

Governing coalitions in multi-level settings: State-wide parties and the sub-national arena in Spain

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The study of governing coalitions is by now one of the classics in political science. There is a solid theoretical body for studying various aspects of coalition politics and national governments have been the subject of extensive empirical research. The appeal of studying local and regional coalitions, if only for the simple fact that they can provide the researcher with an increased number of cases for testing existing theories and at the same time with the possibility to control for a series of systemic factors, has been early pointed out in the coalition literature (Dodd 1976, Mellors and Breary 1986, Laver 1989). However, so far only a handful of studies have proceeded to research sub-national coalitions.²⁴⁷

Nevertheless, the need for researching sub-national coalitions is becoming obvious for empirical reasons too. In the last decades of the 20th century, several Western European countries engaged in processes of political decentralization, devolving governing and legislative jurisdictions to sub-national elected assemblies and regional governments. The territorialization of electoral competition in decentralized states gives rise to a series of cross-level differences in what regards the electoral performance, the organization and the strategies of political parties. Elections often result in asymmetrical governing majorities (Hopkin 2003; Jeffery and Hough 2003). This requires parties to adapt to a dual logic, as the governing and the opposition experiences might overlap in time across levels, and so might the governing-alone and the governing-in-coalition experiences.

This paper builds on the existing body of literature to elaborate a theoretical framework for studying coalitions in multi-level settings and tests several of its predictions using data from the Spanish regions, focusing on the patterns of governing that Spanish state-wide parties engage in at the sub-national level. Generally, comparative coalition literature excludes countries like Spain and Great Britain for the simple reason that national governments are always made of a single party, regardless of this party's majority status (Müller and Strøm 2000). At the regional governing tier however, while single party governments are still the most frequent occurrence, coalitions have formed in a third of all cases since 1982. Just as well, 37% of all regional governments held minority status (see Table 1).

Table 1. Government size and majority status: 1982-2005²⁴⁸

		Majority status		Total
		Minority	Majority	
Government size	One party	36	60	96
	Two parties	9	27	36
	More than two parties	8	4	11
Total		54	91	145

This paper explores the governing strategies that the two main Spanish state-wide parties, the Partido Socialista Obrero Español (PSOE) and the Partido Popular (PP), employ at the regional level. Besides the fact that the Spanish national government has always been formed by either the PSOE or the PP, these two **state-wide parties**²⁴⁹ have a strong governing presence at the sub-national level. As reported in Table 2, only 19 sub-national cabinets, that is 13 percent of all cabinets, did not include any state-wide party. The two main state-wide parties governed alone in two-thirds of the cases, and in coalition in the remaining 33%.

²⁴⁷ See for example Reniu 2005; Bäck 2004; Mershon and Hamann 2000; Downs 1998; Colomer and Martínez 1995.

²⁴⁸ See section 2 for an account of all data sources.

²⁴⁹ For a definition of state-wide parties see section 4.

Table 2. Presence of state-wide parties in government

	single party government	coalition	Total
no SWP in government	13 (68.4%)	6 (31.5%)	19 (13.1%)
at least one SWP in government	84 (66.6%)	42 (33.3%)	126 (86.8%)
Total	97	48	145

Note: entries in parentheses represent row percentages.

The paper is organized as follows: Section 1 sketches a theoretical framework and briefly reviews the relevant literature on the topic. Section 2 presents methodological issues pertaining to concepts, data and measurement. Section 3 outlines the specific hypotheses I set out to test on Spanish data. Section 4 reports and discusses the empirical findings. The final section concludes and proposes an agenda for further research.

1. Multi-level systems and governing coalitions: fundamental theoretical assumptions

The theories of government formation and general coalition behavior have been developed to apply to national governments. All of them should, insofar as they are based on specific assumptions regarding the goals of the main actors involved in government formation and the life of governments, be testable against data on regional governments (Laver 1989; Mellors and Breary 1986). However, in order to be sensibly applicable to multi-level systems, we must ensure that these theories fulfill several basic conditions in what concerns their fundamental assumptions.

These requirements will be presented in what follows. This attempt to sketch a “theory of theory” does not consist in adjusting existing general coalition theories to fit particular cases. Rather on the contrary, the framework outlined in this section is selecting from the existing body of coalition theory those propositions which could be *a priori* applicable to both single- and to multi-level systems.

The first fundamental assumption of any theory dealing with coalition-making in multi-level system is that political actors might *simultaneously* pursue *multiple different goals at different levels* (Downs 1998). These goals will depend on the context of competition, and on the individual stakes involved in bargaining outcomes. Take, for instance, the case of a moderate regionalist party with relatively strong electoral support in its region. If the degree of regional governing autonomy is substantial, or if the party perceives participation in regional government as a means to enhance autonomy for the region, then this party’s motivation to enter government in what it perceives to be the most efficient governing formula will be of highest intensity. In coalition parlance, the party’s dominant goal in regional politics will be *office*. Moving to the next level, due to its strong and territorially concentrated support, this party might find itself in a pivotal position in the national legislature. It might therefore be offered portfolios in the national government. However, the party might find participation in national government too costly, as it will have to engage in shared government responsibility and thus it might have to dilute its regionalist appeal and risk to loose voters at the next elections. Or the organizational costs of participating at two levels might be too high for the size of its organization. This party would therefore find it more beneficial to take advantage of its pivotal position and condition its parliamentary support to a minority national government on the implementation of a few crucial policies related to territorial autonomy. Its refusal to participate in national government would thus be explained by motivations pertaining to *policy* and *votes*. Thus, the party would pursue simultaneously and with equal intensity both *office*, at one level, and *policy* and *votes*, at the other level.

From the example above follow two other fundamental prerequisites of a coalition theory applicable to decentralized systems. One is that such a theory should assume that that bargaining (formation) games are iterative (Franklin and Mackie 1983) and interconnected between levels (Downs 1998). The other is that political actors are future-oriented. Let us take each one separately. For quite a long time coalition research treated each government formation case as a snap-shot scenario, meaning that the only actor attributes considered relevant were the ones they had at that particular moment in time (i.e. usually ideological outlook and parliamentary weight). However, previous coalition experience is part of the minimal information baggage with which actors enter the bargaining game: “the formation of a governing coalition should be viewed as part of a historical sequence of events in which past experience

plays an important role” (Franklin and Mackie 1983: 276). The model proposed by Franklin and Mackie is based on four key variables: size and ideology (the classical ones) as well as familiarity, that is, the information from past experiences, and inertia, which would, by virtue of the “immediate past experience” predict the reformation of the same coalition.²⁵⁰ Their model is among the first ones to explain why many real-world coalitions are neither small nor ideologically compact, attributes which summarize the predictions of the classical size and policy schools.²⁵¹

In the same line of thinking, if actors look in the past to assess the viability of specific coalition formulae, they should also be expected to assess the *possible long-term future consequences* of the various coalition formulae they are considering. Thus, certain coalitions will not form, even if momentarily attractive, because their perceived future costs, usually in terms of votes and policy, are simply too high (Mershon 2002; Strøm 1990).²⁵²

A fourth pre-requisite for a good explanatory theory of government formation multi-level systems is that the policy space is modeled as having at least two distinct dimensions. Territorialization of political competition implies a (re)awakening of the center-periphery cleavage (Lipset and Rokkan 1967). Classical formal coalition theories tended to model the ideological space in which parties compete and bargain as one-dimensional.²⁵³ One of the most celebrated predictions of this model construction is the median-legislator theory, according to which the party containing the median legislator should always be included in the governing coalition, as its policy position is unbeatable by any parliamentary majority. However, it is doubtful that even in centralized systems the space of political competition can be usefully reduced to a single dimension. An early bi-dimensional account is that of Luebbert (1986), who posited that parties prefer forming coalitions with partners whose policy preferences are not proximal, but orthogonal to their own. Schofield (1993), Schofield and Sened (2005), Laver and Schofield (1990) and Laver and Shepsle (1996) developed what have remained until now the most elaborated models of government formation in bi-dimensional spaces.²⁵⁴ The thrust of their arguments is that where it exists, the party occupying the core of the policy space²⁵⁵ will always be included in the governing coalition.²⁵⁶

A fifth demand for our theory is that it relaxes the assumption that parties are unitary actors. The unitary-actor assumption lays at the core of most theoretical models of coalition formation and it is only very recently that scholarship has attempted to relax it for better explaining real-world coalition behavior. The strongest argument in favor of the unitary-actor assumption was made by Laver and Shepsle, who argued on the basis of empirical evidence from Western Europe that “parties both enter and leave cabinet coalitions as unified blocks” (Laver and Shepsle 1996: 25). But internal party politics, and most notably factionalism, have also been found to matter (Laver and Gianetti 2004; Mulé 2001; McGillivray 1997; Pridham 1986). And if the unitary actor assumption is questionable in centralized systems, in countries with *de facto* decentralization, political parties are subject to substantial centrifugal forces. In some cases, the territorial arrangement of the state is mirrored by the organization of political parties. In others, their response to the centrifugal tendencies induced by territorial decentralization is a tightening of organizational centralization. These are two different strategies that point at the same problem: how to contain or manage territorial factionalism. The first strategy proposes accommodation by quasi-federalizing the party organization and devolving powers to the regional/federate party units. The second one proposes containment and attempts to keep regional branches under the strict control of the center (Hopkin and van Biezen 2005; Deschouwer 2003; Detterbeck and Renzch 2003; Hopkin 2003). Of course, both organizational strategies are attempted with more complex aims than simply counteracting factionalism. However, they are also indicating that territorial division is a problem that is viewed

²⁵⁰ See also Warwick 1994.

²⁵¹ The minimal-winning coalition is at the core of the size/office school (Von Neumann and Morgenstern 1952; Riker 1962). The policy school predicts that connected (i.e. ideologically cohesive) coalitions are the ones most likely to form (de Swaan 1973; Axelrod 1970).

²⁵² Colomer and Martínez (1995) base their argument on coalition formation in multi-parliamentary systems on these two behavioral assumptions: parties engage in iterative coalition bargaining games, in which past and perceived future experience is an important determinant of strategic choices.

²⁵³ This is mainly because multi-dimensional models are extremely difficult to formalize.

²⁵⁴ Besides rendering his formal model more realistic by building in two policy dimensions, Schofield’s merits lie also in the fact that his model can incorporate future-orientations of actors and is linked to a general model of party competition.

²⁵⁵ The core is basically the intersection of the two medians in two-dimensional spaces. Unlike the simple median, the core is rarely occupied by an existing party (see Schofield and Sened 2005; Warwick 1994).

²⁵⁶ This assumption of the two-dimensional character of the policy space is inherently built in nearly all accounts of sub-national coalition politics. See for example Reniu 2005; Mershon and Hamman 2000; Colomer and Martínez 1995

seriously by political parties. Differences in party organization should be expected to matter for how parties design coalition strategies too.²⁵⁷

Finally, of course, any good model should take into account the effects of institutions. Strategic action always takes place in certain parametric conditions, and it has already become commonplace that certain electoral institutions as well as institutions shaping the executive-legislative linkages matter for government formation and survival (Martin and Stevenson 2001; Mershon 2000; Strøm, Budge and Laver 1994; Warwick 1994; Bergman 1993; Strøm 1990). In multi-level systems institutions and their effects can vary across levels. National and sub-national elections might be regulated by the same proportionality rules for example, but variations in district size across levels can result in substantial deviations from proportional outcomes and thus in very different parliamentary party constellations and viable coalition alternatives across levels.²⁵⁸

To conclude, in this section I have attempted to sketch the main assumptions that a theory of coalition formation applicable to decentralized contexts should rely on. In summary, these are the following:

1. Parties may simultaneously follow different goals (votes, office, policy) in different arenas (state-level vs. regional);
2. Coalition formation games are iterative and inter-connected between levels;
3. Actors are not myopic (long-term future consequences are assessed);
4. The legislative policy space is two-dimensional;
5. Parties may be non-unitary actors;
6. Institutions are constraining actors' strategic behavior.

Section 3 presents a several empirical hypotheses derived from these assumptions. Before getting there, in what follows section 2 describes and clarifies methodological problems pertaining to concepts, operationalization, data and measurement.

2. Concepts, data and measures

The first issue that must be clarified before proceeding to the analysis of Spanish data regards the units of analysis. In this paper, the units of analysis are individual regional cabinets. In Spanish regional politics, cabinets are the so-called *consejos*. They are led by a *presidente* who must pass a vote of investiture in the parliament. The rules that decide when a new cabinet begins are those usually employed in comparative research of national government. Thus, a new cabinet is counted every time (1) a new prime-minister (i.e. *presidente*) is invested; (2) following elections; (3) a change is recorded in the party composition of the cabinet (Müller and Strøm 2000) and (4) a change has occurred in the majority status of the government (Reniu 2005).

This analysis is focused on the governing strategies of state-wide parties. A state-wide party is defined here as a political party which is contesting *both* regional and national elections in all or nearly all regions of the country, largely under the same electoral banner; if regional or national elections are fought in certain regions by a regional organizational division of a party which competes under a different banner, but this organizational division is *not* competing against any other organizational division of the same party and it *does not* form a separate parliamentary group in those parliamentary contexts in which it co-exists with the national division, it will be counted as the same “state-wide party.”

This last specification is particularly important for the Spanish case. Researchers still argue over the “correct” classification of cases like that of the Partit dels Socialistes de Catalunya (PSC). The PSC is formally part of the federal organization of the Partido Obrero Socialista Español (PSOE). However, it enjoys a special status within the party federation, benefiting from extended autonomy in what regards electoral strategies and candidate selection (Colomé 2004). National elections are fought in Catalonia under the PSC-PSOE banner, while autonomous elections are fought solely by the PSC. For certain analytical purposes thereof (i.e. party organization, campaign strategy, etc.), it is perfectly adequate to consider PSC as a separate party unit. In what regards coalition-related phenomena at the two levels of

²⁵⁷ Two excellent accounts of how internal party politics (i.e. the non-unitary character of political actors) plays a role in the formation of sub-national politics are those of Bäck (2004), who looks at Swedish local coalitions and Downs (1998) who compares sub-national coalitions in Belgium, Germany and France.

²⁵⁸ For applications to sub-national coalitions see in particular Mershon and Hamman (2000) and Downs (1998).

government, it makes more sense though to take the PSC and the PSOE as the same single party organization. This is justified by the fact that in effective parliamentary politics, the two party levels are practically indistinguishable, forming the same party group in the national parliament. One must also add to the argument the fact that Spain is a country where parliamentary indiscipline is quasi-inexistent: once in the same party group, regional MPs follow the party line in their legislative voting behavior (Fernández Riveira 2003; Tomás Mallén 2002; Sanchez de Dios 1999).

By contrast, a “non-state-wide party” (NSWP) is a party that contest either regional or national elections, or both, in a limited territory of the country (one or several, but never all regions) and which retains a separate parliamentary group organization in sub-national parliaments. If two or more non-state-wide organizations run elections on a common list and following elections form one single parliamentary group, then, for the same justifications as above, they are considered a single NSWP.

Note that these definitions apply two criteria of classification, one pertaining to electoral politics (votes) and another one to parliamentary representation (seats). Just as well, they take into account the issues of territorial pervasiveness (number of regions) and territorial presence, or spread (type of elections contested) (Deschouwer, forthcoming).

In what dimensionality is concerned, I follow the method suggested by Mershon and Hamman (2000). They rely on the assumption that the left-right dimension is automatically present in all regional legislatures, and compute a threshold of two-dimensionality that indicates the existence of a second ideological division, defined by the opposition between regional autonomy and state centralization (Heller 2002). The threshold is computed and employed as follows: if non-state-wide parties (regionalist parties thereof) hold above 3% of the total number of parliamentary seats, the system is considered two-dimensional. If regionalist parties fail to reach this threshold of representation, that legislature is considered one-dimensional.

Finally, in what regards the congruence of electoral results across levels, an index of dissimilarity was computed for each regional elections, comparing its results at the regional level of aggregation with those of the previous most recent national elections (at the same level of aggregation). The reference point are thus national elections, namely those of 1979 (for the few cases in which autonomous elections were held already in 1980 – Catalonia – or 1982 – the Basque Country²⁵⁹), 1982 (compared with the first autonomous elections of 1983 held in most ordinary status regions), 1986, 1989, 1993, 1996, 2000, and for a few cases, 2003²⁶⁰.

The exact formula used for computing the index of dissimilarity is:

$$\text{Dissimilarity index} = \sum (| V_{i\text{reg}} - V_{i\text{nat}} | + \dots + | V_{n\text{reg}} - V_{n\text{nat}} |)$$

where $V_{i\text{reg}}$ = Percentage of votes that Party i received in regional elections

$V_{i\text{nat}}$ = Percentage of votes that Party i received in the previous most recent national elections

N = Number of parties winning votes.

The index was computed for each regional-national election pair and its values assigned to every government that was formed following the regional election the index was computed for and before the next regional election held. (For example, the 89-91 index in Aragon was assigned to all the governments that were formed in Aragon in the interval between the 1991 and the 1993 regional elections).

Ceteris paribus, the index is a straightforward measure of “how divergent electoral outcomes at different levels are” (Jeffery and Hough 2003: 209). Calculated this way, it basically computes the percentage of voters that would have to vote differently in regional elections so that the results of these latter should be identical with the results of the previous most recent national election in that region. However, one should bear in mind that factors operating at the national level as well as the time lapse between the two different-level elections are likely to be responsible for at least part of the value the index of dissimilarity takes (Pallarés and Keating 2003). That is to say that indices of volatility computed for same-level elections (national and regional) must be also looked at.

I will conclude this section by giving an account of the sources that have been used to build the dataset. Data on cabinet composition and parliamentary weight was taken from Reniu (2004).²⁶¹ Electoral

²⁵⁹ For the 1982 regional elections in Galicia a different computation applies. See Appendix for details.

²⁶⁰ See Appendix for a detailed discussion of the general rule and the exceptions in calculating the index.

²⁶¹ Several differences occur with respect to the original data posted by Josep Reniu-Villamala on <http://www.ub.edu/grepa/> and they are due to calculation corrections. These corrections have been cross-checked with Josep Reniu (e-mail communications, June-July 2005).

data was taken from official statistics posted on www.eleweb.net and <http://argos.mir.es/MIR/jsp/resultados/index.htm>. Data regarding parliamentary institutions (size of parliaments, regulation of party groups, investiture and no-confidence rules, etc.) as well as data on parliamentary party groups was retrieved from the official websites of regional parliaments. Data on electoral laws (district magnitudes, thresholds of representation and number of electoral districts in the region) were retrieved from the website of the Spanish Ministry of the Interior, <http://www.mir.es/sites/mir/medium/pciudad/elecciones/normativa/comunidadesautonomas.html>. All other variables employed were computed by the author departing from these sources.

3. Hypotheses, findings and discussion

Starting from the assumptions that have been elaborated in the first section of the paper, several specific propositions can be derived and tested.²⁶² ²⁶³

1. Party goals

If political actors pursue different goals in different arenas, government participation, majority status and government composition are likely to be incongruent across levels.

2. Bargaining as an iterative game

At least two hypotheses can be derived from this assumption:

- a. If bargaining is an iterative game, and parties rely on familiarity and inertia when forming coalitions, particular patterns of coalition composition are likely to occur more frequently than others.
- b. If bargaining is an iterative game and the information baggage of parties extends to experience acquired in both the regional and the national arena, pay-offs for support at one level are likely to be observable at other level.

3. Dimensionality and party system attributes

- a. NSWPs are more likely to govern in two-dimensional legislative systems than in one-dimensional ones;
- b. Coalitions between SWPs and NSWPs are more likely to occur in two-dimensional systems;
- c. The higher the level of regional electoral volatility and cross-level electoral dissimilarity, the more likely it is for incongruent governments to emerge. This is because in highly volatile regional settings which are furthermore also characterized by strong cross-level dissimilarity in voting patterns, different parliamentary party constellations are expected to emerge.

4. Institutions

Finally, the institutions that are likely to impact on government attributes fall in three categories: (i) institutions specific to multi-level systems (autonomy status, electoral timing, etc.); (ii) electoral institutions (district size, threshold of representation); (iii) legislative-executive relations (vote of investiture, vote of no confidence, and their respective decision points);

- a. Incongruence is more likely to be present in those regions whose institutions are “highly regionalized”.

By “highly regionalized” institutions I mean special autonomy status, own electoral calendar, and so on.

- b. The higher the threshold and the smaller the district size, the more likely it is for single-party majorities to form (Mershon and Hamman 2000).

²⁶² Due to lack of data, there will be no hypothesis related to how dimensionality affects coalition composition. Two strong classical hypothesis are that in one-dimensional contexts, the median party is more likely to be present in the governing coalition than any other whereas in two-dimensional contexts, it is the core party that will govern (Mershon and Hamman 2000). In order to test these two hypotheses, it is necessary to have data about the ideological positioning of political parties at different election times. Ideally, this data should be generated either from party manifestoes, or from expert surveys (or from both), *for each level of party competition separately*. It will not necessarily always be the case, but the territorialization of party competition also means that parties emphasize different policy positions at different levels. This specification is important. In lack of better resources, existing research relies on data generated at one level, i.e. the national one, for studying coalitions at the other level, i.e. the regional one.

²⁶³ Just as well, due to lack of data no hypothesis related to party organizational attributes will be tested in the paper.

c.Minority governments are less likely to form in legislative settings characterized by investiture requirements (especially when the decision rule for the vote is majority rather than simple plurality) and by the requirement of constructive no-confidence for government termination²⁶⁴ (Mershon and Hamann 2000; Budge, Strøm and Laver 1994; Bergman 1993).

In what follows we will take each of these hypotheses in turn, presenting and discussing empirical evidence.

3.1 Party goals and congruence across levels

To start with, Table 3 below cross-classifies regional governments according to their parliamentary status and to the status of the state-level government existing at the moment of their formation.

Table 3. Majority status across levels*

Regional level	State-level					
	All cases		PSOE only**		PP only	
	Minority	Majority	Minority	Majority	Minority	Majority
Minority(%)	40.7 (22)	35.2 (31)	38.1 (8)	31.0 (13)	20.8 (5)	25.4 (10)
Majority(%)	59.3 (32)	64.8 (57)	61.9 (13)	69.0 (29)	79.2 (19)	74.6 (25)
Total	54	88	21	42	24	35
N	142		63		59	

* Entries are percentages of total number of state-level governments for each status category. Absolute numbers shown in parentheses.

** Only those regional governments that were formed while the PSOE was in government at national level.

These percentages illustrate that there are clear differences in what concerns the two state-wide parties analyzed in this paper. The PP appears to be more cautious in forming minority governments at the regional level, even when there is a minority government at the state-level. The Socialists appear more eager to get into government even under a minority status, and for both parties, the difference in the parliamentary status of the governments they form at the regional level is rather small as we change categories at the state level.

To explore government congruence in party composition across levels, I created a dichotomous variable that takes the value of “1” if the regional government contains the same state-wide party as the national government of the country at the time of regional government formation, regardless of the formula in which this party is present (alone or in various coalitions). As expected, the number of incongruent governments is rather high (see Table 4), with more than fifty percent of all governments formed being incongruent (i.e. governments not containing the party governing at the state level at the moment of their formation).

Table 4. Government composition congruence across levels

Congruence	No. of governments	%
incongruent	75	51.4
congruent	71	48.6
Total	146	100

Of course, one can suspect that this proportion is artificially inflated by the government of the “fast-track”

²⁶⁴This hypothesis will not be tested here, as this institutional characteristics do not vary across regions in Spain. Cases from more countries should be included in order to provide a meaningful test.

regions in Spain. Table 5 below shows that even when excluding from the analysis the cases from Andalusia, Catalonia, Galicia, the Basque Country²⁶⁵, as well as those from the Canary Islands and²⁶⁶, the proportion of incongruent governments still reaches close to 44%.

Table 5. Government composition congruence across levels (selected cases only)*

		<i>No. of governments</i>	<i>%</i>
<i>Congruence</i>	<i>incongruent</i>	42	43.8
	<i>congruent</i>	54	56.3
	<i>N</i>	96	100

* excluding Catalonia, Galicia, the Basque Country, Andalusia, and the Canary Islands.

But how much of this can be explained by party strategic behavior? Patterns of congruence are varying quite substantially when we look at the two major state-wide parties separately. As shown in Table 6, the PSOE was part of many more regional governments that were congruent with the state-level one than was the PP.

Table 6: Government congruence by party

	<i>PSOE in regional government</i>	<i>PP in regional government</i>
<i>Congruence</i>	77.8%	37.7%
<i>Incongruence</i>	22.2%	62.3%
<i>N</i>	63	61

It also clearly appears that having PSOE included in the regional government is a strong determinant of congruence. Table 7 below shows the results of two logistic regression models. Both include structural variables that could theoretically affect governmental composition congruence across levels: the dissimilarity index, the regional volatility index as well as the number of dimensions of competition in the regional parliament. Besides these, the first model includes a dichotomous variable that takes the value of “1” when PSOE is in government at the regional level and “0” otherwise. The second model includes the same variable for PP presence in regional government.

Table 7. Determinants of congruence

	Dependent variable = Congruence			
	Model 1 = PSOE		Model 2 = PP	
	B (SE)	Odds ratio	B (SE)	Odds ratio
PSOE in regional government	1.775*** (0.445)	5.901	-	-
PP in regional government	-	-	-0.640 (0.431)	0.527
Dissimilarity index	-0.003 (0.020)	0.997	-0.012 (0.019)	0.988
Regional volatility index	-0.060* (0.032)	0.942	-0.057* (0.029)	0.95
Dimensionality	-0.689 (0.560)	0.502	-0.758 (0.525)	0.469
Region status	-0.687 (0.526)	0.503	-0.760 (0.516)	0.468
Constant	1.400 (0.856)	4.056	2.701 (0.829)	14.900

²⁶⁵The four special status regions have incongruent governments in proportion of 70%.

²⁶⁶The Canary Islands have a highly regionalized party system (Pallarés and Keating 2003).

N	123	123
Nakelgerke R-square	0.348	0.216

Significance levels: ***0.01, ** 0.05, * 0.1

Notes: B is the unstandardized regression coefficient. Standard errors shown in parentheses. For variable codings see Appendix.

The results are rather interesting. While having a PP government does not have any significant effect on congruence, a PSOE government increases the odds of congruence significantly: the odds of having a congruent situation are 5.9 times higher if the regional government includes the PSOE than if it does not include it. Electoral arithmetic also plays its due role, but unexpectedly, dissimilarity - which is also a measure of regionalization of elections - is insignificant in both models. Instead, in systems with two-dimensions and high regional volatility, the chances of congruent governments are reduced, as one would intuitively expect.

It appears thus that the PSOE is more eager to participate in governments at both levels simultaneously, even if this means forming minority governments: 33.3% of all the regional governments including PSOE had minority status, as opposed to the 25.5% in the case of PP. The picture looks similar if we consider only the single-party governments formed by each party: 25% of the PSOE regional governments had minority status, while only 18% of the PP ones did so. Of course, these conclusions are only tentative, as no real strategy component was introduced at this level of research. Further qualitative analysis must check whether this is indeed a matter of party strategy and provide answers as to why these differences occur.

3.2 Coalition formation as an iterative game

The first hypothesis related to the second theoretical assumption states that “if bargaining is an iterative game, and parties rely on familiarity and inertia, a particular pattern of coalitions is likely to occur more frequently than others.” (*hypothesis 3.2.a*). To be more specific, one can expect that the most frequent coalition pattern that state-wide parties would seek to form at the regional level would be a formula including themselves and one or several non-state-wide parties.²⁶⁷ There are good reasons to expect this in the Spanish case. The main such reason is that except for the Izquierda Unida (IU) and, for a short time span in the early '80s, the various successors of the Unión de Centro Democrático (UCD), the only two parties that are effectively competing in regional level elections are the two big opponents: the PSOE and the PP. UCD's successors practically disappeared from the regional parliamentary arena very early, therefore a general pattern of coalition formation including them and covering the whole period up to 2005 would not make sense. For basic ideological reasons, the IU could only coalesce with the PSOE, but due to a long-term personal animosity between the two parties' respective leaders in the '80s, such a coalition formula is very unlikely for most of the time span covered by this analysis (Reniu 2001).

And indeed, of the 49 coalition governments that were formed at the regional level in Spain between 1980-2005, 77.5% were formed by one or more state-wide parties and one or more non-state-wide parties. There were two instances in which two SWPs coalesced formally without including a third or fourth NSWP: the current Asturian PSOE-IU coalition and the 1989-1991 PP-CDS coalition in Castilla y León. The remaining coalitions were formed by NSWPs only.

But is there any difference at the level of individual parties in what regards the “favorite” formula of governing? Table 8 below suggests that both parties apply the same logic in this respect.

Table 8: Coalitions vs. single-party governments: preference by party

	<i>PSOE in regional government</i>	<i>PP in regional government</i>
<i>Single-party</i>	69.8%	65.0%
<i>Coalition</i>	30.1%	34.4%
<i>Coalition with NSWPs</i>	29.5%	28.6%
<i>Total</i>	63	61

Also, two logistic regression model were run having as dependent a dummy expressing whether the government was a coalition between one or more state-wide parties and one or more non-statewide parties, and including as explanatory variables *PSOEin* and *PPin* respectively besides a number of control variables (see Table 9). The only explanatory variable that appeared statistically significant was the

²⁶⁷Data on government supporting parties in cases of single-party minority will also need to be included in further analysis for a more solid test of this hypothesis.

*PSOE*in, which appears to increase the odds of encountering this particular coalition pattern. Curiously so, except for dimensionality, none of the control variables held significant coefficients, and therefore the observed pattern does not appear to be due to structural conditions such as region status, dissimilarity or regional volatility.²⁶⁸

Table 9 Party strategies as determinants of coalition formula

	Dependent variable = SWP+NSWP coalition			
	Model 1 = PSOE		Model 2 = PP	
	B	Odds ratio	B	Odds ratio
PSOE in regional government	1.160* (0.473)	3.190	-	-
PP in regional government	-	-	0.439 (0.458)	1.551
Dimensionality (continuous)	0.043** (0.014)	1.044	0.038** (0.014)	1.038
Dissimilarity index	0.007 (0.017)	1.007	0.004 (0.017)	1.004
Regional volatility index	0.021 (0.026)	1.022	0.014 (0.025)	1.014
Region status	-0.922 (0.659)	0.398	-0.648 (0.667)	0.523
Constant	-2.476 (0.603)	0.084	-1.965 (0.557)	0.140
N		123		123
Nakelgerke R-square		0.206		0.151

Significance levels: ***0.01, ** 0.05, * 0.1

Notes: B is the unstandardized regression coefficient. Standard errors shown in parentheses. For variable codings see Appendix.

The second hypothesis related to the bargaining-as-an-iterative-game assumption states that pay-offs for support at one level must be observable at other levels (*hypothesis 3.2.b*). Obviously, pay-offs can be of various kinds, more or less observable and operationalizable by the researcher. Moreover, complete data on parliamentary support for minority governments should be analyzed before any final conclusion can be reached. A very basic way to provide some evidence regarding this hypothesis is to simply see if the number of NSWPs in regional government increases substantially when at the state level there is a minority government. In the case of Spain, this is justified by the fact that state-level single-party minority governments have always relied on the parliamentary support of NSWPs (Reniu 2005: 2).

²⁶⁸ Very similar conclusions can be reached when running the regression with “single party government” as a dependent variable (results not shown).

Table 10. NSWP parties in government * majority status national government

	majority status national government		Total
	minority government at state level	majority government at state level	
No NSWP in regional government	32	56	88
At least one NSWP in regional government	23	32	55
Total	55	88	143

As Table 10 shows, in situations of state-level minority, 42% of the regional governments formed included at least one NSWP. This is only somewhat higher than the 36% of the same kind of governments formed in majority situations. Somewhat more interesting is to break down this picture at the level of the two state-wide parties that we are interested in in this paper, the PSOE and the PP. Contrary to any intuitive expectations, during the Aznar I government, 48% of all the regional governments that formed included a NSWP or more, whereas during the last González and the current Zapatero minority governments, only 34% did so. Nevertheless, this does not mean that PP replicated its national support policy at the regional level more than the PSOE, because actually PP itself formed only 3 coalitions with non-statewide parties while governing Spain in a minority status, one in Cantabria and two in the Canary Islands. At the same time however, there were five minority governments formed solely by NSWPs during Aznar I, one in Catalonia and the other four in the Basque Country. Just as well, there are only two instances in which the PP governed in minority at the regional level during Aznar I, but they must be treated with caution, as they are two consecutive cabinets in Navarra, where the previously regionalist Unión del Pueblo Navarro (UPN) had fused with the PP in 1993, and ever since elections were run by the PP under the UPN banner.

What about the González IV and the current Zapatero minority governments? During these two periods, PSOE also formed only three regional coalitions along non-state-wide partners. It formed rather many minority governments: two in Andalucía, two in Aragón, one in the Asturias and another one in Extremadura. Except for the case of Aragón, where the PSOE could have allied with two NSWPs to ensure formal majority in 1995 (the PAR and the Chunta Aragonesa), there was no viable coalition formula between PSOE and non-state-wide partners. Finally, similar to the Aznar I period, Catalonia and the Basque Country, and in addition the Canary Islands this time, were governed by non-state-wide minority governments.

There is thus some mixed evidence in support of the hypotheses that pay-offs for support at one level are observable at other levels, and they are more of a qualitative than of a quantitative nature. We don't necessarily find more NSWPs in government in national minority situations. What we do find though is specific NSWP minority governments formed by precisely those parties that support the PP and PSOE at the state-level when they are in minority situations: the Basque Nationalists in the Basque country (PNV-EAJ), the Convergència i Unió (CiU) in Catalonia, and the Coalición Canaria in the Canary Islands. Of course, in this first exploration I opted for the bluntest way to operationalize the pay-offs for support, namely support for participation in regional government. Further research must provide a more refined measure of pay-offs, including substantive policy concessions to non-state-wide demands at the regional level.

3.3 Dimensionality and party system attributes as determinants of government formation

Some basic hypotheses regarding dimensionality are that:

- (a) NSWPs are more likely to govern in two-dimensional legislative systems than in one-dimensional ones (*hypothesis 3.3.a*);
- (b) coalitions between SWPs and NSWPs are more likely to occur in two-dimensional systems (*hypothesis 3.3.b*);
- (c) the higher the level of regional electoral volatility and cross-level electoral dissimilarity, the more likely it is for incongruent governments to emerge (*hypothesis 3.3.c*).

Both *hypotheses 3.3.a* and *3.3.b* are supported by high bivariate correlation indices ($\Phi = 0.56$ and 0.42 respectively). If we replace the dichotomous variable that expresses the number of dimensions in the legislature by the continuous NSWPERC (which indicates the total percentage of seats won by held by NSWPs), the association is even stronger for the hypothesis regarding NSW presence in government ($r = 0.68$) and only somewhat lower for the hypothesis regarding the occurrence of a coalition between a state-wide and a non-state-wide partner ($r = 0.30$).

The effects of party system characteristics on the congruence of government composition (*hypothesis 3.3.c*) are also mostly running as expected, although the strength of the coefficients is not impressive (see Table 11). As indicated in Table 11 however, the dissimilarity of electoral results across different election types is insignificant when controlling for region status. This latter and regional electoral volatility are nevertheless significant determinants of congruence: as volatility increases and we move from an ordinary region to a historical, or fast-track one, the odds of congruence decrease.

Table 11. Dissimilarity and volatility as determinants of congruence across levels

	Dependent variable = Congruence	
	B	Odds ratio
Dissimilarity index	-0.025 (0.017)	0.976
Regionalvolatility index	-0.055* (0.028)	0.947
Region status	-0.763* (0.447)	0.466
Constant	1.422 (0.473)	4.145
N	123	
Nakelgerke R-square	0.172	

Significance levels: ***0.01, ** 0.05, * 0.1

Notes: B is the unstandardized regression coefficient. Standard errors shown in parentheses.

For variable codings see Appendix.

Once again, the fact that electoral dissimilarity appears to have no effect when other variables are controlled for is rather surprising. At the level of bivariate correlation, dissimilarity is negatively correlated with congruence, but the strength of the association is not very high ($r = - 0.28$)

3.4 Institutions

The final part of the empirical analysis addresses the role of institutions. A first hypothesis states that incongruence is more likely to be present in those regions with highly “regionalized institutions” (*hypothesis 3.4.a*). Table 12 below shows the results of a logistic regression in which congruence was entered as the dependent variable and “own electoral timing” as a proxy for regionalized institutions. Dimensionality was entered as control variable and, due to the nature of the proxy taken as the independent, the analysis was limited to those cases of governments that were formed following elections.

Table 12: Institutions as determinants of congruence across levels

Dependent variable: Congruence		
	B	Odds ratio
Own electoral timing ²⁶⁹	-1.090* (0.590)	0.336
Dimensionality	-0.994* (0.458)	0.389
Constant	1.755 (.755)	5.786
N	106	
Nagelkerke R-square	0.154	

Significance levels: ***0.01, ** 0.05, * 0.1

Notes: (1) B is the unstandardized regression coefficient. Standard errors are shown in parentheses. For variable codings see Appendix.

(2) Only post-electoral government formations are included in the analysis.

Although the regression coefficient is quite low (0.154), the proxy behaves as expected: as we move from regions with their own electoral calendar to ordinary regions, the odds of congruence are decreasing. However, if we stretch the proxy to apply to all cases of government formation and include all 146 cases in the analysis, it performs rather poorly, nearly losing all statistical significance (results not shown).

What about the classical electoral variables that are expected to affect size and majority status of governments? Unfortunately, the effects of variables such as the requirements of investiture and constructive no confidence (Strøm, Budge and Laver 1994) cannot be tested on this data, as Spanish regions display no variation in this respect. Tables 13 shows the effects of district size and electoral threshold on the majority status and size of regional cabinets, while controlling for the number of dimensions (*hypothesis 4.3.b*).

Table 13: Institutions and dimensionality as determinants of government size and status

Dependent variable: single party majority		
	B	Odds ratio
Threshold/district	-0.080 (0.077)	0.923
District magnitude	-0.005 (0.010)	0.995
Dimensionality	-2.212*** (0.485)	0.109
Constant	3.888 (0.941)	48.829
N	106	
Nagelkerke R-squared	0.322	

Significance levels: ***0.01, ** 0.05, * 0.1

Notes: (1) B is the unstandardized regression coefficient and S.E. its standard error. For variable codings see Appendix.

(2) Only post-electoral government formations are included in the analysis.

²⁶⁹ Andalusia is coded as 0 on this variable, although it has its own electoral timing separate from the other 13 ordinary-status regions. However, Andalusia has almost without exception held elections on the exact same day with national elections, and its dissimilarity index scores are, with the exception of the 1996-1999 score, below the average of the 17 ACs. It would be misleading thus to characterise it as a highly regionalised autonomous community.

Contrary to the expectations, the electoral threshold and the district magnitude have absolutely no significant effect on whether the government that formed when we control for the number of dimensions at work. Instead, this variable has a strong negative impact on the dependent, the odds of encountering a single party majority government in a two-dimensional legislature being substantially lower than in a one-dimensional legislature.

5. Conclusions

This research builds mainly on existing theories developed for the study of national coalitions. It outlines the fundamental assumptions that a theory of coalitions should make in order to be applicable to both sub-state and state-level governments. It further tests several empirical implications of this theoretical framework, breaking down the picture at the level of the two main Spanish state-wide parties to depict differences in strategy.

The number of the dependent variables considered here was limited to a handful of classical ones, i.e. government size, majority status and party composition. In addition to these, a fourth variable specific to multi-level settings was included in several analyses, namely government congruence across levels.

Supporting evidence was found for most of the theory's implications. Thus, parties do seem to follow different goals in different arenas, they do appear to rely on familiarity and inertia when forming regional coalitions, and pay-offs for parliamentary support at the national level do seem to be visible at the sub-national one. Just as well, whether the regional legislature is characterized by one or by two dimensions of competition appears to play an important role in what regards congruence, government size and government status.

Nevertheless, most findings about the effects of party system characteristics and are rather surprising. Party system dissimilarity across-levels (as measured by the electoral dissimilarity index) performs poorly in all models in which it is included. Perhaps the most counter-intuitive finding is that the shifts on the dissimilarity index do not appear to affect government congruence across levels. On the other hand, regional-level volatility does, and highly volatile systems are also the ones most likely to feature incongruent governments.

Also surprising is the fact that electoral institutions are not found to have strong effects on government characteristics. Neither the district electoral threshold, nor the district size have any significant effects on the size and the status of regional governments in Spain.

At the level of individual parties, while it appears that both the PSOE and the PP clearly prefer to coalesce with NSWPs, there are significant differences in what regards their formula of government they employ most frequently. Thus, it looks like PSOE is eager to participate in congruent regional governments even at the expense of a minority status. On the contrary, the PP has been very cautious in forming minority governments at the regional level. This is perhaps to be explained by the difficulty of PP to obtain parliamentary support from NSWPs.

But of course, more research needs to be done in order to reach definitive conclusions. First and foremost, for a more refined analysis, additional data needs to be collected pertaining to the ideological positioning of parties in each parliamentary setting at each election point. Just as well, parliamentary voting data on government supporting parties as well as coalition agreements must be accessed in order to provide a more substantial test for some of the hypotheses. Finally, further research will need to supplement the results from this quantitative analysis by a qualitative study of parties' coalition strategies, paying particular attention to organizational characteristics and the particular contexts in which specific governing strategies were developed.

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Electoral results:

www.eleweb.net

<http://argos.mir.es/MIR/jsp/resultados/index.htm>.

Electoral legislation:

<http://www.mir.es/sites/mir/medium/pciudad/elecciones/normativa/comunidadesautonomas.html>

Institutions:

Official websites of regional parliaments.

Appendix: Variable codebook

The variables used in this research were coded the following way:

MAJ	The parliamentary status of the government
1	Majority
0	Minority.
GOVTSIZE	Number of parties in the governing coalition (ordinal).
SPGOV	Number of parties in the governing coalition (dichotomous)
1	Single party government
0	Coalition government
SWP_IN	Whether or not the regional government contains state-wide-parties
1	At least one SWP present in the government
0	No SWP present in the government.
NSWP_IN	Whether or not the regional government contains non-state-wide parties
1	At least one NSWP present in the government
0	No NSWP present in the government.
PSOEIN	Whether the PSOE is included in the regional government or not
1	Yes
0	No.
PPIN	Whether the PP is included in the regional government or not
1	Yes
0	No.
DIM	Number of dimensions in the regional legislature
1	Two dimensions (regionalist parties hold more than 3% of seats)
0	One dimension.
NSWPERC	Percentage of seats held by NSWPs (interval).
COSNSWP	Coalition type
1	One (or more) SWP plus one (or more) NSWP
0	other government type.
SPAINGOVST	Parliamentary status of national government at the time of regional government formation
1	Majority
0	Minority.
REGSTAT	Region status
1	“Fast-track” or historical autonomous community
0	ordinary autonomous community.
OWNTIMELEC	Electoral timing
1	Same electoral timing with other autonomous communities
0	Own electoral timing.
CNGR	Congruence of government composition across levels
1	Congruent (the same SWP in government at both levels)

0 Incongruent (the party in government at the national level is not included in the regional government).

THRESDIS Electoral threshold per district (interval)

DM District magnitude (interval)

DISSIMILARITY INDEX This index was computed to compare results of two subsequent elections of different types. Thus the first regional elections in one region were compared to the previous most recent national elections according to the formula:

$$Dissimilarity\ index = \sum (| V_{i\ reg} - V_{i\ nat} | + \dots + | V_{n\ reg} - V_{n\ nat} |)$$

where $V_{i\ reg}$ = Percentage of votes that Party i received in regional elections

$V_{i\ nat}$ = Percentage of votes that Party i received in the previous most recent national elections.

The following specifications need be made:

1. In the case of Andalusia, which holds both types of elections on the same day, it was obviously necessary to compare the two elections closest in time, therefore the index was computed for elections held in the same year. This also applied to the 1982 elections, although regional elections were actually held six months before the national ones.
2. In the case of Galicia, the first two regional elections were compared with the following, not the previous, most recent elections (i.e. 1981 regional elections with 1982 national elections and 1985 regional elections with 1986 national election). This was necessary to maintain the same national elections that were taken as reference points across all cases, while at the same time maintaining the "most recent" criterion of comparison.

REGIONAL VOLATILITY INDEX

The index of regional volatility was calculated according to the classical formula:

$$Volatility\ index = \sum (| V_{i\ t+1} - V_{i\ t} | + \dots + | V_{n\ t+1} - V_{n\ t} |) / 2$$

where $V_{i\ t}$ = Percentage of votes that Party i received in regional elections at time t .

and $V_{i\ t+1}$ = Percentage of votes that Party i received in regional elections at the elections following elections at time t .