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REGIONAL CABINET SIZE

Autonomic cabinet size variation in Spain

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ABSTRACT

The number of regional departments in Spanish Autonomous Communities (ACs) is diverse and changing, both among and within ACs. Why this variation occur and which elements distinguish bigger and smaller cabinets are the main questions behind this paper. We begin by presenting cabinets' relevance in the context of parliamentary democracies and the consequences cabinet size entails. Then, we write down some hypotheses and the origin and operationalization of our data. Finally, our results demonstrate that factors such as parties' ideology or population can explain why cabinets change in size. Our guess linking decentralization and cabinet size is not fully tested as the number of transferred competences is not always statistically significant. However, there are some hints for believing that (regional) parties preferences regarding State's political structure influence on cabinet size.

***Keywords*:** cabinet size, ministerial posts, executive power, political bargaining, party preferences, decentralization.

RESUM

El nombre de conselleries a les Comunitats Autònomes (CCAA) de l'Estat espanyol és divers i canviant, tant entre CCAA com individualment. Per què es produeix aquesta variació i quins elements distingeixen els gabinets amb més membres dels que en tenen menys són les preguntes que guien aquest estudi. Comencem l'estudi presentant la rellevància dels gabinets en el context de les democràcies parlamentàries i les conseqüències associades al nombre de conselleries. Tot seguit, presentem algunes hipòtesis de treball i l'origen i operacionalització de les dades. Finalment, els resultats ens permeten demostrar que factors com la ideologia dels partits o el nombre d'habitants expliquen el canvi en el nombre de conselleries. La suposada relació amb el nivell de descentralització no acaba de veure's confirmada ja que el nombre de competències transferides no és estadísticament significatiu en tots els models. Malgrat tot, tenim alguns indicis que ens permeten sospitar que les preferències en l'organització de l'Estat dels partits (regionals) influeixen en la mida dels gabinets.

***Paraules clau*:** mida del gabinet, ministeris, poder executiu, pactes polítics, preferències dels partits, descentralització.

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INTRODUCTION

While government formation processes have been widely studied, specifically by scholars interested in coalition governments, cabinet size has never attracted such attention. In fact, we know that cabinets do vary and Prime Ministers (PMs) can reorganize not only ministers but also ministerial posts. From 2008 onwards we have seen that some PMs all over the globe have decided to appoint less ministers in their cabinets. For instance, in Spain Mariano Rajoy reduced his first cabinet in two ministries compared to the previous Zapatero cabinet, and he justified the changes for the need to reduce public spending in a context of economic crisis. If that is true, why the first French cabinet appointed by François Hollande in 2012 had one ministry more than the last cabinet of Nicolas Sarkozy? Are the reasons behind cabinet size just economic? As we will see there are theories linking economy and government size, but we believe there is something more beyond the determinants of cabinet size, specifically in regional cabinets of decentralized countries.

The Spanish political system has implied a large and progressive process of decentralization since the establishment of its democratic Constitution in 1978. However, it was not until 1983 when this decentralization process widely started. Although some regions, or Autonomous Communities (ACs), had already been settled, 12 out of 17 ACs voted for the first time in an autonomic election in 1983, which lead them to establish their first democratic regional cabinets. Since then, decentralization dynamics have been central in the Spanish political debates. By the early years, decentralization was seen positively and most regions looked forward to assume new powers, but about 20 years after its beginning there were some voices claiming that it had gone too far. The constitutional crisis linked to the approval of the Estatut de Catalunya[1] in 2006 and the economic crisis have also contributed to this point of view during the last decade. Some op-eds and part of the public opinion started to claim that ACs governments were too big and asked for a recentralization of power.[2] Some of them also said that the proliferation of regional political posts was unsustainable and denounced the creation of posts for areas in which the ACs had small real attributions.

[1] The Catalan "constitution".

[2] Asked by the Centro de Investigaciones Sociológicas, in 2005 nearly 70% of the respondents said that the effects of the decentralization had been positive for Spain (15% negative), while in 2012 just 40% said it had been positive (37% negative). In the same period, preferences for a unique central government without ACs raised from 9% (2005) to 25% (2012).

As we will see in this paper, it is true that some regional cabinets created new ministries during the decentralization process. If we look the cabinets that came out in 1983, we can see that Comunitat Valenciana and Aragón had a similar number of regional ministerial posts, eight and seven respectively. 24 years later, after the 2007 elections, both had experienced an increase in the number of ministerial posts: in Comunitat Valenciana there were 14 ministers and 12 in Aragón. Meanwhile, in the same period, Canarias and Extremadura have had the same number of ministers (10) almost at all times, with just some minor variations. Following this data, some questions arise: why do regional cabinets change their size? Which are the main factors behind cabinet size at the regional level in Spain? Why did these ACs experience different evolutions in the size of their cabinet? In this paper we will try to answer some of these questions.

This paper argues there are some variables that can influence cabinet size; for instance: the level of decentralization —measured as self-rule—, political parties' ideology, coalition cabinets, and the economic context. The large number of regional governments in Spain, existing for more than 30 years, provides us a large sample of data with different types of cabinets while controlling for other possible influencing variables.

Our results show that both political and economic factors matter when defining which the factors that influence regional cabinet size are. Political parties seem to matter more in qualitative than in quantitative terms. On the one hand, parties' ideology is relevant as left-wing parties tend to spend more in social items and need more ministers in order to tackle this higher spending. On the other hand, the number of parties influences ACs cabinets in broad terms but do not explain differences within ACs. The role of cabinet leaders is also remarkable and our results show that PMs who have been in office for a long time appoint more ministers. Economy is a crucial factor and our findings indicate a direct relation between the variation of the GDP and cabinet size in all ACs —i.e. in bad times cabinets are smaller than in good times—, but it does not explain differences within ACs. Regarding decentralization, there is a weak link between the number of transferred competences and cabinet size, but this relation is stronger if we take into account fiscal autonomy levels. Finally, and following our multilevel hypotheses, we found that political parties' preferences over decentralization matter: the higher the regional demands, the higher the number of ministries.

This article is organized as follows. First, we introduce the concept of cabinet, which arguments have been exposed by the literature regarding cabinet size and how cabinets interact with political factors (parliaments) and economic factors (public spending). We also contex-

tualize cabinets in multi-level governments, and we summarize some of the large literature on decentralization. Second, we determine which hypotheses lead our empirical work and we expose the relation we expected to find between our IVs and our DV. Third, we present our database, variables and how we conducted our analyses. Fourth, we show our main results and which hypotheses have been verified or refused. Finally, we conclude with a brief summary and some ideas for further research in this field.

CABINET SIZE

It is important to distinguish between government and cabinet because these concepts have not the same meaning all over the world. On the one hand, the Anglo-Saxon tradition uses the concept of government when referring to the whole set of public powers, therefore, it is clearly distinguished from the notion of cabinet —i.e. the prime minister and the ministers he/she appoints. On the other hand, in the civil-law tradition government is specifically understood as the group of people in charge of executive powers —i.e. president, vice-president(s) and ministers—; in this tradition, governments and cabinets are interchangeable concepts (Laver & Shepsle 1996; Lleixà 2006). In this work, we will adopt the first meaning as we consider it to be clearer and we will use the word cabinet when referring to the group of people ruling any government.

Although Aristotle highlighted the relevance of the number of people in charge of government (monarchy–aristocracy–democracy), few efforts have been devoted to cabinet size in political science studies. Research conducted in this field throughout the latest decades has focused mainly on the economic consequences of large cabinets[3]. However, we can find some discussions on the relation between coalition cabinets and their size; also, some descriptive works on cabinet size have been published recently.

One of the first explanations on the size of cabinets can be found in *Parkinson's Law, and Other Studies in Administration* by C.N. Parkinson (1957). This author presented cabinets as organic elements, not just structures, and he stated that their evolution is based on a four steps process. First, the size is optimal and cabinets have five members. Then, it grows up to nine members because of the need to achieve higher levels of information. Third, cabinet is enlarged in order to avoid the inconvenience of having some people out of cabinet —i.e. to maintain internal discipline of the party or parties—, so cabinet reaches from ten to twenty

[3] Further discussed in section 2.2

members. The fourth phase implies that cabinet changes its nature: the number of members is so high that new parallel institutions are created —whose purpose is to rule the government effectively. Hence, in this final step, new cabinet enlargements do not affect governance because the cabinet is not the ruling institution any more. (Parkinson 1957, chap.4)

Accordingly, Parkinson formulated an inefficiency coefficient and stated that any cabinet loses political grip when it exceeds 20 people. Based on Parkinson's ideas, Hanel, Klimek and Thurner (2009) used cross-national data from 197 worldwide cabinets, showing that cabinet sizes ranged from 5 (Liechtenstein and Monaco) to 54 (Sri Lanka). Then, they compared cabinet size with indicators regarding political or economic performance —e.g. Human Development Index (HDI). Their results supported Parkinson's contribution since all the countries above 20 cabinet members scored below the global average of HDI and other indicators regarding political stability or effectiveness.

Despite their interesting findings, our intention in this work goes beyond just descriptive inferences on cabinets' size. In this sense, we believe it is important to understand the consequences of having bigger or smaller cabinets but, most of all, which elements can explain their size. While consequences of cabinet size have been studied —mostly from an economic perspective—, we cannot say the same about their causes. The seminal work of Bowler and Indriðason (2014) has recently opened the path for understanding the determinants of cabinet size.

Cabinets in their Political Context

Since the publication of *Making and Breaking Governments* by Michael Laver and Kenneth Shepsle (1996), government formation has increasingly been in the spotlight of political science studies. Particularly in parliamentary democracies, interactions between cabinet and legislature shape the outcomes of both the executive and legislative powers. Laver and Shepsle stated that this can be clearly seen when none of the parties win a majority of the seats, because then

> legislative politics is much more about building and maintaining a government than it is about legislating. Even when legislation is important, the legislative agenda in most parliamentary democracies is very much in the hands of the government. (1996, p.4)

In other words, when studying cabinets in parliamentary democracies we must be aware that their power is strongly linked to their parliamentary support. As these authors assert, "changes in the cabinet [are] generated by changes in the balance of forces in the legislature" (Laver & Shepsle 1996, p.29). Despite cabinet formation remains formally on hands of the

elected prime minister, who usually has complete discretional power to elect anyone for a ministerial post, the need of parliamentary support has strong influence on the composition of cabinets.

This is clearly seen in coalition cabinets, and has been extensively studied under the concept of Gamson's law (Gamson 1961; Bäck et al. 2011; Falcó-Gimeno & Indriðason 2013): political parties are allocated portfolios according to their contribution to the legislative support. This means that inter-party relations in parliaments clearly shape the structure of the correspondent cabinet. For instance, imagine a parliament with 135 seats where party A has 42 seats, party B has 23 seats and party C has just 9 seats; together they retain 74 seats, which represents almost 55% of the seats and an absolute majority of the chamber. Taking into account all their MPs, party A holds 57% of the seats, party B 31% and party C 12%. When they agree to form a coalition, their decision is that the cabinet will be made up of 17 members: 9 from party A (53%), 6 from party B (35%) and 2 from party C (12%), which almost fits perfectly the parliamentary distribution of seats. In fact, this cabinet existed: it was the first Catalan coalition government (Maragall I) and clearly represents how Gamson's law works.

To date, most studies regarding cabinets have focused on inter-party relations and on how portfolios are allocated to each party. However, Bowler and Indriðason introduce the idea that "much of the literature on coalition formation assumes that the size of the cabinet is fixed but…cabinets do change in size" (2014, p.381). In this direction, it is important to highlight that not only coalition cabinets change their size. Also single-party cabinets can alter the composition of their cabinets, because "[a]ltering the size of the cabinet may help bring otherwise dissatisfied party members and/or party factions on board. Cabinet posts are…the big prizes in politics among politicians" (Bowler & Indriðason 2014, p.382). [4] Accordingly, cabinet posts are one of the tools used to maintain discipline of members or/and factions of the ruling party: "the MPs advancement [i.e. becoming ministers] depends, therefore, on maintaining good relations with party leaders" (Kam 2009, p.29). This explanation shows that cabinet size and allocation of portfolios are also relevant in single-party cabinets. Thereby, cabinet composition depends both on inter-party bargaining and intra-party bargaining.

[4] Cabinet posts are just one tool, probably the most "glamorous", but there are others such as Junior Ministers or even local administration posts to reward party members. Although PMs can punish or reward the members of their party using these tools we consider that ministerial posts are the most effective and mediatic way to do it.

It is important to emphasize that cabinet changes do not only occur from one legislature to another, but also within legislatures. Even though the prime minister retains the confidence of the parliament, he or she can decide to reshuffle[5] the cabinet. Kam and Indriđason (2005) show that mid-term reshuffles in cabinets are usual in parliamentary democracies and reshuffles can be a source of change in the size of cabinets. As we will discuss later, this can also be related with inter and intra-party bargaining.

Why Do Cabinets Matter?

Cabinets matter because they represent the executive power. Although we have shown how parliaments can influence on cabinet formation, parliaments can only decide the broad courses of action of the executive while the policy-making process remains in hands of the cabinet. The executive has to choose among a restricted set of policies to implement. In fact, however, it is not the executive who has this information but specific units of the cabinet.

> [O]nly the government department with jurisdiction over a particular policy area is effectively equipped to develop feasible and implementable policy proposals in that area and present these to the cabinet for decision. And this in turn means that the entire process of policy formation on any given issue is heavily influenced by whoever has the political control over the relevant government department… (Laver & Shepsle 1996, p.13)

This means that cabinets may not follow a unitary path, different ministers have their own interests and if we could have two persons occupying the same post at the same time we would see different decisions being taken. Additionally, differences might not only appear between ministers of different parties but also between ministers of the same political party (but maybe in different factions of that party). Cabinets most important role is their agenda power (Burch 1993) since they are capable to influence parliaments giving priority to certain policies rather than others. In short, cabinets depend on individualities, but the number of individualities might be reduced or enlarged, addressing or exacerbating the problems associated with different agenda powers.

As any democratic political institution, cabinets also suffer from a principal-agent problem. A clear example can be seen when the parliament elects a new prime minister, as he/she can take decisions against the will of the majority of the parliament. Nevertheless, the principal (the parliament) can regain its power through a motion of no confidence. In any cabinet the logic is similar. When appointing ministers, the prime minister cannot avoid the possibilities

[5] Following Kam and Indriđason's (2005) definition, a reshuffle is "the promotion (or demotion) of ministers or a reallocation of portfolios by the prime minister during the parliamentary term".

that ministers foster policies which do not fit the common accorded program. But the principal-agent dilemma in the cabinets has specific features in the policy-making process as the ministers are both the principal/agenda-setters (in the council of ministers, jointly with the rest of ministers) and the agent as the policy executers (Andeweg 2000). This, altogether with the usual scarcity of ministerial staff and the expectation of anticipated reciprocity, lead individual ministers in the cabinets not to veto other ministers policy proposals —i.e. the principal gives up its restrictor functions. However, still exists a mechanism that avoids policy-drift of individual ministers: reshuffles. As we introduced before, the possibility of changes in the cabinet depends only on the prime minister, and it is the way to maintain discipline and to prevent policy drift from his/her ministers.

> PMs can use reshuffles to limit the agency loss generated by self-interested cabinet ministers and opportunistic civil servants. These results do not hinge on the PM's power to hire and fire ministers; they obtain even when reshuffles are restricted to rotating ministers among portfolios, and even when doing so is costly to the PM. (Indriðason & Kam 2008, p.622)

Nevertheless, reshuffles are limited because each reshuffle implies costs and it is seen as a signal of instability. Having the same person in the same ministerial post for continued periods of time also has positive effects, such as the expertise linked with the in-depth knowledge of the department. This is why, as non-confidence votes in parliaments, reshuffles are not used indiscriminately, but remain a real menace for ministers willing to deviate from the common goals. Policy coordination is, thus, a central feature in any cabinet and the need for policy coordination suggests that cabinet size has an upper limit if it is supposed to work efficiently, which is consistent with Parkinson's coefficient. Hence, we should expect cabinets to vary in size but these variations should be limited.

Consequences of Cabinet Size

As we have already mentioned, cabinet's size relevance goes hand in hand with its political and economic consequences. But this variable is not only important in the framework of advanced democracies, it has been found to be a significant element when considering patronage-based rule in some African countries (Arriola 2009) and also when considering assassinations of politicians: larger cabinets disincentive political attacks (Frey & Torgler 2012). Beyond these anecdotic studies, in this epigraph we will mainly focus on political and economic consequences of cabinet size.

The most relevant political consequence has been pointed out in the previous section: as the number of ministers expands, possibilities of policy-drift increase, thus, it hinders cabinet

coordination in order to achieve shared goals. Furthermore, if cabinet's composition is above 20 members, according to Parkinson's Law, the cabinet loses the effective executive power.

Nevertheless, most of the academic literature and the scholars who have showed an interest on cabinet size have primarily focused on how this factor influences the economic performance of governments. Most of the political economy literature has used cabinet size as an independent variable in order to explain different political and economic outcomes. Specifically, scholars have highlighted the effect of cabinet size on government budgets, and it has been demonstrated that cabinet size is a predictor of governments' budget variation.

The seminal contribution by Weingast, Shepsle and Johnsen (1981) introduced the idea of common pool problems in policy making. Their theory suggested that political fragmentation is a key variable which needs to be taken into account when studying fiscal policy decisions. These authors were not thinking in terms of cabinet fragmentation, but in terms of electoral districts,

> [e]ach district, through its representative, is presumed to maximize its net (private) benefits without regard to the costs imposed on other districts. Publicly supported projects are funded through taxes which fall primarily on other districts. Hence, the benefits are concentrated while the costs are diffused. (Weingast et al. 1981, p.650)

However, the logic beyond their contribution —i.e. political fragmentation leads to higher expenditures and debts— remains valid and has inspired many other scholars.

In fact, what this authors were pinpointing was a reformulation of the *Tragedy of the commons* exposed by Hardin (1968). Government's budget can be thought as a public good whose use has no costs (or very small ones) and its potential individual benefits are high. However, as the name suggests, this leads to a tragic ending: inefficiency in government's spending.

Some of the first works understood government fragmentation as the presence or absence of coalition governments in cabinets. Some scholars found that "budget deficits in the industrial countries in the past decade [1975-85] is greatest where there have been divided governments" (Roubini & Sachs 1989, p.908). The logic behind this assertion is that each party represents a different interest group, that contributes to higher pressure over the public budget and it reduces the ability of governments to balance their budgets.

Since Roubini and Sachs work, there have been some other contributions following their idea that internal political fragmentation in the executive power can result in inefficient and

excessive spending or in deficits. However, new fragmentation variables were introduced, such as the cabinet size and/or the number of spending ministers[6] (de Haan & Volkerink 2001; Kontopoulos & Perotti 2002; Woo 2003; Wehner 2010). Recent contributions also highlight that previous literature did not consider the possible interaction between parties' fragmentation (coalition cabinets) and personal fragmentation (number of ministers). In fact, Wehner shows that "the effect of spending ministers on expenditures…is increasing in partisan fragmentation" (2010, p.647). In turn, single party cabinets have lower levels of budgetary drift although the number of spending ministers still matters, hence, party fragmentation does not explain the whole budgetary drift.

Continuing with this approach, some articles also have tried to demonstrate whether left-wing parties create bigger governments' ―in terms of spending― or not. This assumption derives from the fact that left and right-wing parties differ, in broad terms, in which should be the role of the State in the economy. While left-wing parties defend government intervention to prevent market failures, right-wing parties prefer to rely on the market in order to prevent government failures. On this basis, Blais, Blake and Dion (1993) found out that parties only make a difference in government spending when taking into consideration other variables such as majority of the parliament or time in cabinet: "parties matter only for unchanging (majority) governments" (Blais et al. 1993, p.56). This means that time is the most powerful predictor of increases in government spending between different types of parties. According to their findings, a leftist government in its second term can be expected to spend up to 4% more than a rightist one.

Most scholars cited until now have focused their studies on cross-national analysis but in early years some papers have applied this theories at the sub-national level. For instance, Feld and Schaltegger (2009) studied whether the fiscal commons problem is present in the Swiss cantons. Their findings reveal that cabinet size is a significant variable in order to explain public expenditure at the sub-national level, even though they find the same result when the dependent variables is public revenue (probably a sign of endogeneity). Another example is to be found in Baskaran (2013), where cabinet size is a significant variable for German länder

[6] "[T]he total number of ministers in government…minus the ministers of finance and/or the budget and the prime minister." (de Haan & Volkerink 2001, p.225) Wehner (2010) defines them as the ministers without "incentives to internalize the full cost of their actions", while "the prime minister and the finance minister…are not bound by the particular interests of a spending department and can be assumed to give more weight to the collective interest of the government" (von Hagen & Harden 1995, p.774).

expenditures, even though an "increase of the cabinet size by one member increases expenditures by less than 1% of average expenditures per capita" (p.365).

Why Do We Choose the Regional Level?

The interest in what causes cabinet size to differ has just emerged in the political science literature and this issue has been covered in a cross-national work by Bowler and Indriðason (2014). Nonetheless, cross-national studies cope with high degrees of heterogeneity as different countries may have different traditions in forming cabinets and it is difficult to control for enough variables to overcome this heterogeneity. When studying different governments of the same country at the sub-national level we can achieve higher grades of homogeneity in many variables; as Freitag, Schniewind and Vatter defend, "[w]hile they [regions] do share a general structural framework, they are nevertheless idiosyncratic enough not to be seen as a single, homogenous entity" (2009, p.329).

Furthermore, working at the regional level allows us to introduce a new variable: regional power's variability. Power of regional entities, widely known as self-rule, was defined by Daniel Elazar (1991) through three different elements: representation —i.e. the extent of representative institutions in the region—, policy scope —i.e. how many policies are directly dependent of the regional government— and tax authority —i.e. the revenues in the budget coming directly from regional decisions. During more than 30 years, the Spanish regional self-rule has evolved gradually (See Figure 3 in Amat & Falcó-Gimeno 2013) and differently through the different ACs[7]. This feature makes Spain an interesting case of study, because differences among ACs cabinets' can be analyzed both from cross-regional and longitudinal points of view.

Our focus in the Spanish sub-national level also tries to shed some light on a relevant issue in the political and mediatic life in Spain as it is commonly discussed whether autonomic governments are oversized or not. Without addressing this discussion, our work will try to explain which are the main factors (if any) that might explain cabinet size and its subsequent increases in government expenditure, which has been demonstrated to be related with cabinet size.

[7] The Spanish Constitution established two different paths for acceding to autonomy. Article 151.1 established tougher standards for the provinces whose will was to become an AC and, in exchange, the initial powers of these ACs were supposed to be higher than those for the provinces following the standard path.

HYPOTHESES

As we mentioned, cabinet size has received little attention in the study of government formation. Cabinets in Spanish ACs rely on the legislative support of a single parliamentary chamber, which means that inter-party bargaining will be important when none of the parties gets more than 50% of the seats. When a coalition government is formed, inter-party bargaining is completely necessary to understand how portfolios are allocated (Bäck et al. 2011; Falcó-Gimeno 2014). Parties do not just bargain about policies but also about cabinet posts, which ―according to Gamson's Law― should be allocated proportionally to the contribution of each party. As the number of required parties to achieve a majority increases, the agreement and the distribution of posts will be more difficult. The easiest way to distribute power among the different parties is by splitting existing portfolios, which also (theoretically) increases the supervision on the ministers and prevents policy-drift.

H1: The larger the number of parties in a cabinet, the bigger the cabinet size

Not only the number of parties' matters, but also their ideology. We showed that most studies have used cabinet size as IV and it was positively related with government's spending levels: the higher the number of portfolios, the higher the public spending. Knowing that, left and right-wing parties should face cabinet formation in different ways. Left-wing parties are in favor of a higher public interventionism in the economy and, in order to achieve it properly, left-wing parties are expected to support the division of existing portfolios. By doing this, they can ensure they intervene better in more economic sectors and, thus, they spend more public resources ―obviously, focusing on social budget items. On the other hand, right-wing parties support a lower interventionism because they consider that markets work better with small governments. Right-wing parties need less people to take charge of public intervention and prioritize balanced budgets over social attention; therefore, right-wing parties will prevent an excessive public spending by merging some portfolios. (Blais et al. 1993)

H2: Left-wing cabinets will be bigger than right-wing cabinets

The previous hypotheses were already set by Bowler and Indriðason (2014) and our goal is to replicate their work using a different dataset in order to confirm or hesitate about the validity of their results. However, some new questions have emerged after reading their work.

We started this paper talking about the influence economy has exerted over cabinet formation since 2008 ―i.e. since the beginning of the Great Recession. Then, if the economic

context influences cabinet size, we should expect that in low economic growth (or even negative) periods, cabinets should cut the number of ministers in order to save public resources. This, again, according to the findings that link the number of portfolios and the levels of public spending.

H3: Smaller (bigger) cabinets are expected when yearly GDP variation is lower —even negative— (higher).

Another question is about the prime minister's personal influence. As we know, cabinet formation decisions are formally in prime minister's hands, which means that his/her decisions are highly relevant if we want to understand what affects cabinet size. Any prime minister chooses as a minister either trustworthy people or leaders of internal party factions —in order to maintain party discipline (Kam 2009). As the time goes by, we can assume that all prime ministers either have to face an increasing number of internal factions or/and can easily rely on more people of his/her party. The first idea is linked to the fact that there is an internal opposition of people who want to get prime minister's office. In the second scenario there is a an internal stability in the party, and the senior prime minister may want to hire new ministers but does not want to fire his old faithful ministers. He/She can easily find a solution: enlarging the cabinet. There is a second argument supporting this hypothesis, although it has nothing to do with ministers but with ministries: it might be argued that some interest groups may pressure the prime minister against the unification of ministries that used to be separated or in favor of splitting certain ministry. Our idea is mainly that we should find a path dependence in cabinet size either due to intraparty politics or due to external factors.

H4: The longer the time prime minister has been in office, the larger the cabinet

Finally, the main difference between our study and the one by Bowler and Indriðason is our territorial scope: our units of analysis are subnational cabinets in a decentralized country. This is a clearly distinctive trait, as the level of decentralization also defines which are the powers of the analyzed cabinets. Beyond the interparty and intraparty bargaining when forming a cabinet, we should expect that political power itself also exerts an influence over the cabinet size. Hence, the higher the self-rule of an AC, we should expect more ministers to deal with the higher amount of power the autonomic level is responsible of.

Nonetheless, the subnational level in Spain is also important as there are important differences among these ACs. The Constitution itself distinguished between two paths to become an AC, and also we cand find differences among the electoral arenas. For example, in

Catalunya or Euskadi there are clearly differentiated party systems, which include a higher number of political parties ―some of them are regional parties, whose main goal is to win autonomic elections. We can hypothesize that parties with higher decentralization preferences in any autonomic cabinet can push for an increase in cabinet size. These (regional) parties may want to show to their citizenship that their regional government is more important than the central government by creating new and specific ministries ―even though the competences of the AC are limited on that field. For instance, the first elected prime minister of the Catalan government after the francoism, Jordi Pujol, says in his memoirs: "*A l'inici, em resistia a crear un Departament de Justícia. Creia que en aquest camp tindríem unes competències reduïdes que podrien ser ateses amb una direcció general. […]. Hauria estat una equivocació no donar importància al dret, i ho hauria estat especialment en un catalanista com jo*."[8] (Pujol 2011, p.279) Hence, we can hypothesize that the power of regional demands over the cabinet formation should push on a higher number of ministries.

> *H5a: We expect bigger cabinets when the decentralization is higher*
> *H5b: The higher the decentralization preferences of parties in regional cabinets, the bigger the cabinet*

In sum, in this article we argue that, besides inter and intraparty influences, there are some external features to be taken into account when considering cabinet formation. On the one hand, we expect the state of the economy to condition the size of cabinets, specifically in crisis periods we should see a reduction in the number of ministries. On the other hand, we expect decentralization ―either the current situation or future preferences of decentralization― to influence on the cabinet size.

DATA, VARIABLES AND METHODOLOGY

For the empirical analyses we focus on the 17 Spanish Autonomous Communities[9] over the period 1979 to 2013. It is important to highlight that we have data for all the 17 ACs only from 1983-2013, before 1983 only Navarra (1979), Euskadi and Catalunya (1980), Galicia (1981) and Andalucía (1982) had held elections.

[8] Translation [own]: At the beginning, I refused to create a Ministry of Justice. I believed that in this field we would have limited powers which could be addressed by a Directorate General...It would have been a mistake not to give importance to the law, and it would have been a serious error especially in a Catalan nationalist as myself.

[9] We have excluded of our dataset the two Autonomous Cities of Ceuta and Melilla because of their particular status, since their government is closer to a City Council than to a regional government.

We gathered our data from the annals of the newspaper *El País* (1982-2011) —the most important newspaper in Spain—, which annually collects the composition of each autonomic cabinet on January 1. Also, to the extent possible, we have tried to verify this information through official data in the Regional Gazettes or/and in each autonomic government webpages (especially for the most old and most recent cabinets, for which we had no data in the *Anuarios de El País*). We have used the same source as Falcó-Gimeno (2014), and we also had the same problems of missing data for the partisan composition of each cabinet. The dataset has been completed through the data available at the website of the 'Observatorio de Gobiernos de Coalición' (Reniu 2013) and, in some cases, using the archives of *El País*. The sources for some of the IVs and control variables will be specified in following sections.

Dependent Variable: Cabinet Size

Our dependent variable is cabinet size, which is defined as the number of people in a cabinet: the prime minister plus the ministers' —with or without portfolio— and the spokesperson —when it has the range of minister, which it is not always the case.[10] We have considered all regional cabinets since their first democratic election[11] and we have counted the number of ministers appointed by the elected prime minister. Our dataset includes two types of cabinets. On one hand, those cabinets formed after every elections, despite their partisan or/and personal composition did not change compared to the previous year cabinet. On the other hand, we include any reshuffle made during the legislative term, as these reshuffles sometimes imply changes in the partisan composition of the cabinet or/and changes in cabinet's size. It was important to enlarge our dataset with this second type of cabinets, as cabinet size may vary during the legislative term. However, we could not just select those cabinets that increased or decreased their size as it would had been a selection based on the DV. Hence, we included all reshuffles which, following the definition by Indriðason and Kam (2005, p.329), we consider to be "any change in ministerial personnel or responsibilities that affects more than two officeholders and at least two portfolios". Nonetheless, we cannot take into account those cabinet changes which lasted less than one year and, therefore, were not reflected in the annals of *El País* —these type of reshuffles, however, are not common.

[10] Although the ministers at the autonomic level are named as *consejeros* (counselors), we have preferred to maintain the traditional and most common naming. The same happens with the prime ministers, who usually are known as presidents of their AC.

[11] For instance, we exclude the cabinet formed by Josep Tarradellas, as he represented the exiled Catalan government, but he had not been elected in democratic elections.

	N	Mean	Median	s.d.	Min.	Max.	Diff.
POST-ELECTORAL	145	10.96	11	2.20	6	17	11
RESHUFFLES	117	10.92	11	1.97	6	16	10
BY ACS							
Andalucía	16	12.83	12	1.91	10	16	6
Aragón	18	10.17	10	1.65	7	13	6
Asturias	14	10.36	11	1.39	7	12	5
Illes Balears	16	12.44	13	1.79	8	15	7
Canarias	19	10.84	11	0.76	9	12	3
Cantabria	14	8.71	9	1.68	6	11	5
Castilla-La Mancha	20	11.00	10	2.27	8	15	7
Castilla-León	12	9.17	9	1.85	6	13	7
Catalunya	15	14.07	14	1.39	12	17	5
Comunitat Valenciana	15	10.80	10	1.74	9	14	5
Extremadura	12	10.33	10	1.15	8	12	4
Galicia	15	11.93	12	1.75	9	15	6
La Rioja	9	9.11	9	1.27	7	11	4
Madrid	17	11.12	11	2.03	8	16	8
Murcia	20	9.70	9.50	1.42	7	13	6
Navarra	14	10.14	10	1.41	8	13	5
Euskadi	16	12.13	11.50	1.75	9	15	6
TOTAL	**262**	**10.94**	**11**	**2.10**	**6**	**17**	**11**

Table 1: Cabinet size descriptive statistics

The descriptive statistics in Table 1 reflect an important variation of cabinet size, not only among the different ACs (11 ministers separate the smallest and the biggest regional cabinets in Spain in the period), but also within most ACs (the maximum cabinet size doubles the minimum size in some cases). Dependent variable's variation is key because without variation our analysis would lack of sense.

Independent Variables

Coalition Cabinets

Our first hypothesis states that increasing the number of parties in a cabinet tends to inflate cabinets size to adjust to the Gamson's law. We will use the number of parties in each cabinet as an IV to verify whether our hypothesis is correct or not. We consider as a single party those pre-election coalitions' of parties —e.g. Convergència i Unió (CiU) or Coalición Canaria (CC)— because the logic of their "coalition cabinet" precedes the electoral results, being the same logic behind the distribution of party members on the electoral ballot.

Partisan Ideology

It has been not possible to capture the ideology for each party by a variable, for instance, in a Likert scale from 0-10, being 0 extreme left to 10 extreme right. Post-electoral autonomic surveys of the Centro de Investigaciones Sociológicas (CIS), do not allow us to clearly position each party in the left-right scale as the data of first elections' is not available. Also, the presence of regional parties makes it more difficult to define their ideology. Finally, we have created a dummy variable for left cabinets: those cabinets whose main party is the Socialist Party —including all their autonomic branches and PSC— and PRC[12] are coded as 1 and the cabinets whose main party is AP/PP, UCD/CDS, CiU, PNV, UPN, PAR and FAC are coded as 0. In those cases where ideology was not clear we have assigned ideology according to the last post-electoral survey of the CIS. When the mean was below 5 points the party was coded 1 (left-wing) and if it was above 5 it was coded 0 (right-wing). In coalition cabinets we just considered major political party's ideology.

Economic Context

As economic context is considered a variable that can explain decreases of cabinet size, especially in crisis periods, we will use the regional variation of the GDP as an IV. This data was collected from the INE. In fact, we consider that what affects changes in cabinet size is the variation on the GDP of the previous year —i.e. we will use GDP variation in 2011 over 2010 in order to understand variations of cabinet size in 2012. This is because current economic situation is always uncertain and most politicians take their decisions according to previous, certain and stable data. Moreover, if we used the GDP variation of 2012 over 2011 when analyzing a reshuffle in early 2012 we would be considering the effect before the cause.

Prime Minister Years in Office

The fourth hypothesis states that there should be some kind of path dependence in the cabinet formation when the same prime minister stays in office for a long period. In order to contrast the hypothesis we have simply computed the number of uninterrupted years since the prime minister took office for the first time.

$$\text{PM years in office} = PM_{j_t} - PM_{j_{t=0}}$$

Thus, if the *n* cabinet of the same prime minister is not immediately after his *n-1* cabinet, the timer is zeroed. For instance, when Jaume Matas was elected prime minister of Illes Bale-

[12] IU has not been included as it has never been the main party in any AC cabinet. In p. 44 there is a list with parties' acronyms.

ars AC in 2003, despite he had been prime minister from 1997 to 2000, we consider the number of years in office to start again, as the period out of office was an interruption of the possible path dependence trend.[13]

Decentralization

When we talk about decentralization effects we refer to two different ideas: real decentralization levels and preferences for further decentralization. First, decentralization level means how much power is in hands of the regional political unit. Following the classical distinction made by Elazar (1991) there is a difference between self-rule —i.e. to what extent these regional units can take decisions autonomously— and shared-rule —i.e. to what extent regional authorities are important actors in central government decisions. All ACs are completely autonomous from the central government, but there are variations in their autonomy in policy and financial powers. Marks, Hooghe and Schakel (2008) measurement on ACs policy scope is too vague and does not capture the transfer of competences to the ACs, but their measurement of fiscal autonomy is the best indicator we can get and it is operationalized in a scale from 0-4[14]. In order to assess the effect of decentralization on cabinet size we will combine data on the competences already transferred to the ACs and the level of fiscal autonomy by Marks, Hooghe and Schaekel. As the first factor of self-rule (institutional autonomy) is equal in all ACs, these two indicators will reflect the variation in self-rule levels.

Second, we can think on decentralization as a goal for some of the parties competing on the regional ground. The lack of a Regional Manifesto Project (RMP) for the whole period prevents us from analyzing decentralization preferences of ruling parties and including them in our complete dataset. Our supposition that higher regional demands lead to larger cabinets cannot be fully tested. However, we will use the available data and partially analyze our dataset in order to test our hypothesis *H5b*.

Control Variables

Some other IVs will be included in our analysis. First, whether the cabinet is a reshuffle or not, as normally reshuffles just have a minimal effect on cabinet size; this variable will be operationalized as a dummy in which reshuffles will be coded 1 and post-electoral cabinets

[13] However, outgoing PMs rarely stand for subsequent elections.

[14] Description in the Regional Authority Index codebook. ***0:*** the central government sets base and rate of all regional taxes; ***1:*** the regional government sets the rate of minor taxes; ***2:*** the regional government sets base and rate of minor taxes; ***3:*** the regional government sets the rate of at least one major tax: personal income, corporate, value added or sales tax; ***4:*** the regional government sets base and rate of at least one major tax: personal income, corporate, value added or sales tax.

will be coded 0. A second control variable is the support the cabinet has from the parliament and we will use a dummy variable for minority cabinets, to compare minority versus majority cabinets —there have been few and exceptional cases of surplus coalition, which makes unnecessary to create an specific dummy for these cases. We also control by (log of) population, since "[h]ow populous a country is may affect the number of issue areas that are considered sufficiently important to warrant appointing a minister" (Bowler & Indriðason 2014, p.389).[15] In Table 2 we see some descriptive statistics of all independent and control variables we will include in our statistical analyses, and in Table A3 there are segmented by ACs.

	N	**Min.**	**Max.**	**Mean**	**s.d.**
Number of parties	262	1	4	1.37	0.670
Left cabinet	262	0	1	0.43	0.496
GDP Variation	262	-5.65	17.54	3.72	3.77
Years same PM	262	0	22	4.26	5.19
Competences	262	0	189	78.78	35.99
RMP Position[16]	33	-2.19	19.78	2.78	3.99
Fiscal Autonomy	262	2	4	2.67	0.67
Mid-term cabinet	262	0	1	0.45	0.49
Majority	262	0	1	0.68	0.46
LOG Population	262	5.40	6.90	6.24	0.37

Table 2: IVs summary statistics

Model

Our dependent variable is a numeric continuous variable which leads us to analyze our hypotheses through an OLS regression. In order to address the problems of endogeneity among our IVs, the omitted variables and values of the DV being a function of previous values, we will analyze our data using different models of OLS regressions, some including a lagged DV. We will also run OLS regressions with fixed effects in order to control for the changes over time —as we have longitudinal data—, and differences among ACs.

[15] Although these authors also use the size of the legislature as a control variable, the classic literature initiated by Taagepera (1972) states that lower chambers size is equal to the cubic root of the population it represents; hence, we should expect a high level of multicollinearity between these variables.

[16] This variable displays the decentralization preferences of the political party in cabinet (we just took the main party in coalition cabinets). Navarra was excluded because we did not have data for UPN. In Castilla-La Mancha we used a general indicator for the PP because the regional manifesto for this AC has not been included in the RMP dataset.

As Wilkins states, "LDVs [Lagged DVs] are frequently used as a robust strategy to eliminate autocorrelation in the residuals and to model dynamic data generating processes" (2013, p.1) Hence, OLS with lagged DV can avoid the influence of previous cabinets on cabinet size. We will also lag some continuous variables, whose values are not independent from values of previous years, for instance, GDP variation.

OLS with fixed effects tries to address omitted values that can affect both the DV and IVs and the effect of previous values on the value of the DV. By doing these different kinds of regressions we will be able to conclude certainly whether the IVs have any statistically significant effect on the cabinet size variation.

EMPIRICAL ANALYSES

In our work we are interested in cabinet size variation both among and within ACs. Although we have already presented some summary statistics on the dependent and independent variables now we present some figures that will show better the variation and the relation between dependent and independent variables.[17]

In Figure 1 we can see how the most essential condition is met, as our DV varies both within and among the seventeen Spanish ACs. Also it is curious to observe some similar trends in some of the ACs with an increase in cabinet size since 1990s and a recent (and sharp) fall concurring with the burst of the real estate bubble and the economic crisis.

But also our DV is related with our independent variables. As we can see in the four scatter plots in Figure 2, there is a direct relation between cabinet size and some of our independent variables: (log of) population, number of parties, GDP variation and the years the prime minister has been in office. Also in the Annex, Table A2 gathers correlation coefficients between all variables included in our analyses.

[17] Figure A1 displays histograms of all the variables we will use.

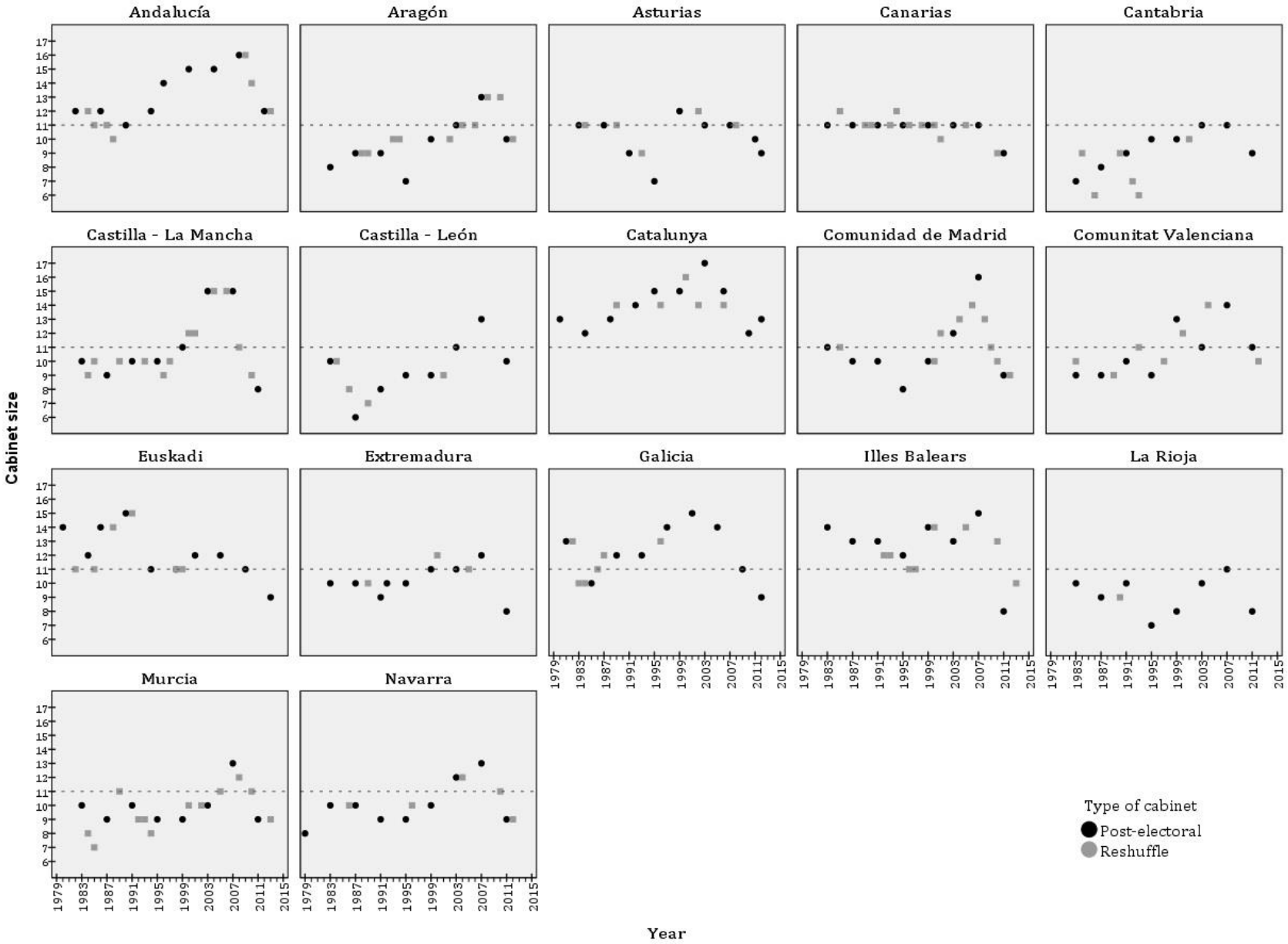

Figure 1: Plot cabinet size and year.
Dotted line represents mean cabinet size for all ACs.

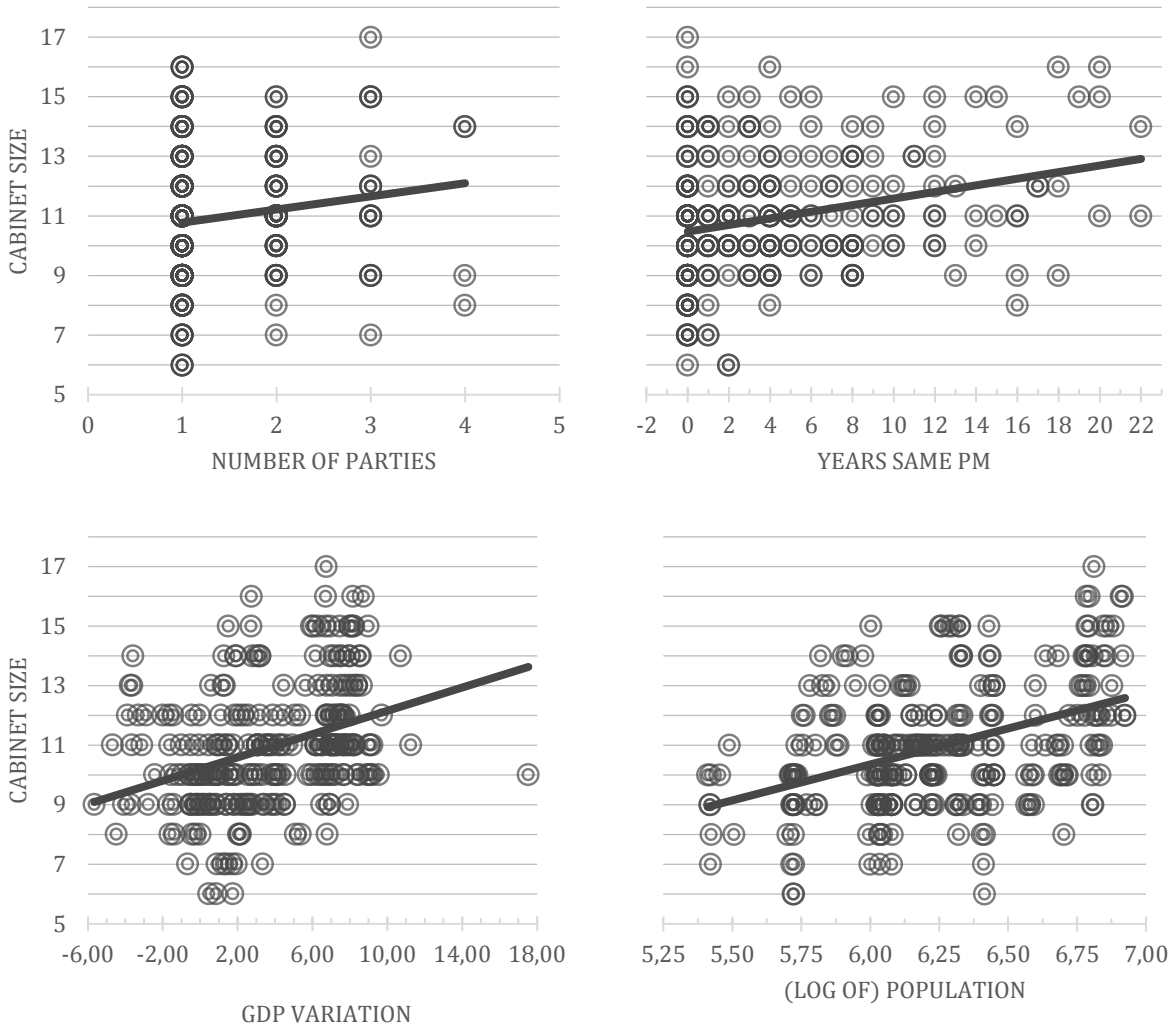

Figure 2: Scatter plots of cabinet size versus (some) IVs

In order to check our set of hypotheses we have run regressions using different models, each one including different sets of variables. As our hypotheses *H5b* just covered a reduced sample, we detach a partial regression analysis in Table 4.

First, it is important to highlight that introducing lagged variables of both cabinet size and GDP variation increases in 0.25 the value of the adjusted R^2. The lagged value of cabinet size is statistically significant and explains the permanence of about half the ministerial posts in the previous cabinet according to standardized betas —i.e. when the previous cabinet had 12 posts, the following will (at least) retain about 6 posts and the remaining posts will depend on other factors. In turn, the lagged value of GDP variation is not statistically significant, which means that this variable just affects cabinet size in the short term.

	(1)		(2)		(3)		(4)		(5)		(6)	
	B	sd	B	sd	B	sd	B	sd	B	sd	B	Sd
(Constante)	-6.436***	2.024	-6.118***	1.919	-3.842**	1.651	-2.756*	1.636	-29.192*	15.333	-43.102***	15.857
Lagged Cabinet Size			.224***	.041	.589***	.050	.570***	.048	.425***	.058	.411***	.057
Number of parties	.566***	.165	.434***	.159	.324**	.130	.304**	.128	.160	.153	.207	.148
Left cabinet	.523**	.209	.552***	.198	.333**	.164	.275*	.160	.551**	.216	.446**	.210
GDP variation	.132***	.028	.130***	.027	.140***	.023	.052*	.031	.142***	.024	.044	.032
Lagged GDP var.					-.005	.024	-.019	.026	.030	.025	.002	.026
Years same PM	.078***	.021	.055***	.020	.044***	.016	.045***	.016	.044***	.017	.042**	.017
Competences t-1	.007*	.004	-.003	.004	.001	.003	.011***	.004	-.012*	.006	-.001	.008
Fiscal Autonomy	.509***	.172	.393**	.165	.189	.139	.422***	.152	.691**	.338	.886***	.341
Majority	-.414*	.226	-.240	.216	-.210	.177	-.035	.177	.068	.206	.109	.199
Mid-term cabinet	-.083	.199	-.330*	.194	-.099	.158	-.095	.154	-.143	.159	-.136	.155
LOG Population	2.234***	.317	2.028***	.302	1.051***	.277	.754***	.282	4.917**	2.315	6.939***	2.358
Time dummies	✗		✗		✗		✓		✗		✓	
ACs dummies	✗		✗		✗		✗		✓		✓	
N	258		258		241		241		241		241	
ACs	17		17		17		17		17		17	
Adjusted R^2	0.422		0.481		0.676		0.702		0.699		0.723[+]	

Table 3: OLS regressions.
DV: Cabinet size. *p<0.10, **p<0.05, ***p<0.01
Notes: (1) OLS. (2) OLS with lagged DV. (3) OLS with lagged DV and IVs.
(4) OLS w/ temporal fixed effects. (5) OLS w/ ACs fixed effects.
(6) OLS w/ temporal and ACs fixed effects.

[+] Variation in Adjusted R^2 per IV (Model 6): Lagged Cabinet Size: .567 | Number of parties: .007 | Left cabinet: .004 | GDP Variation+lagged: .078 | Years same PM: .007 | Competences t-1: .006 | Fiscal Autonomy: -.001 | (log of) Population: .018 | Majority+Reshuffles: 0.000 | Time dummies: .026 | ACs dummies: .021

Our first hypothesis states that the number of parties influences cabinet size positively and the higher the number of parties in a coalition, the bigger the cabinet; all models support this positive relation. Approximately, the inclusion of a new party in any autonomic cabinet increases cabinet size in 0.3-0.5 members, which means that any tripartite agreement will result in the creation of a new ministerial post. Nevertheless, the effect of the number of parties seems not to be statistically significant when we control for the different ACs (Models 5-6), which points that changes in the number of parties in any given AC do not result in significant cabinet increases. Thus, we can say differences in cabinet size among ACs are partly due to the number of parties, but differences within ACs are not affected by the number of parties. It is important to highlight that robustness checks using coalition cabinets (1) versus single party cabinets (0) resulted in the same direction and statistically significance.

According to the results, *H2* is also verified and we can corroborate that left-wing cabinets are larger than their right-wing counterparts both within and among ACs. This results are in line with the idea that links bigger cabinets and bigger spending levels, which Blais *et al.* (1993) determined that were partially due to parties' ideology. Although some studies ―see Song (2012)― defend that right-wing cabinets are also responsible for government spending increases, our results seem to support the idea that left-wing cabinets spend more in social items and for this reason ―or precisely because of this― left-parties create new ministerial posts. *Ceteris paribus* left-wing parties will form bigger cabinets than right-wing parties in any AC. Regressions on Table 4, despite a smaller sample, also reinforce our results.

Our third hypothesis defends that not only bigger cabinets generate economic consequences but also the state of the economy influences cabinet compositions. In four out of six models GDP variation is highly statistically significant and it corroborates our hypothesis, as it points out that the bigger (lower) the GDP variation, the bigger (smaller) the cabinet size. However, when including our time dummies the statistical significance is reduced, as errors in this IV are correlated with these dummies. Model 4 shows that GDP variation has had a slight effect in the autonomic development and, for instance, ACs with higher GDP growth had bigger cabinets than the rest; however, in Model 6, we can see that GDP had no effect within ACs. Nevertheless, Table 4 reflects how in the last lustrum GDP has highly influenced cabinet size and decreases in GDP have generated cabinet reductions. In order to reinforce our results in this economic indicators, we have replicated the regressions using a dummy crisis variable ―negative values in the variation (1) and positive values (0)― and also we have used data on

public debt data for the period 2000-2013. The results obtained do not contradict the ones obtained using GDP variation.

We can also upheld our fourth hypothesis and maintain our claim that permanence of the same person as PM creates a path dependence which makes cabinets bigger over time. Despite coefficients vary in each model we can sustain that, *ceteris paribus,* after 10-20 years (depending on the model) cabinets gain one ministerial post.

Before moving to the fifth set of hypothesis, is important to comment the control variables results. Both 'Majority' and reshuffles dummy variables are not statistically significant; the first one, counterintuitively, shows that majority cabinets are smaller than minority ones ―the same happens in Bowler & Indriðason (2014)―, the second one, get a negative coefficients (reshuffles seem to be used as a [non-significant] punishment tool). The last control variable, (log of) population, is positive, statistically significant, and it is the most influencing variable ―according to standardized betas― in all models. Marginal effects on cabinet size for all IVs are shown in Figure A2.

The last set of hypotheses regards those related with the subnational level of analysis and the effect of the decentralization and future preferences of decentralization. In order to test *H5a* ―the more intense power in AC's hands (self-rule) is, the greater cabinets are―, we have used two different variables. In two out of three self-rule components there are divergences among ACs (policy scope and fiscal autonomy) and there is the same level in the third (institutional autonomy). As we mentioned, the measurement of policy scope by Marks *et al.* (2008) is not accurately enough in order to capture differences among ACs, this is why we choose as an indicator the number of competences already transferred to each AC. However, results show that only in one model the coefficient is positive and statistically significant. The second indicator for self-rule is fiscal autonomy and we have obtained statistically significant results. According to our predictions, the higher levels of fiscal autonomy the bigger the cabinet size. Again, it seems that when cabinets do have larger funds to spend, new ministries are created in order to tackle the higher amount of resources. This indicator is one of the most robust in our analysis as it maintains its statistically significance in almost all models. It is also noteworthy the high coefficient values, specifically in model 6 where the standardized beta value for Fiscal Autonomy is just behind the values of (log of) population and the lag of cabinet size.

	(1)		(2)		(3)		(4)	
	B	sd	B	sd	B	sd	B	sd
(Constante)	2.898	5.914	.686	3.832	.623	3.883	14.060	9.286
Lagged Cabinet Size			.471***	.082	.429***	.104	.190	.178
Number of parties	.367	.497	.276	.321	.318	.331	-.276	.436
Left cabinet	2.155***	.592	1.140**	.420	1.159**	.426	1.782*	.896
GDP variation	.354***	.076	.365***	.049	.352***	.054	.320***	.064
Lagged GDP var.					.027	.041	.152**	.073
Years same PM	.019	.042	.027	.027	.027	.028	-.013	.056
RMP Position	*.175***	*.074*	*.143****	*.048*	*.142****	*.049*	*.204***	*.088*
Fiscal Autonomy	-1.780	1.059	-1.117	.692	-1.244	.727	-3.493*	1.633
Majority	-.065	.792	-.094	.511	-.142	.523	-.280	.906
Mid-term cabinet	.949	.594	1.497***	.395	1.463***	.403	.787	.610
LOG Population	1.759**	.692	.957*	.468	1.095**	.517	.697	.911
ACs dummies	✗		✗		✗		✓	
N	33		33		33		33	
ACs	16		16		16		16	
Adjusted R^2	0.725		0.886		0.883		0.898	

Table 4: RMP OLS regressions.
DV: Cabinet size. *p<0.10, **p<0.05, ***p<0.01
Notes: (1) OLS. (2) OLS with lagged DV. (3) OLS with lagged DV and IVs.
(4) Lagged OLS with territorial fixed effects[18].

[18] We have not included the temporal dummies because our data set covers just 5 years (2007-2012).

The second hypothesis regarding decentralization preferences couldn't be fully tested because of the lack of data. However, we have run a regression for the short period in which we do have data available. In Table 4 we can see four regression models[19] for just 33 observations from 2007-2013. In previously commented variables there can be major changes both in coefficients and statistical significance levels because of the sharp reduction of the sample. However, we are interested in just one variable and it is positive and statistically significant in all models. Regressions results support our claim that higher preferences of decentralization of the ruling party lead to bigger cabinets. Regional parties may want to preserve the identity of their territory by highlighting some specific areas —as in the creation of the Catalan Department of Justice described by Jordi Pujol (p.13). Moreover, creating new ministerial posts might be a strategy for regional parties to emphasize their regional agenda in the media in order to attract new voters, like those who usually vote wide-state parties in general elections.[20] The fact is, when parties with higher regional demands, rule in an AC it is highly probable that cabinets will include more ministers.

HYPOTHESES	AMONG ACS	WITHIN ACS
H1	✓	✗
H2	✓	✓
H3	✓ +	✗
H4	✓	✓
H5.a		
COMPETENCES	✓ *	✗
FISCAL AUTONOMY	✓	✓
H5.b	✓	✓

Table 5: Tested hypotheses summary

CONCLUSIONS

This study has tried to shed some light on our knowledge about how executive power is internally structured. As we have seen, cabinets are a central actor in politics and policies, sometimes even assuming legislative functions. Thus, composition and fragmentation of cabinets is vital in order to better understand their political consequences. In decentralized coun-

[19] We have not included models with temporal dummies as the period we are testing comprises just 5 years.

[20] There are studies —e.g Font & Montero (1991)— that describe this phenomena under the concept of "dual vote". This duality was clearly reflected in Catalonia when large segments of people systematically voted the PSOE (wide state party) in general elections and CiU (regional party) in autonomic elections

[+] Low statistical significance

[*] Just in Model 4 is highly statistical significant

tries this is particularly important as there exist multiple cabinets, all of them influencing citizens day-to-day. Determinants of cabinet size had never been systematically studied until the recent study by Bowler and Indriðason (2014) but their focus on central cabinets put aside some relevant factors that can influence cabinet size at the regional level, in this paper we have tried to change this perspective. We used their work as a stepping stone and their shortcomings gave us ideas and new variables for studying determinants of cabinet size. For instance, we realized that economic factors were a possible influencing factor, but most of our contributions are related to decentralization dynamics.

Our results, summarized in Table 5, show that all our hypotheses are verified when comparing ACs cabinet size but not all variables are equally relevant. The most important predictor of cabinet size is our control variable for (log of) population, followed by the lag of cabinet size, which shows that cabinet size is highly subject to path dependence. According to standardized betas the following predictors in relevance are, generally, fiscal autonomy levels, parties' left-right ideology and the years the same PM has been in office. However, when we include ACs dummies, H1 (number of parties), H3 (GDP variation) and H5.a (number of competences) lose their statistical significance which means that this factors are not useful for explaining cabinet size variations within each AC.

Some examples can better illustrate our results, and we start by Extremadura's case. From 1983 to 2005 Extremadura remained unchanged in many variables: (log of) population, the same left party in cabinet (PSOE) and the same PM (Juan C. Rodríguez Ibarra). Cabinet size was always about 10 ministers until 1999, when the levels of fiscal autonomy were raised (1997) and also concurring with the same PM being in office for more than 15 years (path dependence was settled). Precisely after 1999 cabinet size was enlarged in 1-2 ministers from 1999-2005, which fits our results. On the other hand, if we look at differences among ACs, now we can understand the high number of ministries in Catalunya as it has always been the AC with the higher amount of transferred competences. Besides this factor, Catalunya is one of the most populous ACs, its economy has been the third most growing economy in this period and its ruling parties are featured for high decentralization demands[21]. We started our paper wondering why ACs diverged over time and now, as we have shown, if we looked one-to-one each AC, we would be able to deduce which are the crucial factors responsible for most of cabinet size changes.

[21] Amat and Falcó-Gimeno (2013) show that decentralization grew precisely when CiU was a central actor and wide state parties (PSOE and PP) needed its support in order to obtain parliamentary majorities.

We have shown that both political and economic factors can influence cabinet configuration —e.g. ministries' cuts since 2007. However, beyond some general economic and political variables our work contributes literature on cabinet formation by pointing out that regional cabinets are influenced by multilevel politics. Decentralization levels and decentralization preferences appear to be important, at least in our unit of analysis (Spain). However, one limitation of our study regards the scope of our dataset and future works should try to test whether our results are consistent in other decentralized countries such as Germany, Italy or United Kingdom. Moreover, the lack of an extended RMP for all regional parties and for the whole democratic period throws some doubt upon our *H5b* results. Using better and expanded data regarding parties' preferences would be vital in order to reinforce or discard our conclusions.

We can unequivocally say that cabinet's matter and cabinet configuration too. Changes in cabinets can be explained both through economic and political conditionings, but in subnational levels these factors go bound to decentralization dynamics. The Spanish autonomic model of decentralization has implied a large and heterogeneous process, which has led to some differences among cabinets' size and a progressive enlargement of them in most ACs. Yet, some important questions remain to be addressed. What will happen if this decentralization process does not develop any more, will then ACs cabinets continue to grow? After the current economic crisis, ACs cabinets will regain the previous number of ministerial posts? We should answer affirmatively the second question and negatively the first one as, according to our results, these variables are important when we try to understand the number of ministers appointed. Nevertheless, it is not political scientists work to predict how cabinet's size will evolve, only time will tell.

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Being almost a one year after I have set this project up, the dissertation comes to an end. It has been a long journey in which I have learned the ups and downs of an academic writing process. My deepest gratitude to my supervisor, Toni Rodon. His priceless recommendations and help have enormously improved this paper, not any less, his enthusiasm for my work progresses has encouraged me to spend lots of hours collecting data. Also, I would like to thank Albert Falcó-Gimeno for sharing with me the data I could not find in order to finish my dataset. Finally, I would like to thank to all my classmates the hours of mutual support listening our troubles about our *TFGs*, Alba deserves particular mention for the hours spent combating SPSS.

REFERENCES

Amat, F. & Falcó-Gimeno, A., 2013. The Legislative Dynamics of Political Decentralization in Parliamentary Democracies. *Comparative Political Studies*.

Andeweg, R.B., 2000. Ministers as double agents? The delegation process between cabinet and ministers. *European Journal of Political Research*, 37(3), pp.377–395.

Arriola, L.R., 2009. Patronage and Political Stability in Africa. *Comparative Political Studies*, 42(10), pp.1339–1362.

Bäck, H., Debus, M. & Dumont, P., 2011. Who gets what in coalition governments? Predictors of portfolio allocation in parliamentary democracies. *European Journal of Political Research*, 50(4), pp.441–478.

Baskaran, T., 2013. Coalition governments, cabinet size, and the common pool problem: Evidence from the German states. *European Journal of Political Economy*, 32, pp.356–376.

Blais, A., Blake, D. & Dion, S., 1993. Do parties make a difference? Parties and the size of government in liberal democracies. *American Journal of Political Science*, 37(1), pp.40–62.

Bowler, S. & Indriðason, I.H., 2014. Determinants of cabinet size. *European Journal of Political Research*, 53(2), pp.381–403.

Burch, M., 1993. Organizing the flowof business in Western European cabinets. In J. Blondel & F. Müller-Rommel, eds. *Governing together*. London, pp. 99–130.

Elazar, D.J., 1991. *Federal Systems of the World: A Handbook of Federal, Confederal, and Autonomy Arrangements*, Longman Current Affairs.

Falcó-Gimeno, A., 2014. Portfolio Allocation under Decentralization. *Publius: The Journal of Federalism*, 44(1), pp.205–225.

Falcó-Gimeno, A. & Indriðason, I.H., 2013. Uncertainty, Complexity, and Gamson's Law: Comparing Coalition Formation in Western Europe. *West European Politics*, 36(1), pp.221–247.

Feld, L.P. & Schaltegger, C.A., 2009. Do large cabinets favor large governments? Evidence on the fiscal commons problem for Swiss Cantons. *Journal of Public Economics*, 93(1-2), pp.35–47.

Font, J. & Montero, J.R., 1991. El voto dual en Cataluña: lealtad y transferencia de votos en las elecciones autonómicas. *Revista de estudios políticos*, 73, pp.7–34.

Freitag, M., Schniewind, A. & Vatter, A., 2009. Big Cabinets, Big Governments? Grand Coalitions and Public Policy in the German Laender. *Journal of Public Policy*, 29(03), p.327.

Frey, B.S. & Torgler, B., 2012. Politicians: be killed or survive. *Public Choice*, 156(1-2), pp.357–386.

Gamson, W.A., 1961. A theory of coalition formation. *American sociological review*, 26(3), pp.373–382.

De Haan, J. & Volkerink, B., 2001. Fragmented Government Effects on Fiscal Policy: New evidence. *Public Policy*, 109(3-4), pp.221–242.

Von Hagen, J. & Harden, I.J., 1995. Budget processes and commitment to fiscal discipline. *European Economic Review*, 39(3-4), pp.771–779.

Hanel, R., Klimek, P. & Thurner, S., 2009. To how many politicians should government be left? *Physica A: Statistical Mechanics and its Applications*, 388(18), pp.3939–1947.

Hardin, G., 1968. The tragedy of the commons. *Science*, 162(3859), pp.1243–1248.

Indriðason, I.H. & Kam, C., 2008. Cabinet Reshuffles and Ministerial Drift: Why do Prime Ministers Reshuffle their Cabinets ? *British Journal of Political Science*, 38(4), pp.621–656.

Indriðason, I.H. & Kam, C., 2005. The timing of cabinet reshuffles in five Westminster parliamentary systems. *Legislative Studies Quarterly*, 30(3), pp.327–363.

Kam, C., 2009. *Party discipline and parliamentary politics*, Cambridge University Press.

Kontopoulos, Y. & Perotti, R., 2002. Fragmented fiscal policy. *Journal of Public Economics*, 86(2), pp.191–222.

Laver, M. & Shepsle, K.A., 1996. *Making and Breaking Governments: Cabinets and Legislatures in Parliamentary Democracies*,

Lleixà, J., 2006. El gobierno. In M. Caminal Badia, ed. *Manual de ciencia política*. Madrid: Tecnos, pp. 460–476.

Marks, G., Hooghe, L. & Schakel, A., 2008. Patterns of regional authority. *Regional and Federal Studies*, 18(2-3), pp.111–302.

Parkinson, C.N., 1957. *Parkinson's Law, and Other Studies in Administration*, Houghton Mifflin.

Pujol, J., 2011. *Memòries II: Temps de construir (1980-1993)*, Barcelona: Proa.

Reniu, J.M., 2013. Observatorio de Gobiernos de Coalición - Base de Datos. Available at: http://www.ub.edu/OGC/index_es.htm [Accessed April 7, 2014].

Roubini, N. & Sachs, J., 1989. Political and economic determinants of budget deficits in the industrial democracies. *European Economic Review*, 33(5), pp.903–933.

Song, Z., 2012. Persistent ideology and the determination of public policy over time. *International Economic Review*, 53(1), pp.175–202.

Taagepera, R., 1972. The size of national assemblies. *Social Science Research*, 1(4), pp.385–401.

Wehner, J., 2010. Cabinet structure and fiscal policy outcomes. *European Journal of Political Research*, 49(5), pp.631–653.

Weingast, B.R., Shepsle, K.A. & Johnsen, C., 1981. The political economy of benefits and costs: A neoclassical approach to distributive politics. *Journal of Political Economy*, 89(4), pp.642–664.

Wilkins, A., 2013. To Lag or Not to Lag? Re-evaluating the Use of Lagged Dependent Variables in Regression Analysis. *Stanford*, p.16.

Woo, J., 2003. Economic, political, and institutional determinants of public deficits. *Journal of Public Economics*, 87(3-4), pp.387–426.

DATA SOURCES

Anuarios de El País

Banco de España

Codebook for the Regional Scores Dataset, from: Hooghe, Liesbet, Gary Marks, Arjan H. Schakel (2008) "Regional Authority in 42 Democracies, 1950–2006. A Measure and Five Hypotheses," Regional and Federal Studies, Vol.18, No.2-3, pp.111-302.

Instituto Nacional de Estadística

Observatori de Governs de Coalició, from: Reniu, Josep M. Acuerdos coalicionales y formación de gobiernos en España, 1979-2011 [Ref. CSO2010-16337]. Programa Nacional de I+D+i, Ministerio de Economía y Competitividad, Gobierno de España.

Regional Manifesto Project, from: Gómez, Braulio; Sonia Alonso y Laura Cabeza. Regional Manifestos Project [CSO2009-11241]. Programa Nacional de I+D+i, Ministerio de Economía y Competitividad, Gobierno de España.

ANNEX

List of Regional Cabinets[a]

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
ANDALUCÍA	1982	12	60.55	1	0	PSOE				1	0	-1.46	10	2		6.81
ANDALUCÍA	1984	12	60.55	1	0	PSOE				1	0	2.07	48	2		6.82
ANDALUCÍA	1985	11	60.55	1	0	PSOE				1	1	0.93	70	2		6.82
ANDALUCÍA	1986	12	55.05	1	0	PSOE				1	2	4.40	80	2		6.83
ANDALUCÍA	1987	11	55.05	1	0	PSOE				1	3	3.67	85	2		6.83
ANDALUCÍA	1988	10	55.05	1	0	PSOE				1	4	6.62	87	2		6.83
ANDALUCÍA	1990	11	56.88	1	0	PSOE				1	0	3.07	87	2		6.84
ANDALUCÍA	1994	12	41.28	1	0	PSOE				1	4	-2.00	98	2		6.85
ANDALUCÍA	1996	14	51.38	2	1	PSOE	PA			1	6	2.79	108	2		6.85
ANDALUCÍA	2000	15	52.29	2	1	PSOE	PA			1	10	6.70	115	3		6.86
ANDALUCÍA	2004	15	55.96	1	0	PSOE				1	14	8.99	116	3		6.88
ANDALUCÍA	2008	16	51.38	1	0	PSOE				1	18	6.72	143	3	3.26	6.91
ANDALUCÍA	2009	16	51.38	1	0	PSOE				1	0	2.74	151	3	3.26	6.91
ANDALUCÍA	2010	14	51.38	1	0	PSOE				1	1	-3.59	151	3	3.26	6.92
ANDALUCÍA	2012	12	54.13	2	1	PSOE	IU			1	3	-0.02	152	3	2.30	6.92
ANDALUCÍA	2013	12	54.13	2	1	PSOE	IU			1	0	-1.67	152	3	2.30	6.92
ARAGÓN	1983	8	50.00	2	1	PSOE				1	0	5.11	16	2		6.08
ARAGÓN	1987	9	25.37	1	0	PAR				0	0	2.42	55	2		6.08
ARAGÓN	1988	9	25.37	1	0	PAR				0	1	4.07	56	2		6.08
ARAGÓN	1989	9	46.20	3	1	PAR	PP			0	2	6.91	56	2		6.08

REGIONAL CABINET SIZE

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
ARAGÓN	1991	9	50.75	3	1	PAR	PP			0	0	3.36	56	2		6.08
ARAGÓN	1993	10	28.36	1	0	PSOE				1	0	0.90	59	2		6.08
ARAGÓN	1994	10	28.36	1	0	PSOE				1	1	-1.55	63	2		6.08
ARAGÓN	1995	7	61.19	3	1	PP	PAR			0	0	1.23	70	2		6.08
ARAGÓN	1999	10	49.25	2	1	PSOE	PAR			1	0	4.56	93	3		6.08
ARAGÓN	2002	10	49.25	2	1	PSOE	PAR			1	3	7.09	97	3		6.08
ARAGÓN	2003	11	52.24	2	1	PSOE	PAR			1	4	8.22	98	3		6.09
ARAGÓN	2004	11	52.24	2	1	PSOE	PAR			1	5	7.08	98	3		6.09
ARAGÓN	2006	11	52.24	2	1	PSOE	PAR			1	7	7.70	99	3		6.11
ARAGÓN	2007	13	58.21	2	1	PSOE	PAR			1	8	8.37	102	3		6.11
ARAGÓN	2008	13	58.21	2	1	PSOE	PAR			1	9	8.62	104	3		6.12
ARAGÓN	2010	13	58.21	2	1	PSOE	PAR			1	11	-3.73	105	3		6.13
ARAGÓN	2011	10	44.80	1	0	PP				0	0	-0.04	110	3	0.64	6.13
ARAGÓN	2012	10	55.22	2	1	PP	PAR			0	1	0.25	112	3	0.64	6.13
ASTURIAS	1983	11	57.78	1	0	PSOE				1	0	1.74	16	2		6.05
ASTURIAS	1984	11	57.78	1	0	PSOE				1	1	1.43	33	2		6.05
ASTURIAS	1987	11	42.55	1	0	PSOE				1	4	4.91	55	2		6.05
ASTURIAS	1989	11	42.55	1	0	PSOE				1	6	4.21	56	2		6.04
ASTURIAS	1991	9	46.67	1	0	PSOE				1	0	-0.50	59	2		6.04
ASTURIAS	1993	9	46.67	1	0	PSOE				1	0	3.42	59	2		6.04
ASTURIAS	1995	7	46.67	1	0	PP				0	0	1.41	64	2		6.04
ASTURIAS	1999	12	53.33	1	0	PSOE				1	0	6.77	79	3		6.03
ASTURIAS	2002	12	53.33	1	0	PSOE				1	3	7.64	95	3		6.03

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
ASTURIAS	2003	11	57.78	2	1	PSOE	IU			1	4	6.19	95	3		6.03
ASTURIAS	2007	11	46.67	1	0	PSOE				1	8	9.18	102	3		6.03
ASTURIAS	2008	11	55.56	2	1	PSOE	IU			1	9	7.36	102	3		6.03
ASTURIAS	2011	10	35.56	1	0	FAC				0	0	-0.55	105	3		6.03
ASTURIAS	2012	9	37.78	1	0	PSOE				1	0	-0.15	105	3	1.14	6.03
ILLES BALEARS	1983	14	38.89	1	0	AP				0	0	3.19	15	2		5.82
ILLES BALEARS	1987	13	49.15	2	1	AP	UM			0	4	4.47	51	2		5.83
ILLES BALEARS	1991	13	52.54	2	1	AP	UM			0	8	8.14	52	2		5.85
ILLES BALEARS	1992	12	52.54	2	1	AP	UM			0	9	3.19	52	2		5.86
ILLES BALEARS	1993	12	52.54	2	1	AP	UM			0	10	2.31	53	2		5.86
ILLES BALEARS	1995	12	50.85	1	0	PP				0	12	2.58	60	2		5.87
ILLES BALEARS	1996	11	50.85	1	0	PP				0	0	3.50	79	2		5.88
ILLES BALEARS	1997	11	50.85	1	0	PP				0	1	6.96	84	3		5.88
ILLES BALEARS	1999	14	45.76	4	1	PSOE	PSM	EU	V	1	0	8.53	89	3		5.90
ILLES BALEARS	2000	14	45.76	4	1	PSOE	PSM	EU	V	1	1	10.70	96	3		5.92
ILLES BALEARS	2003	13	49.15	1	0	PP				0	0	6.34	101	3		5.95
ILLES BALEARS	2005	14	49.15	1	0	PP				0	2	7.15	101	3		5.97
ILLES BALEARS	2007	15	50.85	3	1	PSOE	BLOC	UM		1	0	8.00	106	3	2.42	6.00
ILLES BALEARS	2010	13	50.85	3	1	PSOE	BLOC	UM		1	3	-3.64	110	3	2.42	6.03
ILLES BALEARS	2011	8	59.32	1	0	PP				0	0	-1.38	110	3	0.82	6.04
ILLES BALEARS	2013	10	59.32	1	0	PP				0	2	-0.34	110	3	0.82	6.05
CANARIAS	1983	11	45.00	1	0	PSOE				1	0	0.44	8	2		6.14
CANARIAS	1985	12	45.00	1	0	PSOE				1	2	-3.30	45	2		6.15

REGIONAL CABINET SIZE

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
CANARIAS	1987	11	50.00	3	1	CDS	AIC	PP		0	0	9.05	67	2		6.16
CANARIAS	1989	11	50.00	3	1	CDS	AIC	PP		0	0	6.22	69	2		6.17
CANARIAS	1990	11	40.00	2	1	CDS	AIC			0	1	4.51	69	2		6.17
CANARIAS	1991	11	65.00	2	1	PSOE	AIC			1	0	-0.06	76	2		6.17
CANARIAS	1993	11	45.00	3	1	AIC	CCI	CanariasN		0	0	3.72	76	2		6.18
CANARIAS	1994	12	45.00	3	1	AIC	CCI	CanariasN		0	1	1.11	78	2		6.19
CANARIAS	1995	11	35.00	1	0	CC				0	2	3.06	83	2		6.19
CANARIAS	1996	11	65.00	2	1	CC	PP			0	3	2.60	95	2		6.20
CANARIAS	1998	11	65.00	2	1	CC	PP			0	5	7.13	103	3		6.21
CANARIAS	1999	11	65.00	2	1	CC	PP			0	0	9.08	110	3		6.22
CANARIAS	2000	11	65.00	2	1	CC	PP			0	1	11.26	112	3		6.22
CANARIAS	2001	10	40.00	1	0	CC				0	2	7.65	112	3		6.24
CANARIAS	2003	11	66.67	2	1	CC	PP			0	0	7.66	114	3		6.24
CANARIAS	2005	11	38.33	1	0	CC				0	2	6.40	116	3		6.27
CANARIAS	2007	11	53.33	2	1	CC	PP			0	0	7.18	119	3		6.29
CANARIAS	2010	9	28.33	1	0	CC				0	3	-4.09	120	3		6.31
CANARIAS	2011	9	59.02	2	1	CC	PSOE			0	4	0.47	124	3	6.07	6.31
CANTABRIA	1983	7	51.43	1	0	AP				0	0	1.94	16	2		5.72
CANTABRIA	1984	9	51.43	1	0	AP				0	0	2.79	35	2		5.72
CANTABRIA	1986	6	51.43	1	0	AP				0	2	0.46	50	2		5.72
CANTABRIA	1987	8	48.72	1	0	AP				0	0	-4.47	53	2		5.72
CANTABRIA	1990	9	100.00	4	1	PSOE	PP	PRC	CDS	0	0	6.93	53	2		5.72
CANTABRIA	1991	9	53.85	2	1	UPCA	AP			0	0	0.04	53	2		5.72

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
CANTABRIA	1992	7	53.85	2	1	UPCA	PP			0	1	-0.67	53	2		5.72
CANTABRIA	1993	6	20.51	1	0	UPCA				0	2	1.75	53	2		5.72
CANTABRIA	1995	10	48.72	2	1	PP	PRC			0	0	2.55	53	2		5.72
CANTABRIA	1999	10	64.10	2	1	PP	PRC			0	4	7.69	84	3		5.72
CANTABRIA	2001	10	64.10	2	1	PP	PRC			0	6	9.20	87	3		5.73
CANTABRIA	2003	11	53.85	2	1	PSOE	PRC			1	0	7.86	89	3		5.73
CANTABRIA	2007	11	56.41	2	1	PRC	PSOE			1	4	8.18	98	3		5.75
CANTABRIA	2011	9	51.28	1	0	PP				0	0	-0.50	106	3	0.56	5.77
CASTILLA – LA MANCHA	1983	10	52.27	1	0	PSOE				1	0	0.79	15	2		6.22
CASTILLA – LA MANCHA	1984	9	52.27	1	0	PSOE				1	1	0.54	35	2		6.22
CASTILLA – LA MANCHA	1985	10	52.27	1	0	PSOE				1	2	3.32	46	2		6.22
CASTILLA – LA MANCHA	1987	9	53.19	1	0	PSOE				1	4	0.27	55	2		6.22
CASTILLA – LA MANCHA	1989	10	53.19	1	0	PSOE				1	6	8.47	57	2		6.22
CASTILLA – LA MANCHA	1991	10	57.45	1	0	PSOE				1	8	3.05	60	2		6.22
CASTILLA – LA MANCHA	1993	10	57.45	1	0	PSOE				1	10	1.00	60	2		6.22
CASTILLA – LA MANCHA	1995	10	51.06	1	0	PSOE				1	12	1.45	62	2		6.23
CASTILLA – LA MANCHA	1996	9	51.06	1	0	PSOE				1	13	1.82	76	2		6.23
CASTILLA – LA MANCHA	1997	10	51.06	1	0	PSOE				1	14	6.27	81	3		6.23
CASTILLA – LA MANCHA	1999	11	55.32	1	0	PSOE				1	16	6.99	83	3		6.24
CASTILLA – LA MANCHA	2000	12	55.32	1	0	PSOE				1	17	5.06	86	3		6.24
CASTILLA – LA MANCHA	2001	12	55.32	1	0	PSOE				1	18	7.45	86	3		6.24
CASTILLA – LA MANCHA	2003	15	61.70	1	0	PSOE				1	20	6.94	90	3		6.25
CASTILLA – LA MANCHA	2004	15	61.70	1	0	PSOE				1	0	8.16	90	3		6.26

REGIONAL CABINET SIZE

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
CASTILLA – LA MANCHA	2006	15	61.70	1	0	PSOE				1	2	8.22	90	3		6.28
CASTILLA – LA MANCHA	2007	15	55.32	1	0	PSOE				1	3	8.04	92	3		6.29
CASTILLA – LA MANCHA	2008	11	55.32	1	0	PSOE				1	4	7.90	92	3		6.31
CASTILLA – LA MANCHA	2010	9	55.32	1	0	PSOE				1	6	-3.73	92	3		6.32
CASTILLA – LA MANCHA	2011	8	51.02	1	0	PP				0	0	-1.61	92	3	-2.19	6.32
CASTILLA – LEÓN	1983	10	50.00	1	0	PSOE				1	0	3.84	16	2		6.41
CASTILLA – LEÓN	1984	10	50.00	1	0	PSOE				1	1	4.08	30	2		6.41
CASTILLA – LEÓN	1986	8	50.00	1	0	PSOE				1	0	5.36	54	2		6.41
CASTILLA – LEÓN	1987	6	38.10	1	0	PP				0	0	0.86	55	2		6.41
CASTILLA – LEÓN	1989	7	38.10	1	0	PP				0	0	3.35	59	2		6.41
CASTILLA – LEÓN	1991	8	51.19	1	0	PP				0	0	2.13	62	2		6.41
CASTILLA – LEÓN	1995	9	59.52	1	0	PP				0	4	2.24	72	2		6.40
CASTILLA – LEÓN	1999	9	57.83	1	0	PP				0	8	4.52	92	3		6.39
CASTILLA – LEÓN	2001	9	57.83	1	0	PP				0	0	6.50	100	3		6.39
CASTILLA – LEÓN	2003	11	58.54	1	0	PP				0	2	6.97	104	3		6.39
CASTILLA – LEÓN	2007	13	57.83	1	0	PP				0	6	7.47	108	3	0.57	6.40
CASTILLA – LEÓN	2011	10	63.10	1	0	PP				0	10	-0.19	112	3	1.25	6.41
CATALUNYA	1980	13	31.85	1	0	CiU				0	0		7	2		6.77
CATALUNYA	1984	12	53.33	1	0	CiU				0	4	1.85	64	2		6.78
CATALUNYA	1988	13	51.11	1	0	CiU				0	8	5.63	87	2		6.78
CATALUNYA	1989	14	51.11	1	0	CiU				0	9	6.15	87	2		6.78
CATALUNYA	1992	14	51.85	1	0	CiU				0	12	3.05	99	2		6.78
CATALUNYA	1995	15	44.44	1	0	CiU				0	15	2.72	109	2		6.79

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
CATALUNYA	1996	14	44.44	1	0	CiU				0	16	3.20	119	2		6.79
CATALUNYA	1999	15	41.48	1	0	CiU				0	19	6.06	137	3		6.79
CATALUNYA	2000	16	41.48	1	0	CiU				0	20	8.16	141	3		6.79
CATALUNYA	2002	14	41.48	1	0	CiU				0	22	7.99	151	3		6.80
CATALUNYA	2003	17	54.81	3	1	PSC	ERC	ICV		1	0	6.74	153	3		6.81
CATALUNYA	2006	14	36.30	2	1	PSC	ICV			1	3	7.46	163	3		6.85
CATALUNYA	2006	15	51.85	3	1	PSC	ERC	ICV		1	0	7.46	163	3		6.85
CATALUNYA	2010	12	45.93	1	0	CiU				0	0	-3.88	183	3	9.12	6.87
CATALUNYA	2012	13	37.04	1	0	CiU				0	2	0.57	189	3	19.78	6.88
COMUNITAT VALENCIANA	1983	9	57.30	1	0	PSOE				1	0	0.14	21	2		6.57
COMUNITAT VALENCIANA	1983	10	57.30	1	0	PSOE				1	1	0.14	21	2		6.57
COMUNITAT VALENCIANA	1987	9	47.19	1	0	PSOE				1	4	1.39	80	2		6.58
COMUNITAT VALENCIANA	1989	9	47.19	1	0	PSOE				1	6	4.50	85	2		6.58
COMUNITAT VALENCIANA	1991	10	50.56	1	0	PSOE				1	8	4.23	91	2		6.59
COMUNITAT VALENCIANA	1993	11	50.56	1	0	PSOE				1	10	-0.51	93	2		6.59
COMUNITAT VALENCIANA	1995	9	52.81	2	1	PP	UV			0	0	1.82	93	2		6.59
COMUNITAT VALENCIANA	1997	10	52.81	2	1	PP	UV			0	2	5.98	107	3		6.59
COMUNITAT VALENCIANA	1999	13	55.06	1	0	PP				0	4	7.92	114	3		6.60
COMUNITAT VALENCIANA	2000	12	55.06	1	0	PP				0	5	7.49	120	3		6.60
COMUNITAT VALENCIANA	2003	11	53.93	1	0	PP				0	0	7.23	126	3		6.64
COMUNITAT VALENCIANA	2004	14	53.93	1	0	PP				0	1	6.96	126	3		6.64
COMUNITAT VALENCIANA	2007	14	54.55	1	0	PP				0	4	8.58	130	3	0.83	6.68
COMUNITAT VALENCIANA	2011	11	55.56	1	0	PP				0	0	-1.00	131	3	3.47	6.70

REGIONAL CABINET SIZE

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
COMUNITAT VALENCIANA	2012	10	55.56	1	0	PP				0	1	-0.16	131	3	3.47	6.70
EXTREMADURA	1983	10	53.85	1	0	PSOE				1	0	0.63	14	2		6.03
EXTREMADURA	1987	10	52.31	1	0	PSOE				1	4	-0.94	51	2		6.03
EXTREMADURA	1989	10	52.31	1	0	PSOE				1	5	6.75	51	2		6.03
EXTREMADURA	1991	9	60.00	1	0	PSOE				1	8	2.13	55	2		6.03
EXTREMADURA	1992	10	60.00	1	0	PSOE				1	9	4.00	55	2		6.03
EXTREMADURA	1995	10	47.69	1	0	PSOE				1	12	1.44	62	2		6.03
EXTREMADURA	1999	11	52.31	1	0	PSOE				1	16	6.22	81	3		6.02
EXTREMADURA	2000	12	52.31	1	0	PSOE				1	17	7.62	86	3		6.02
EXTREMADURA	2003	11	55.38	1	0	PSOE				1	20	7.08	90	3		6.03
EXTREMADURA	2005	11	55.38	1	0	PSOE				1	22	7.36	92	3		6.03
EXTREMADURA	2007	12	58.46	1	0	PSOE				1	0	6.74	94	3	0.54	6.03
EXTREMADURA	2011	8	49.23	1	0	PP				0	0	-0.42	99	3	0.53	6.04
GALICIA	1981	13	36.62	1	0	PP				0	0		3	2		6.45
GALICIA	1982	13	36.62	1	0	PP				0	1	1.23	4	2		6.45
GALICIA	1983	10	36.62	1	0	PP				0	2	1.91	24	2		6.45
GALICIA	1984	10	36.62	1	0	PP				0	3	0.47	42	2		6.45
GALICIA	1985	10	47.89	1	0	PP				0	4	0.86	59	2		6.45
GALICIA	1986	11	47.89	1	0	PP				0	5	0.90	72	2		6.45
GALICIA	1987	12	47.89	1	0	PP				0	0	-2.89	75	2		6.44
GALICIA	1989	12	53.33	2	1	PP	CG			0	0	3.88	81	2		6.44
GALICIA	1993	12	57.33	1	0	PP				0	4	5.32	92	2		6.44
GALICIA	1996	13	57.33	1	0	PP				0	7	1.30	108	2		6.43

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
GALICIA	1997	14	56.00	1	0	PP				0	8	1.91	119	3		6.43
GALICIA	2001	15	54.67	1	0	PP				0	12	6.32	138	3		6.43
GALICIA	2005	14	50.67	2	1	PSG	BNG			1	0	7.55	142	3		6.43
GALICIA	2009	11	50.67	1	0	PP				0	0	3.90	154	3	3.42	6.44
GALICIA	2012	9	54.67	1	0	PP				0	3	-0.14	154	3	5.03	6.44
LA RIOJA	1983	10	51.43	1	0	PSOE				1	0	4.01	0	2		5.41
LA RIOJA	1987	9	39.39	1	0	PP				0	0	-5.66	34	2		5.42
LA RIOJA	1990	9	51.50	2	1	PSOE	PR			1	0	3.92	38	2		5.42
LA RIOJA	1991	10	54.55	2	1	PSOE	PR			1	1	17.54	38	2		5.42
LA RIOJA	1995	7	51.52	1	0	PP				0	0	1.70	46	2		5.42
LA RIOJA	1999	8	54.55	1	0	PP				0	4	6.79	64	3		5.42
LA RIOJA	2003	10	51.52	1	0	PP				0	8	5.78	73	3		5.45
LA RIOJA	2007	11	51.52	1	0	PP				0	12	8.24	75	3		5.49
LA RIOJA	2011	8	60.61	1	0	PP				0	16	0.01	76	3	1.65	5.50
COMUNIDAD DE MADRID	1983	11	54.26	1	0	PSOE				1	0	3.10	0	2		6.68
COMUNIDAD DE MADRID	1985	11	54.26	1	0	PSOE				1	2	1.09	23	2		6.68
COMUNIDAD DE MADRID	1987	10	41.67	1	0	PSOE				1	4	9.09	39	2		6.69
COMUNIDAD DE MADRID	1991	10	40.59	1	0	PSOE				1	8	2.84	45	2		6.69
COMUNIDAD DE MADRID	1995	8	52.43	1	0	PP				0	0	2.15	52	2		6.70
COMUNIDAD DE MADRID	1999	10	53.92	1	0	PP				0	4	9.53	75	3		6.71
COMUNIDAD DE MADRID	2000	10	53.92	1	0	PP				0	5	8.39	81	3		6.71
COMUNIDAD DE MADRID	2001	12	53.92	1	0	PP				0	6	9.70	82	3		6.72
COMUNIDAD DE MADRID	2003	12	51.35	1	0	PP				0	0	7.21	89	3		6.75

REGIONAL CABINET SIZE

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
COMUNIDAD DE MADRID	2004	13	51.35	1	0	PP				0	1	7.07	92	3		6.76
COMUNIDAD DE MADRID	2006	14	51.35	1	0	PP				0	3	7.97	93	3		6.77
COMUNIDAD DE MADRID	2007	16	55.83	1	0	PP				0	4	8.73	93	3		6.78
COMUNIDAD DE MADRID	2008	13	55.83	1	0	PP				0	5	6.76	93	3		6.79
COMUNIDAD DE MADRID	2009	11	55.83	1	0	PP				0	6	3.51	93	3		6.80
COMUNIDAD DE MADRID	2010	10	55.83	1	0	PP				0	7	-2.43	93	3		6.80
COMUNIDAD DE MADRID	2011	9	55.81	1	0	PP				0	8	-0.26	93	3	0.00	6.81
COMUNIDAD DE MADRID	2012	9	55.81	1	0	PP				0	0	0.55	93	3	0.00	6.81
MURCIA	1983	10	60.47	1	0	PSOE				1	0	-0.53	14	2		5.99
MURCIA	1984	8	60.47	1	0	PSOE				1	0	2.06	32	2		5.99
MURCIA	1985	7	60.47	1	0	PSOE				1	1	0.91	45	2		6.00
MURCIA	1987	9	55.56	1	0	PSOE				1	3	3.76	55	2		6.01
MURCIA	1989	11	55.56	1	0	PSOE				1	5	3.08	57	2		6.01
MURCIA	1991	10	53.33	1	0	PSOE				1	7	6.90	59	2		6.02
MURCIA	1992	9	53.33	1	0	PSOE				1	8	-2.77	60	2		6.02
MURCIA	1993	9	53.33	1	0	PSOE				1	0	0.86	60	2		6.03
MURCIA	1994	8	53.33	1	0	PSOE				1	1	-0.25	62	2		6.03
MURCIA	1995	9	57.78	1	0	PP				0	0	2.51	69	2		6.04
MURCIA	1999	9	57.78	1	0	PP				0	4	7.89	92	3		6.05
MURCIA	2000	10	57.78	1	0	PP				0	5	7.21	97	3		6.06
MURCIA	2002	10	57.78	1	0	PP				0	7	9.04	102	3		6.08
MURCIA	2003	10	62.22	1	0	PP				0	8	8.91	104	3		6.09
MURCIA	2005	11	62.22	1	0	PP				0	10	7.62	105	3		6.12

ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
MURCIA	2007	13	64.44	1	0	PP				0	12	8.36	105	3		6.14
MURCIA	2008	12	64.44	1	0	PP				0	13	7.51	105	3		6.15
MURCIA	2010	11	64.44	1	0	PP				0	15	-4.68	111	3		6.16
MURCIA	2011	9	73.33	1	0	PP				0	16	-0.48	111	3	0.45	6.16
MURCIA	2013	9	73.33	1	0	PP				0	18	-1.68	111	3	0.45	6.16
NAVARRA	1979	8	72.86	4	1	UCD	PSOE	HB	Amaiur	0	0		0	4		5.70
NAVARRA	1983	10	40.00	1	0	PSOE				1	0	-1.21	0	4		5.71
NAVARRA	1986	10	40.00	1	0	PSOE				1	3	1.80	16	4		5.71
NAVARRA	1987	10	30.00	1	0	PSOE				1	4	1.71	32	4		5.71
NAVARRA	1991	9	40.00	1	0	UPN				0	0	2.69	40	4		5.72
NAVARRA	1995	9	46.00	3	1	PSOE	CDN	EA		1	0	2.58	40	4		5.73
NAVARRA	1996	10	34.00	1	0	UPN				0	0	2.77	40	4		5.73
NAVARRA	1999	10	44.00	1	0	UPN				0	3	6.42	50	4		5.73
NAVARRA	2003	12	54.00	2	1	UPN	CDN			0	7	7.00	60	4		5.75
NAVARRA	2004	12	54.00	2	1	UPN	CDN			0	8	6.81	60	4		5.76
NAVARRA	2007	13	48.00	2	1	UPN	CDN			0	11	7.70	60	4		5.78
NAVARRA	2010	11	44.00	1	0	UPN				0	14	-3.65	60	4		5.80
NAVARRA	2011	9	56.00	2	1	UPN	PSOE			0	0	0.79	60	4		5.80
NAVARRA	2012	9	38.00	1	0	UPN				0	1	1.41	60	4		5.81
EUSKADI	1980	14	41.67	1	0	PNV				0	0		3	4		6.33
EUSKADI	1982	11	41.67	1	0	PNV				0	2	1.39	37	4		6.33
EUSKADI	1984	12	42.67	1	0	PNV				0	4	-0.46	45	4		6.33
EUSKADI	1985	11	42.67	1	0	PNV				0	0	-3.10	45	4		6.33

REGIONAL CABINET SIZE

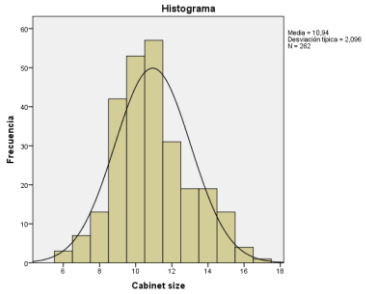
ACs id	Year	Cabinet size	Parliamentary support	Number parties	Coalition	Party 1	Party 2	Party 3	Party 4	Left cabinet	Years PM	Economy t-1	Competences t-1	Fiscal autonomy	RMP	LOG Population
EUSKADI	1986	14	48.00	2	1	PNV	PSE			0	1	1.27	66	4		6.33
EUSKADI	1988	14	48.00	2	1	PNV	PSE			0	3	1.91	73	4		6.33
EUSKADI	1990	15	49.33	3	1	PNV	EA	EE		0	5	5.95	73	4		6.33
EUSKADI	1991	15	50.67	2	1	PNV	PSE			0	6	1.52	73	4		6.32
EUSKADI	1994	11	56.00	3	1	PNV	PSE	EA		0	9	-1.62	73	4		6.32
EUSKADI	1998	11	40.00	2	1	PNV	EA			0	12	6.53	88	4		6.32
EUSKADI	1998	11	36.00	2	1	PNV	EA			0	0	6.53	88	4		6.32
EUSKADI	1999	11	36.00	2	1	PNV	EA			0	1	8.05	90	4		6.32
EUSKADI	2001	12	48.00	3	1	PNV	EA	EB		0	3	7.98	91	4		6.32
EUSKADI	2005	12	42.67	3	1	PNV	EA	EB		0	7	7.27	91	4		6.33
EUSKADI	2009	11	33.33	1	0	PSOE				1	0	4.28	93	4	2.92	6.34
EUSKADI	2013	9	36.00	1	0	PNV				0	0	-1.44	107	4	10.71	6.34

Table A1: Dataset

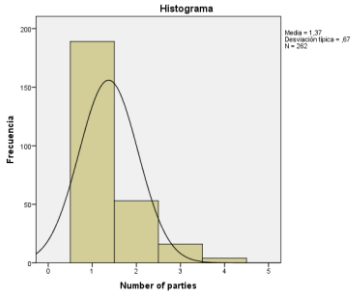
[a] Parties' acronyms

AIC: Agrupaciones Independientes de Canarias (NSWP – Canarias)
AMAIUR: Agrupaciones Electorales de Merindad (NSWP – Navarra)
AP: Alianza Popular (WSP)
BLOC: Bloc per Mallorca (NSWP – Illes Balears) [Preelectoral coalition]
BNG: Bloque Nacionalista Galego (NSWP – Galicia)
CANARIASN: Centro Canario Independiente (NSWP – Canarias)
CC: Coalición Canaria (NSWP – Canarias)
CCI: Centro Canario Independiente (NSWP – Canarias)
CDS: Centro Democrático y Social (WSP)
CG: Coalición Galega (NSWP – Galicia)
CiU: Convergència i Unió (NSWP – Catalunya)
EA: Eusko Alkartasuna (NSWP – Euskadi)
EB: Ezker Batua-Berdeak (NSWP – Euskadi)
EE: Euskadiko Ezkerra (NSWP – Euskadi)
ERC: Esquerra Republicana de Catalunya (NSWP – Catalunya)
FAC: Foro Asturias Ciudadano (NSWP – Asturias)
ICV: Iniciativa per Catalunya Verds (NSWP – Catalunya)
IU/EU: Izquierda Unida/Esquerra Unida (WSP)
PA: Partido Andalucista (NSWP – Andalucía)
PAR: Partido Aragonés (NSWP – Aragón)
PNV: Partido Nacionalista Vasco (NSWP – Euskadi/Navarra)
PP: Partido Popular (WSP)
PR: Partido Riojano (NSWP – La Rioja)
PRC: Partido Regionalista de Cantabria (NSWP – Cantabria)
PSC: Partit dels Socialistes de Catalunya (NSWP – Catalunya)
PSOE: Partido Socialista Obrero Español (WSP)
PSM: Partit Socialista de Mallorca (NSWP – Illes Balears)
UCD: Unión de Centro Democrático (WSP)
UM: Unió Mallorquina (NWSP – Illes Balears)
UPCA: Unión para el Progreso de Cantabria (NWSP – Cantabria)
UPN: Unión del Pueblo Navarro (NSWP – Navarra)
UV: Unió Valenciana (NSWP – Comunitat Valenciana)
V: Verds de Mallorca (NSWP – Illes Balears)

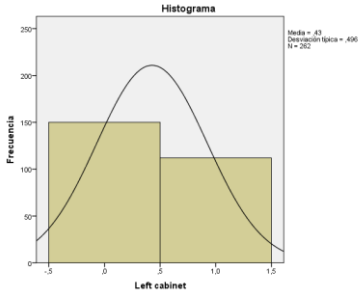
Descriptive Statistics



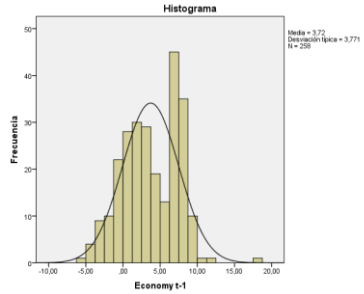
Cabinet Size



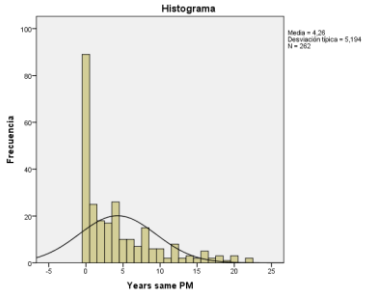
Number of parties



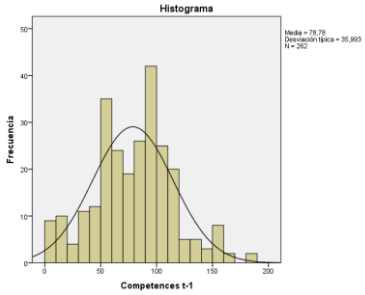
Left Cabinet



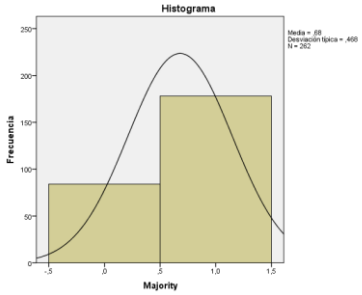
GDP variation



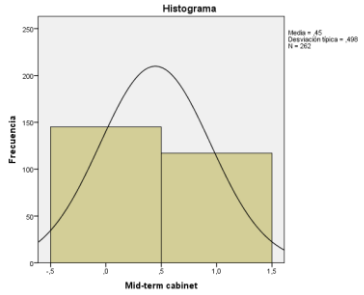
Years same PM



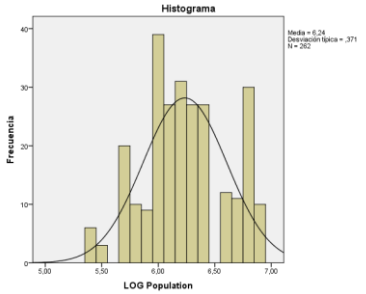
Competences t-1



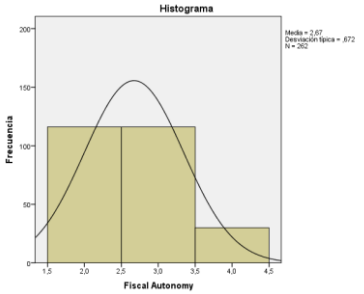
Majority



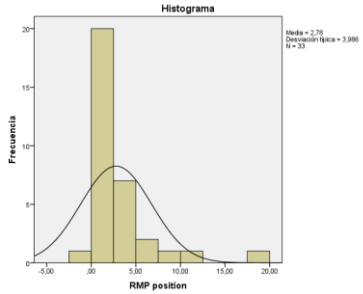
Mid-term cabinets



Log of population



Fiscal Autonomy



RMP Position

Figure A1: Histograms

REGIONAL CABINET SIZE

		Cabinet size	Majority	Minority	Parliamentary support	Number of parties	Left cabinet	Population	LOG Population	Economy t-1	Years same PM	Mid-term cabinet	Competences t-1	Fiscal Autonomy
Cabinet size	R	1												
	Sig.													
Majority	R	-.011	1											
	Sig.	.860												
Minority	R	.011	-1.000**	1										
	Sig.	.860	.000											
Parliamentary support	R	.002	.754**	-.754**	1									
	Sig.	.978	.000	.000										
Number of parties	R	.141*	-.011	.011	.160**	1								
	Sig.	.023	.859	.859	.009									
Left cabinet	R	.057	.164**	-.164**	.061	-.040	1							
	Sig.	.359	.008	.008	.325	.519								
Population	R	.435**	.089	-.089	-.015	-.164**	.031	1						
	Sig.	.000	.153	.153	.811	.008	.617							
LOG Popula-tion	R	.431**	.075	-.075	-.007	-.175**	.009	.922**	1					
	Sig.	.000	.228	.228	.908	.005	.887	.000						
GDP variation	R	.354**	.171**	-.171**	.161**	.232**	.026	-.015	-.004	1				
	Sig.	.000	.006	.006	.009	.000	.675	.810	.953					
Years same PM	R	.275**	.137*	-.137*	.173**	-.171**	.046	.075	.087	.176**	1			
	Sig.	.000	.027	.027	.005	.006	.458	.226	.162	.005				
Mid-term cabinet	R	-.008	.008	-.008	-.017	-.038	.031	.008	.051	-.027	.072	1		
	Sig.	.892	.892	.892	.780	.539	.620	.898	.414	.666	.245			
Competences t-1	R	.399**	.133*	-.133*	.139*	.078	-.143*	.419**	.424**	.193**	.259**	.029	1	
	Sig.	.000	.032	.032	.024	.208	.021	.000	.000	.002	.000	.645		
Fiscal Autonomy	R	.259**	-.141*	.141*	-.048	.186**	-.221**	-.055	-.062	.183**	.132*	-.041	.325**	1
	Sig.	.000	.022	.022	.440	.003	.000	.373	.316	.003	.033	.507	.000	

Table A2: Correlations between variables

ACs id		Majority	Parliamentary support	Coalition	Number of parties	Left cabinet	Population	GDP variation	Years same PM	Mid-term cabinet	Competences t-1	Fiscal Autonomy
Andalucía	Mean	.94	54.19	.25	1.25	1.00	7,335,908.88	2.50	4.12	.44	103.31	2.44
	Std. Dev.	.25	4.73	.45	.45	.00	703,311.32	3.65	5.41	.51	41.23	.51
Aragón	Mean	.56	46.97	.72	1.89	.61	1,242,217.67	3.92	2.89	.56	80.50	2.56
	Std. Dev.	.51	11.88	.46	.68	.50	60,656.33	3.77	3.61	.51	26.95	.51
Asturias	Mean	.43	48.62	.14	1.14	.86	1,087,863.36	3.79	2.50	.36	73.21	2.50
	Std. Dev.	.51	7.45	.36	.36	.36	23,767.13	3.29	3.23	.50	28.65	.52
Canarias	Mean	.53	50.83	.68	1.89	.16	1,641,763.79	4.21	1.37	.58	89.26	2.47
	Std. Dev.	.51	12.05	.48	.74	.37	205,863.34	4.30	1.54	.51	30.23	.51
Cantabria	Mean	.79	54.98	.57	1.71	.14	535,279.21	3.12	1.36	.43	63.07	2.36
	Std. Dev.	.43	16.45	.51	.83	.36	19,638.35	4.17	1.98	.51	25.61	.50
Castilla - La Mancha	Mean	1.00	54.97	.00	1.00	.95	1,782,529.40	4.02	7.80	.60	72.00	2.55
	Std. Dev.	.00	3.54	.00	.00	.22	150,366.47	3.78	6.68	.50	22.22	.51
Castilla - León	Mean	.83	52.67	.00	1.00	.25	2,539,831.92	3.93	2.58	.33	72.00	2.42
	Std. Dev.	.39	8.08	.00	.00	.45	53,584.41	2.41	3.58	.49	31.46	.51
Catalunya	Mean	.40	45.23	.20	1.33	.20	6,433,364.33	4.51	8.67	.33	123.47	2.53
	Std. Dev.	.51	6.99	.41	.72	.41	544,882.90	3.44	8.09	.49	49.04	.52
Comunidad de Madrid	Mean	.88	52.59	.00	1.00	.24	5,598,246.88	5.00	3.71	.53	72.29	2.71
	Std. Dev.	.33	4.62	.00	.00	.44	628,730.44	3.89	2.82	.51	29.33	.47
Comunitat Valenciana	Mean	.87	53.29	.13	1.13	.40	4,122,984.27	3.65	3.07	.47	97.93	2.53
	Std. Dev.	.35	3.17	.35	.35	.51	456,384.58	3.53	3.15	.52	35.90	.52
Euskadi	Mean	.13	43.29	.63	1.87	.06	2,120,575.63	3.07	3.31	.38	71.00	4.00
	Std. Dev.	.34	6.30	.50	.81	.25	36,900.23	3.81	3.65	.50	26.70	.00
Extremadura	Mean	.83	54.10	.00	1.00	.92	1,069,830.83	4.05	9.42	.25	69.17	2.50
	Std. Dev.	.39	3.93	.00	.00	.29	12,386.44	3.29	7.95	.45	25.30	.52
Galicia	Mean	.53	48.32	.13	1.13	.07	2,764,986.33	2.32	3.27	.40	84.47	2.33
	Std. Dev.	.52	7.96	.35	.35	.26	42,414.99	2.78	3.56	.51	51.50	.49
Illes Balears	Mean	.63	50.52	.50	1.88	.25	842,572.75	4.35	3.25	.50	79.31	2.56
	Std. Dev.	.50	4.86	.52	1.09	.45	155,342.09	3.95	4.12	.52	28.71	.51
La Rioja	Mean	.89	51.84	.22	1.22	.33	276,307.56	4.70	4.56	.11	49.33	2.44
	Std. Dev.	.33	5.56	.44	.44	.50	22,868.26	6.35	6.06	.33	25.20	.53
Murcia	Mean	1.00	60.07	.00	1.00	.45	1,178,191.60	3.31	6.65	.60	77.80	2.50
	Std. Dev.	.00	5.90	.00	.00	.51	175,110.45	4.33	5.79	.50	29.81	.51
Navarra	Mean	.29	45.78	.43	1.64	.29	559,673.86	2.83	3.64	.36	41.29	4.00
	Std. Dev.	.47	10.86	.51	.93	.47	49,492.65	3.38	4.63	.50	22.04	.00
Total	Mean	.68	51.20	.28	1.37	.43	2,476,737.17	3.72	4.26	.45	78.78	2.67
	Std. Dev.	.47	8.99	.45	.67	.50	2,117,885.38	3.77	5.19	.50	35.99	.67

Table A3: Descriptive statistics IVs for each AC

REGIONAL CABINET SIZE

ANOVA

			Sum of Squares	ld	Root Mean Square	F	Sig.
Majority	Inter-groups	(Combined)	17.545	15	1.170	7.280	.000
	Intra-groups		39.524	246	.161		
	Total		57.069	261			
Parliamentary support	Inter-groups	(Combined)	4,884.798	15	325.653	4.947	.000
	Intra-groups		16,194.015	246	65.829		
	Total		21,078.813	261			
Coalition	Inter-groups	(Combined)	18.200	15	1.213	8.662	.000
	Intra-groups		34.460	246	.140		
	Total		52.660	261			
Number of parties	Inter-groups	(Combined)	34.879	15	2.325	6.958	.000
	Intra-groups		82.209	246	.334		
	Total		117.088	261			
Left cabinet	Inter-groups	(Combined)	22.361	15	1.491	8.781	.000
	Intra-groups		41.761	246	.170		
	Total		64.122	261			
Population	Inter-groups	(Combined)	1,143,254,214,668,735.200	15	76,216,947,644,582.340	683.156	.000
	Intra-groups		27,445,233,422,561.220	246	111,565,989,522.607		
	Total		1,170,699,448,091,296.500	261			
GDP variation	Inter-groups	(Combined)	136.975	15	9.132	.628	.851
	Intra-groups		3,518.399	242	14.539		
	Total		3,655.374	257			
Years same PM	Inter-groups	(Combined)	1,237.399	15	82.493	3.497	.000
	Intra-groups		5,802.952	246	23.589		
	Total		7,040.351	261			
Mid-term cabinet	Inter-groups	(Combined)	3.290	15	.219	.878	.590
	Intra-groups		61.462	246	.250		
	Total		64.752	261			
Competences t-1	Inter-groups	(Combined)	83,373.162	15	5,558.211	5.367	.000
	Intra-groups		254,743.998	246	1,035.545		
	Total		338,117.160	261			
Fiscal Autonomy	Inter-groups	(Combined)	61.449	15	4.097	17.893	.000
	Intra-groups		56.322	246	.229		
	Total		117.771	261			

Table A4: Mean differences on the IVs per AC

Regressions

MODEL 1

Model	Non Standardized Coefficients		Standardized Coefficients		
	B	S.E.	Beta	t	Sig.
(Constante)	-6.436	2.024		-3.180	.002
Number of parties	.566	.165	.177	3.426	.001
Left cabinet	.523	.209	.124	2.498	.013
Economy t-1	.132	.028	.239	4.654	.000
Years same PM	.078	.021	.195	3.797	.000
Competences t-1	.007	.004	.118	1.901	.058
Majority	-.414	.226	-.092	-1.836	.068
Mid-term cabinet	-.083	.199	-.020	-.415	.678
LOG Population	2.234	.317	.397	7.058	.000
Fiscal Autonomy	.509	.172	.162	2.953	.003

MODEL 2

Model	Non Standardized Coefficients		Standardized Coeffi-cients		
	B	S.E.	Beta	t	Sig.
(Constante)	-6.118	1.919		-3.188	.002
Lagged Cabinet Size	.224	.041	.340	5.401	.000
Number of parties	.434	.159	.136	2.734	.007
Left cabinet	.552	.198	.131	2.780	.006
Economy t-1	.130	.027	.235	4.814	.000
Years same PM	.055	.020	.138	2.759	.006
Competences t-1	-.003	.004	-.049	-.735	.463
Majority	-.240	.216	-.053	-1.108	.269
Mid-term cabinet	-.330	.194	-.079	-1.697	.091
LOG Population	2.028	.302	.360	6.706	.000
Fiscal Autonomy	.393	.165	.125	2.386	.018

MODEL 3

Model	Non Standardized Coefficients		Coeficientes tipificados	t	Sig.
	B	S.E.	Beta		
(Constante)	-3.842	1.651		-2.327	.021
Lagged Cabinet Size	.589	.050	.584	11.890	.000
Number of parties	.324	.130	.103	2.496	.013
Left cabinet	.333	.164	.078	2.027	.044
Economy t-1	.140	.023	.253	6.007	.000
Lagged Economy t-1	-.005	.024	-.010	-.224	.823
Years same PM	.044	.016	.110	2.734	.007
Competences t-1	.001	.003	.020	.392	.695
Majority	-.210	.177	-.046	-1.186	.237
Mid-term cabinet	-.099	.158	-.024	-.628	.531
LOG Population	1.051	.277	.184	3.800	.000
Fiscal Autonomy	.189	.139	.059	1.364	.174

MODEL 4

Model	Non Standardized Coefficients		Standardized Coefficients	t	Sig.
	B	S.E.	Beta		
(Constante)	-2.756	1.636		-1.685	.093
Lagged Cabinet Size	.570	.048	.565	11.853	.000
Number of parties	.304	.128	.096	2.378	.018
Left cabinet	.275	.160	.064	1.721	.087
Economy t-1	.052	.031	.095	1.708	.089
Lagged Economy t-1	-.019	.026	-.034	-.735	.463
Years same PM	.045	.016	.111	2.838	.005
Competences t-1	.011	.004	.169	2.589	.010
Majority	-.035	.177	-.008	-.197	.844
Mid-term cabinet	-.095	.154	-.022	-.613	.540
LOG Population	.754	.282	.132	2.676	.008
Fiscal Autonomy	.422	.152	.131	2.774	.006
80s	.221	.381	.043	.580	.562
90s	-.009	.290	-.002	-.030	.976
10s	-1.564	.385	-.258	-4.058	.000

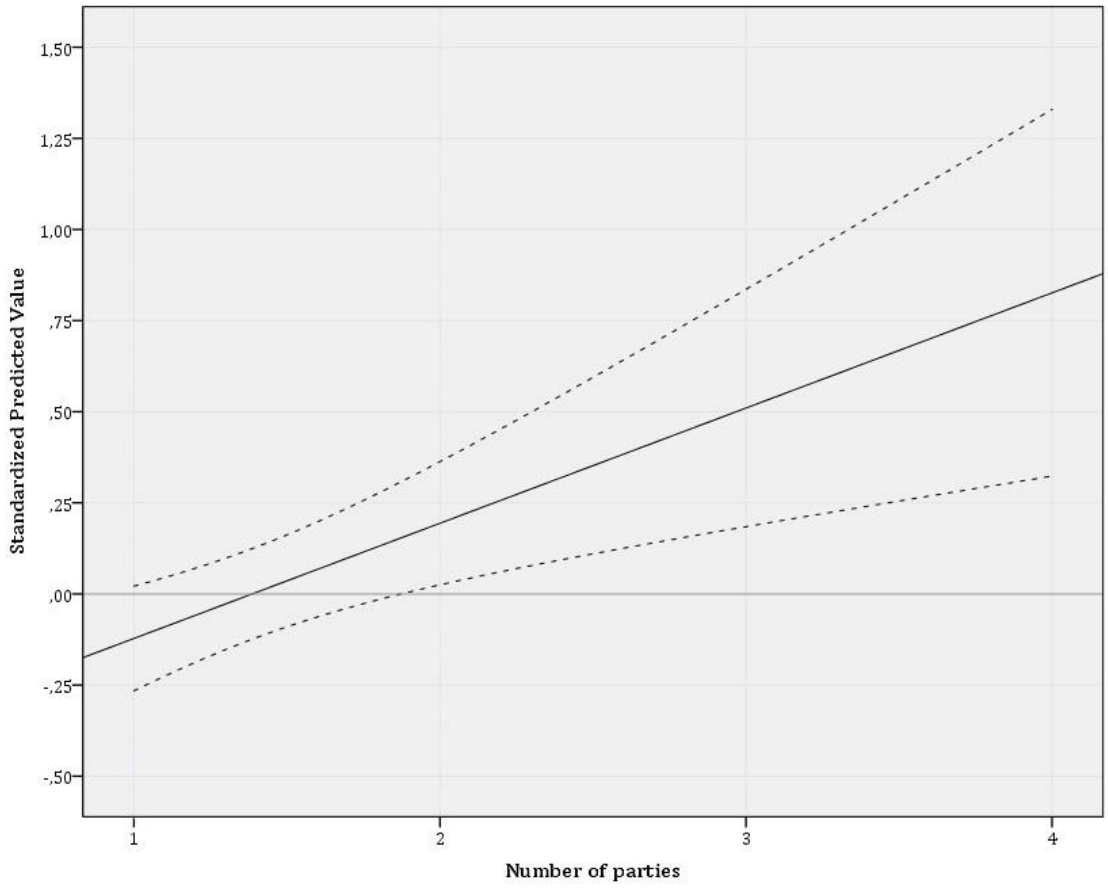
MODEL 5

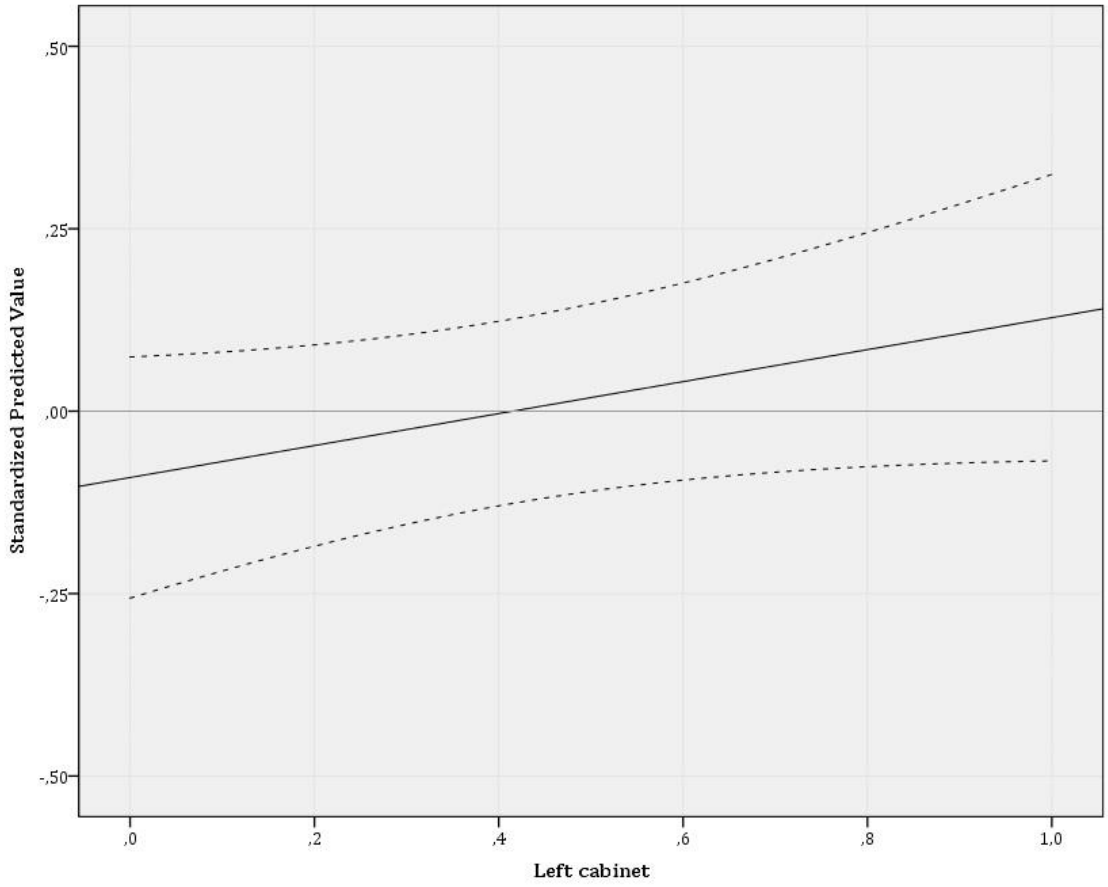
Model	Non Standardized Coefficients		Standardized Coefficients	t	Sig.
	B	S.E.	Beta		
(Constante)	-29.192	15.333		-1.904	.058
Lagged Cabinet Size	.425	.058	.421	7.269	.000
Number of parties	.160	.153	.051	1.049	.296
Left cabinet	.551	.216	.129	2.551	.011
Economy t-1	.142	.024	.258	5.886	.000
Lagged Economy t-1	.030	.025	.052	1.187	.237
Years same PM	.044	.017	.110	2.587	.010
Competences t-1	-.012	.006	-.171	-1.813	.071
Majority	.068	.206	.015	.329	.742
Mid-term cabinet	-.143	.159	-.034	-.896	.372
LOG Population	4.917	2.315	.858	2.124	.035
Fiscal Autonomy	.691	.338	.214	2.042	.042
Andalucía	1.031	.581	.118	1.775	.077
Aragón	2.968	1.563	.361	1.899	.059
Asturias	3.231	1.753	.346	1.843	.067
Illes Balears	4.850	1.992	.556	2.434	.016
Canarias	2.986	1.329	.372	2.246	.026
Cantabria	4.386	2.407	.470	1.822	.070
Castilla - La Mancha	2.173	1.251	.278	1.736	.084
Castilla - León	1.067	.922	.106	1.158	.248
Catalunya	2.150	.629	.230	3.417	.001
Comunitat Valenciana	1.182	.584	.131	2.025	.044
Extremadura	2.785	1.780	.276	1.564	.119
Galicia	3.035	1.000	.325	3.034	.003
La Rioja	4.994	3.033	.424	1.647	.101
Murcia	2.779	1.620	.355	1.715	.088
Navarra	3.557	2.470	.367	1.440	.151
Euskadi	2.201	1.322	.244	1.665	.097

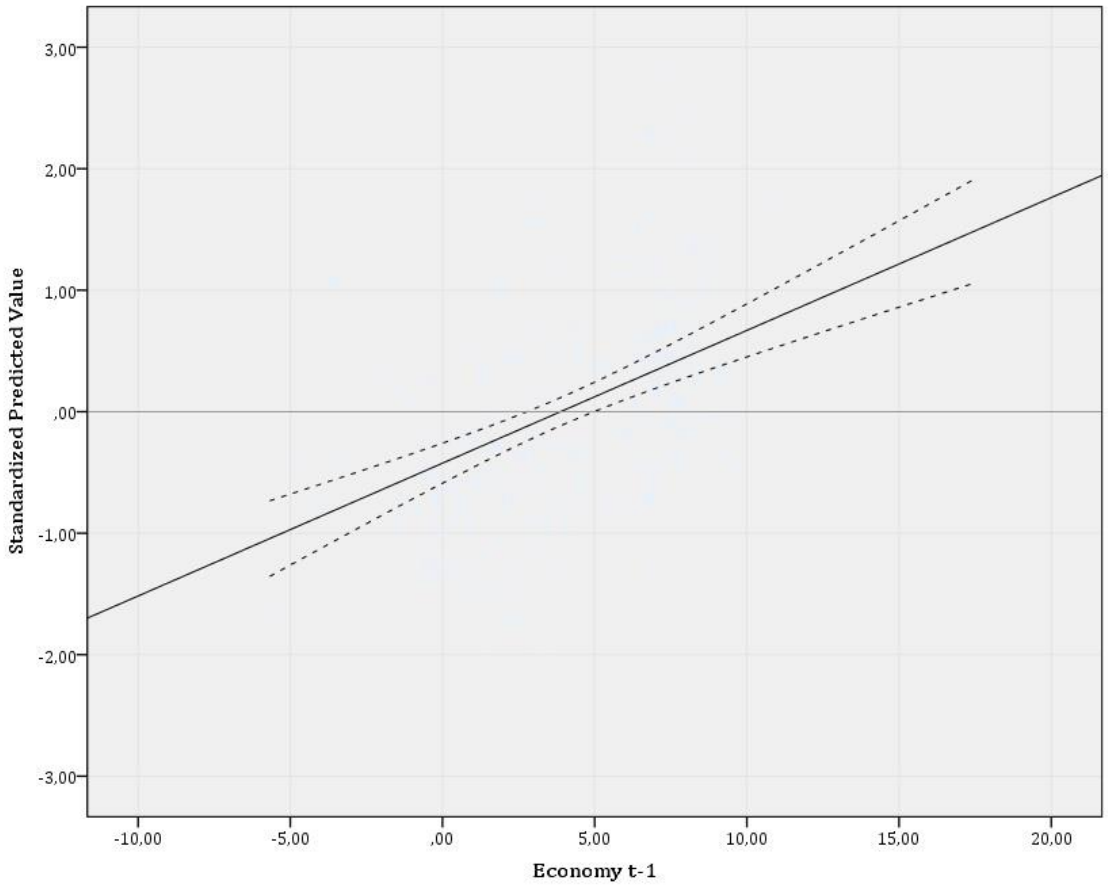
MODEL 6

Model	Non Standardized Coefficients		Standardized Coefficients	t	Sig.
	B	S.E.	Beta		
(Constante)	-43.102	15.857		-2.718	.007
Lagged Cabinet Size	.411	.057	.408	7.208	.000
Number of parties	.207	.148	.065	1.397	.164
Left cabinet	.446	.210	.104	2.123	.035
Economy t-1	.044	.032	.079	1.360	.175
Lagged Economy t-1	.002	.026	.003	.071	.944
Years same PM	.042	.017	.106	2.526	.012
Competences t-1	-.001	.008	-.017	-.147	.883
Majority	.109	.199	.024	.548	.584
Mid-term cabinet	-.136	.155	-.032	-.878	.381
LOG Population	6.939	2.358	1.211	2.942	.004
Fiscal Autonomy	.886	.341	.275	2.600	.010
80s	.032	.443	.006	.071	.943
90s	-.041	.326	-.009	-.126	.900
10s	-1.779	.398	-.294	-4.470	.000
Andalucía	.359	.625	.041	.575	.566
Aragón	4.074	1.576	.495	2.585	.010
Asturias	4.641	1.771	.497	2.621	.009
Illes Balears	6.428	2.001	.737	3.212	.002
Canarias	3.672	1.324	.458	2.774	.006
Cantabria	6.164	2.441	.661	2.525	.012
Castilla - La Mancha	3.094	1.256	.396	2.462	.015
Castilla - León	1.494	.923	.148	1.619	.107
Catalunya	1.385	.707	.148	1.959	.051
Comunitat Valenciana	.986	.585	.109	1.686	.093
Extremadura	4.199	1.801	.416	2.331	.021
Galicia	3.073	1.003	.329	3.065	.002
La Rioja	7.772	3.093	.661	2.513	.013
Murcia	3.906	1.637	.499	2.385	.018
Navarra	5.501	2.472	.568	2.226	.027
Euskadi	2.405	1.274	.267	1.888	.060

Marginal Effects



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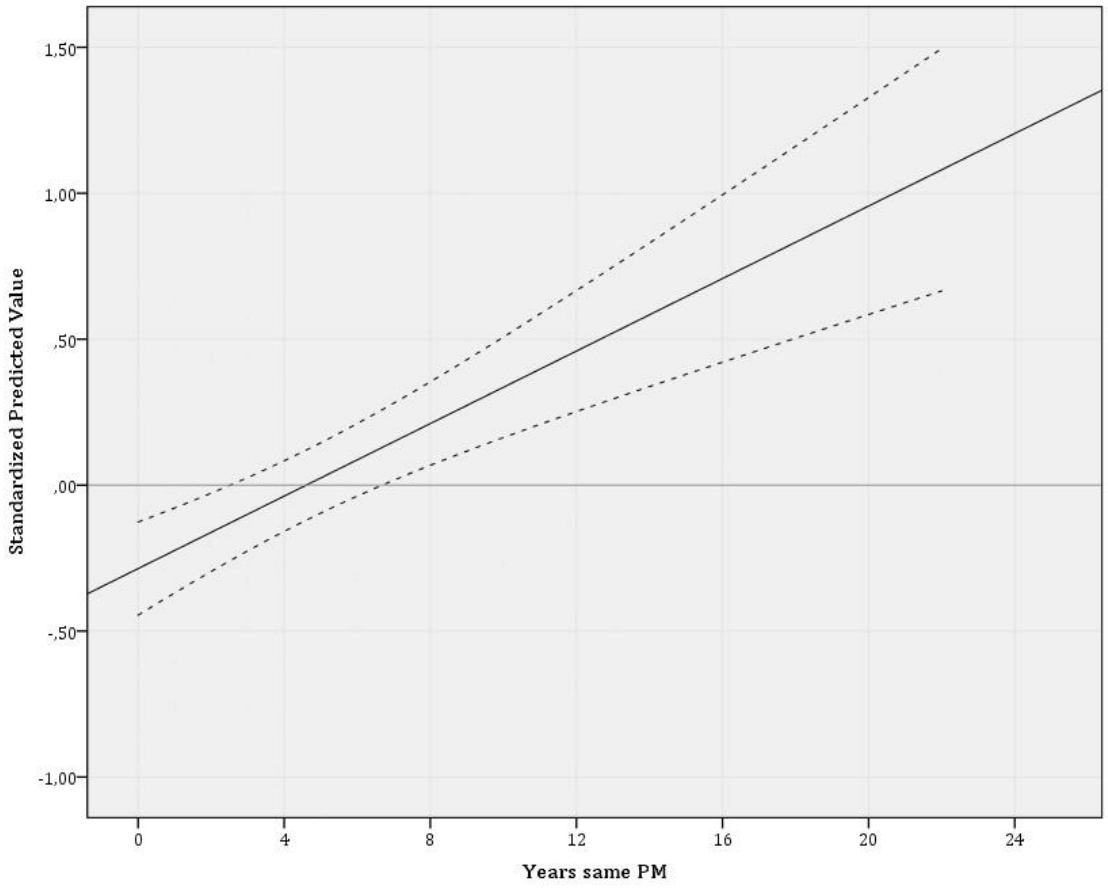
Economy t-1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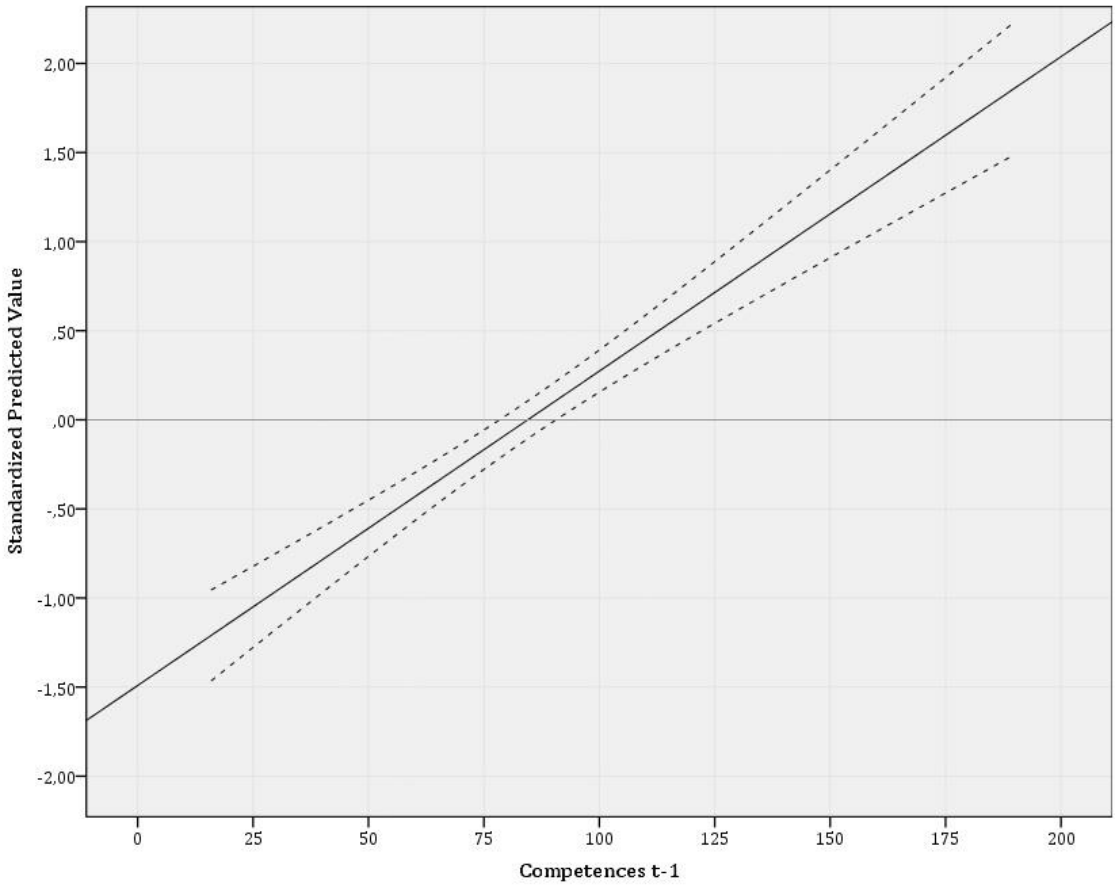
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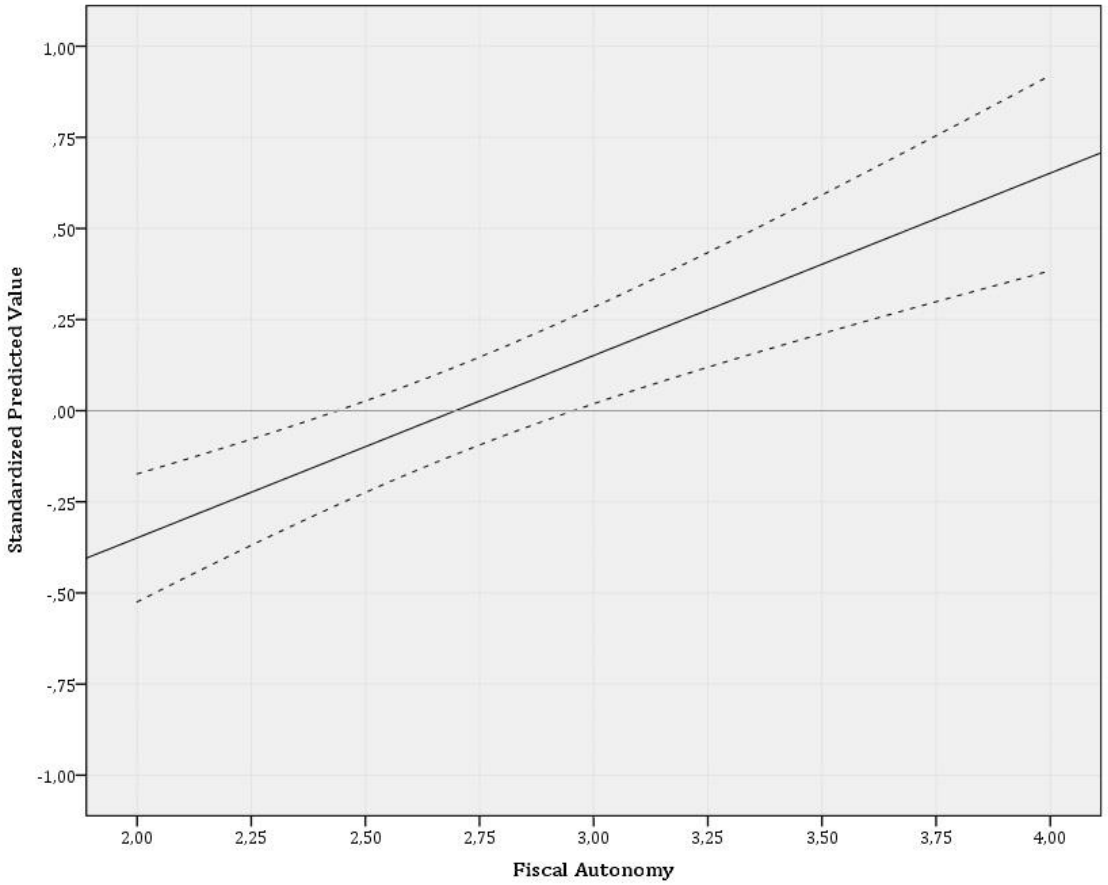
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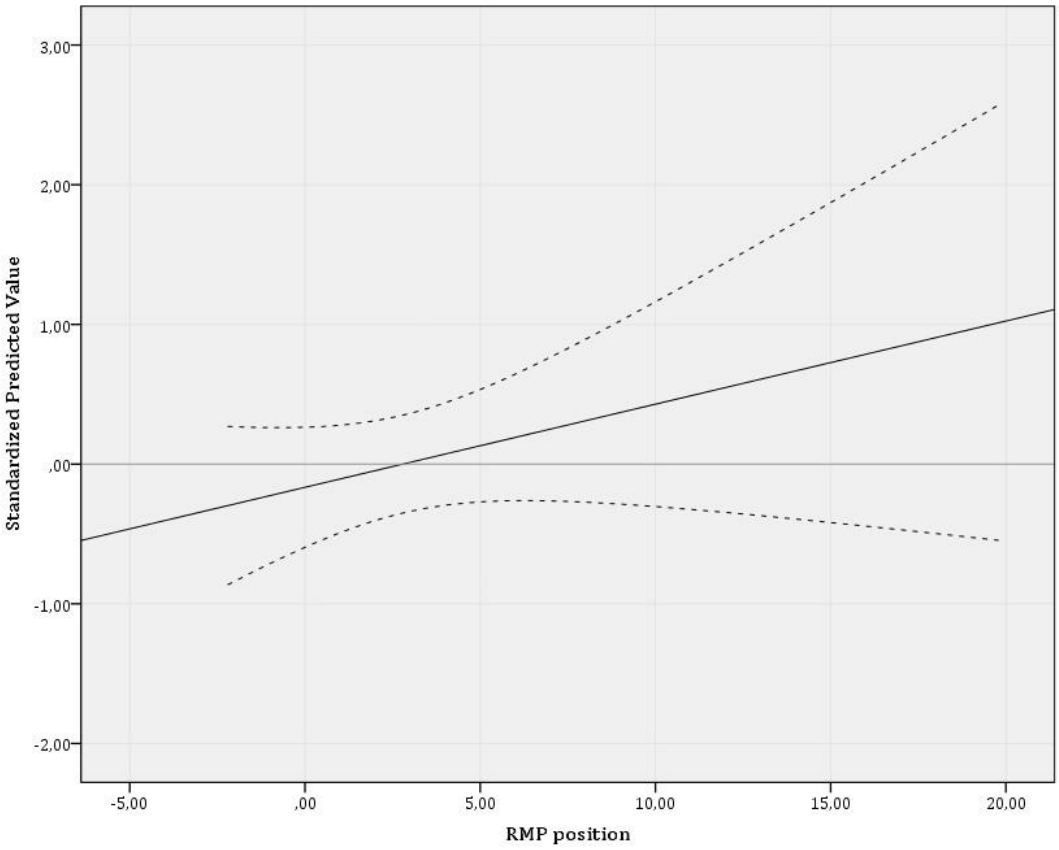
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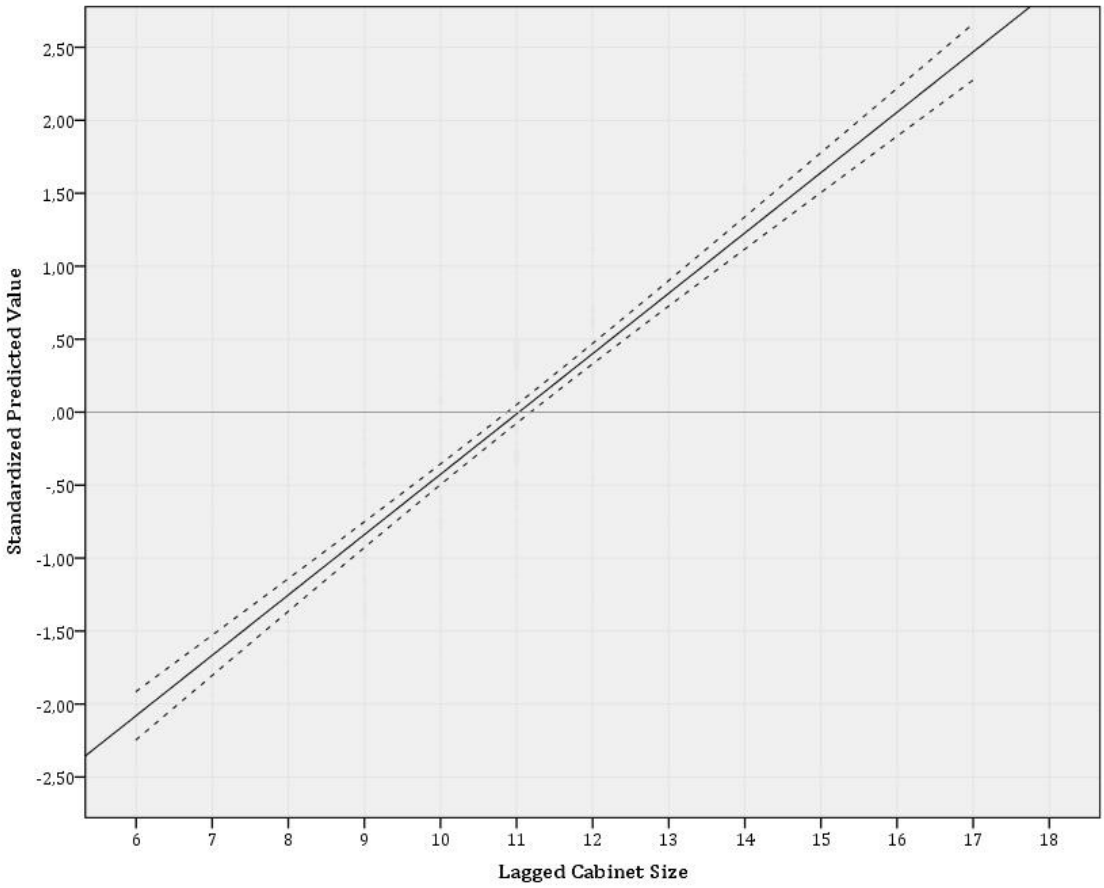
10,00
15,00
20,00
RMP position


2,50
2,00
1,50
1,00
,50
,00
-,50
-1,00
-1,50
-2,00
-2,50
Standardized Predicted Value
6
7
8
9
10
11
12
13
14
15
16
17
18
Lagged Cabinet Size

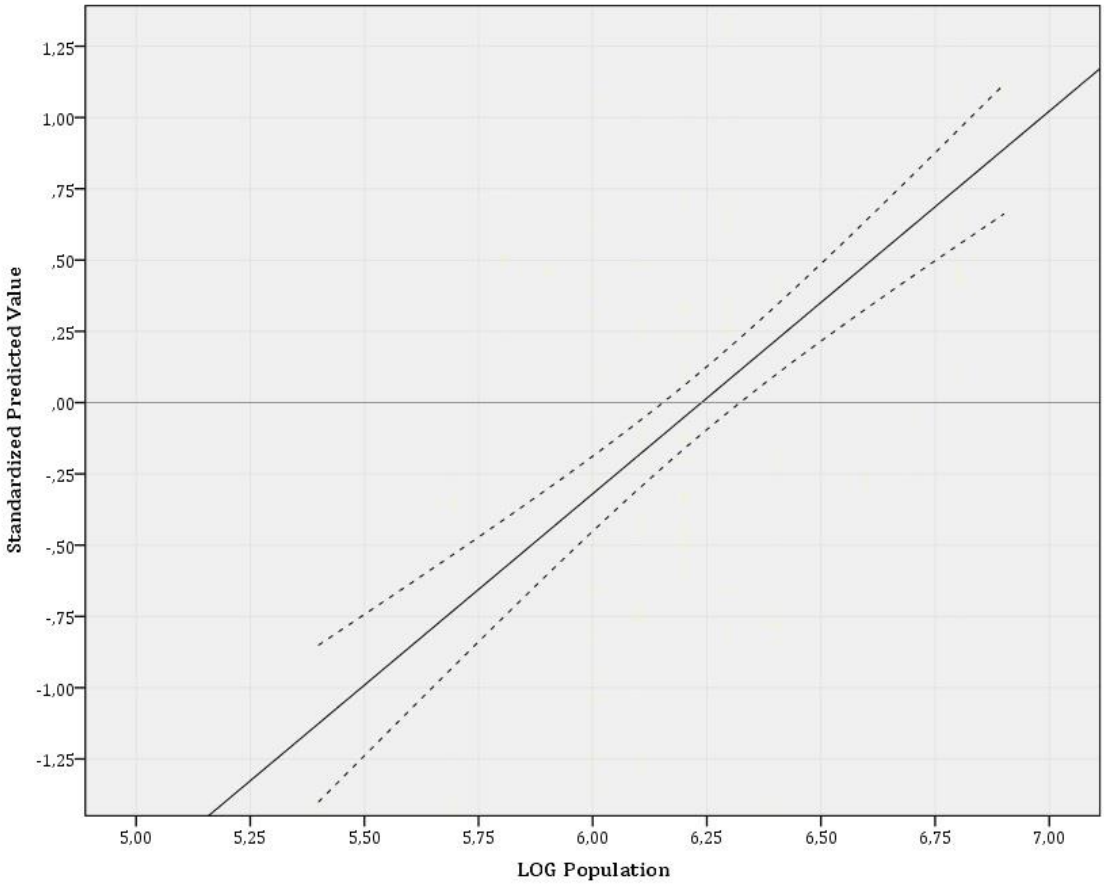


Figure A2: Marginal effects IVs over Cabinet Size in OLS regressions[1]

[1] All figures display marginal effects as of Model 6 in Table 3 except for RMP, whose results derive from Model 4 in Table 4.