coordination dilemma that the literature had clearly overlooked and that might be to some extent responsible for the failures of many Duvergerian predictions in decentralized countries: the interaction or contamination effects between electoral arenas when several representative bodies in different territorial levels are chosen under different rules. Strictly speaking, this strategic dilemma is referred to the decision of subnational parties to compete or not in national elections when they count on seats or at least chances of winning a seat in regional elections but not in national ones. Using data from Spain, a country which recently underwent a particularly intense process of political decentralization, we have demonstrated that the resolution of this dilemma depends fundamentally on the difference in the permissiveness of electoral rules between both arenas, the existence of a intense regional cleavage, the possession of good information about the relative chances of potential competitors, the competitiveness of national elections and the concurrence of national and subnational elections. And these dimensions interact with the structure of regional party systems, given the incentives provided by federalism to soften Duvergerian gravity.

In sum, the explanation of the number of parties in a decentralized country has to take into account not only institutional and sociological variables but also the coordination or dis-coordination between electoral arenas: the more perfect this coordination, the higher the precision of Duverger´s laws.

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