

The short- and long-term effects of institutional reforms on party system nationalization

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Abstract

The impact of institutions on party system nationalization has traditionally been examined in a cross-national fashion. However, while in some cases institutional reform will immediately affect party nationalization, in other occasions changes will take place over the subsequent elections. In this paper we argue that reforms that affect mainly elite' coordination –such as decentralization– will take longer time to have an impact on party system nationalization, whereas reforms concerning also the demand side of parties –electoral system change– will have a more immediate effect. To test our arguments we use error-correction models considering party system nationalization in legislative elections since 1945 to 2012. Consistent with our arguments we show that both decentralization and the number of districts elected in the legislative power will have an impact on party system nationalization and that the timing of this effect will depend on the type of reform.

Keywords: party system nationalization, error-correction models, decentralization, number of districts.

[Word count: 7,899]

Introduction

Institutions are central to explain why some countries exhibit more nationalized party systems than others (Cox 1997; Cox 1999; Jones and Mainwaring 2003; Chhibber and Kollman 1998; Chhibber and Kollman 2004). In specific, two sets of arrangements have been addressed as the most relevant. On the one hand, political decentralization has been said to erode party system nationalization (Chhibber and Kollman 1998; Brancati 2008; Harbers 2010). On the other hand, electoral systems with small district magnitude or large number of districts are expected to deter nationalization, while upper tiers and national thresholds should increase nationalization, as long as they enforce statewide organizations (Cox and Knoll 2003; Simón 2013).

Nevertheless, empirical findings are, at best, mixed. For instance, district magnitude has been shown to erode nationalization in certain pieces of research (Cox and Knoll 2003), while in others the opposite direction has been suggested (Morgenstern, Swindle, and Castagnola 2011). Similarly, the evidence with regard to the percentage of seats elected in the upper tier is not clear (Simón 2013), and research addressing the relationship between decentralization and nationalization has found no conclusive proofs in Central and Eastern Europe (Bochsler 2010a) and in Western Europe (Lago-Peñas and Lago-Peñas 2011).

These mixed results can be driven by the very same nature of the research carried out until date, which has mainly relied on static analyses. Institutions are presumed to be stable over time, but while this approach seems sound, changes actually take place more often than what it is recognized (Bedock 2015). For example, although major electoral reforms are rare in Western democratic countries, small changes are commonplace: district magnitude, ballot structure and boundaries are often revisited, as well as the number of seats allocated in different tiers (Jacobs and Leyenaar 2011). Similarly, during the last decades Europe has experienced what has labeled as an “era of regionalization”, increasing political and fiscal decentralization (Hooghe, Marks, and Schakel 2010).

In this paper we use institutional reforms to address the relationship between institutions and party system nationalization from a dynamic perspective. This strategy will allow us to better identify the actual impact of the institutional settings on party systems (see Bowler and Donovan 2013) as well as to determine the speed at which party systems adapt to institutional reforms. Studies about party system nationalization are centered on pooled time series cross-national evidence but they tend to overlook the possibility of changes taking place after different elections. Only recently, literature (see Best 2012) has started to consider the possibility that institutional reforms do not necessarily will have consequences in the immediate election after the reform, but rather these may take place over a longer time span.

Party system nationalization is the consequence of a long term equilibrium which is reached when demand –i.e. territorial fragmentation (Rokkan 1970; Caramani 2004)– and supply –i.e. political institutions–, match a focal point. Accordingly, institutional

reforms should change the equilibrium, but the timing should differ depending on the nature of the reform. In the case of electoral reforms affecting proportionality (like district magnitude), we expect that coordination will take place in the short-term, as long as the reform will have an immediate *mechanical* effect. However, in the case of changes on the level of decentralization or the percentage of seats elected in an upper tier, the reform lacks this immediate mechanical effect and, instead, it requires a supply side coordination process. As a result, we expect that those changes will require a learning process and will have its effect diffused over the subsequent elections.

To address empirically this idea we estimate a series of error-correction models with data from several European countries that have undergone institutional reforms, to capture the short- and long-term effects of reforms on party system nationalization. Using two different measures of party nationalization we show that decentralization shows its effects on party system nationalization over longer period of time, while reforms in the number of districts elected take place in a shorter time-span. The paper is structured as follows. In the next section the main arguments are presented. In section three we introduce the methods and empirical indicators. In the following section the main results are discussed, and the last section concludes.

2. Arguments

Despite the long tradition of the concept (Schattschneider 1960; Rokkan 1970), only recently party system nationalization has re-entered in the research agenda (Cox 1999; Jones and Mainwaring 2003; Chhibber and Kollman 1998; Chhibber and Kollman 2004; Caramani 2004). This concept refers to the extent to which “politicians seeking election to the national legislature from different districts (...) run under a common party label” (Cox 1997, 186). This territorial connection of local party systems is usually conceptualized as a continuum depending on the degree to which parties are uniformly successful in winning votes across districts (Bochsler 2010b; Harbers 2010; Moenius and Kasuya 2004). Strongly nationalized party systems are those in which each party is similar across geographic units, while weakly nationalized party systems exhibit great variation in the vote share of parties across subnational units (Kasuya and Moenius 2008)

A crucial demand-side explanation of party system nationalization is based on the impact of territorial cleavages. The nationalization of party systems has been explained by the progressive erosion of the pre-industrial cleavages and the increasing importance of the socio-economic one (Caramani 2004). However, the nationalization process has been weaker in societies with relevant territorial cleavages –ethnic, religious or linguistic– (Sikk and Bochsler 2008; Bochsler 2010b; Bochsler 2010a) for two different reasons. First, because local parties face incentives to compete by their own representing their territorial electorates; second, because ethno-regional representation is incompatible with merging with parties from other districts, thus leading to territorially disconnected party system (Clark and Golder 2006; Lago and Montero 2009)

Institutions and party system nationalization

Despite the relevance of territorial cleavages at determining the degree of party system nationalization, the most part of the literature has been focused on the role of institutions (Morgenstern, Swindle, and Castagnola 2011). One of the most important institutional variables explaining party system nationalization is political decentralization. The degree of decentralization will determine the level where political decisions are taken, and therefore, the more centralized is the power, the higher the incentives for local parties and candidates to join into national parties, and voters to support them instead of a local but nationally noncompetitive party.

The causal mechanisms linking the level of decentralization and party system nationalization are twofold. First, voters are oriented towards the arena that affects their lives and, as the balance of power moves in favor of the central government, they will tend to support national parties since these will be the ones dealing with the policies they care about (Chhibber and Kollman 1998; Chhibber and Kollman 2004; Deschouwer 2006). Second, since the national government is a bigger prize than the regional one, local candidates will prefer to join into nationwide parties. This will provide them a greater influence in terms of policy-making, communication and will eventually increase their electoral prospects (Chhibber and Kollman 1998; Chhibber and Kollman 2004).

Conversely, when a country decentralizes, regional legislatures increase their power and make regional parties more likely to emerge and to participate in national politics, thus eroding party system nationalization (Brancati 2008). There are two different reasons for this. First, pre-existing regional parties will take advantage of the already created infrastructure at the regional level to compete also in the national one (Guinjoan 2014, chap. 3). Second, regional parties competing at the national arena will be able to influence the national agenda and policies through coalition bargaining in favor of their region (Falcó-Gimeno and Verge 2013). Despite this mechanism is partially different because it operates through regional parties the implication goes in the same direction: political decentralization will erode the nationalization of party systems.

The second main institutional component affecting party system nationalization is the electoral system. The crucial element that relates electoral system with party system size is district magnitude (Duverger 1954; Cox 1997; Clark and Golder 2006). Small district magnitude reduces the number of parties through the *mechanical effect* of electoral laws –the translation of the number of seats to votes that prevents minor parties from achieving representation (Duverger 1954)– and the *psychological effect* –parties' and voters' anticipation of the mechanical effect. Then, under the assumptions of short-term instrumental rationality and perfect information (Cox 1999), voters will be expected to desert minor parties through strategic voting, whereas parties will tend to coalesce or to withdraw from competition if they have no real chances of winning a seat (Cox 1997; Cox 1999).

Nevertheless, the effect of district magnitude on party system nationalization is still not clear. Cox and Knoll (2003) argue that district magnitude should have an impact on the nationalization through the number of wasted votes generated by the electoral system. “Politicians representing minority viewpoints in low-magnitude districts may fall short of their district’s threshold of representation and end up with nothing but wasted votes. Thus, they have a much greater incentive to combine votes across districts” (Cox and Knoll 2003, 3). On the contrary, large district magnitudes will reduce the number of wasted votes and will discourage parties from coalescing across districts, thus preventing party system nationalization.

However Morgenstern et al (2011) argued exactly the opposite. According to them, district magnitude should be positively related with the party nationalization, based on its connection with proportional representation (PR). In those systems under PR, wasted vote-winning competition is costly because winning a legislative seat requires fewer votes. The situation is reversed under single-member (SMD) district plurality: “Since a plurality is required to win a seat in SMD systems, parties may avoid spending the resources (good candidates, costs, and effort) to compete where they have little chance for winning” (Morgenstern, Swindle, and Castagnola 2011, 1327). Then, the positive impact of district magnitude on the party nationalization operates through parties’ strategic entry¹.

District magnitude is intrinsically linked with the number of constituencies in which a polity is carved up. There are three different arguments that link an increase in the number of districts of a polity with lower party system nationalization. First, some authors have argued that increasing the number of units makes more difficult the coordination among them (Nikolenyi 2009; Harbers 2010). Second, a high number of districts increases the likelihood that one of the constituencies is different from the others, thus boosting the costs of coordinate campaign strategies. In fact, “more districts should yield greater variability in terms of candidate qualities, which again should increase the distinctive of electoral districts” (Morgenstern, Swindle, and Castagnola 2011, 1328). Third, “compared to data from many small units, in a few larger territorial units electoral strongholds will not be any more as pronounced and not necessarily as recognizable” (Bochsler 2010b, 163).

Another element which can foster the nationalization of the party system is the presence of an upper tier to pool districts’ wasted or excessive votes. “Laws implementing upper tiers require an explicit legal linkage of the lists or candidates wishing to pool their votes at the stipulated higher level. Thus, they provide an obvious incentive to politicians to ally across district boundaries” (Cox 1999, 157). When there are many seats allocated in the upper district there is a clear potential electoral gain competing in a national fashion.

¹ This refers to “candidates and parties (which) decide whether or not enter a race partly on the basis on their chance of winning a seat (or) seats” (Cox 1999, 149). Therefore, in this case, the Duvergerian logic operates against a nationalized party system because parties will avoid wasting resources instead of competing nationally oriented.

Towards a dynamic explanation

Most of the research addressing the relationship between institutions and party system nationalization tend to be oriented in a cross-sectional fashion. Nevertheless, institutional changes may not only have an effect on the nationalization in the subsequent election, but also they can be distributed over the future (Tavits 2008; Riera 2013). Their effect on party system nationalization is driven by the perception of how a change in institutional rules drives a change in voters and parties' incentives to compete nationally oriented.

Until date, the majority of research has underline that modernization and the inclusion of peripheries in the political process will lead to a progressive nationalization of the electorates (Caramani 2004; Bochsler 2010a). However, institutions may change and then the equilibrium is temporarily disrupted, for becoming again equilibrated at a new point where voters and parties adapt their behavior². Thus, both major and minor institutional reforms (Jacobs and Leyenaar 2011; Bedock 2015) will lead to changes but the timing of their effects remains unknown³.

In our view the timing of the effects is driven by the extent to which mechanic considerations of the reforms create urgency in adapting to the new rules (Cox 1997; Cox 1999). In the case of electoral reform both strategic entry and strategic voting are the product of repeated interactions in a context in which the translation of votes into seats is driven by some degree of disproportionality (Riera 2013). In this situation the mechanical effect operates pushing for a quickly coordination and a change in the national/regional orientation of political parties. In fact, if they fail to anticipate the effect of electoral reforms they will have an important penalty in terms of representation (Andrews and Jackman 2005). Thus, reforms affecting district magnitude or the number of districts will have an immediate effect on party elites and voters' strategic behavior and, therefore, party system nationalization will quickly change to adapt to the new context.

However, other institutional reforms may have consequences on party system nationalization in a larger time-span. This could be, firstly, because some institutional reforms entail a potential gain in terms of seats but do not put into risk parties' electoral prospects. For instance, when the number of seats allocated in the upper tier is increased, parties can consider cross-district alliances to gain extra seats in the legislature (Cox 1999). However, this process is not automatic, but it involves a second stage of coordination for which we expect a longer period of adaptation. Moreover, such

² This rationale is the same as in the case of strategic behavior under electoral rules. When voters and parties vote and coalesce around M+1 (being M district magnitude) the system reaches a Duvergerian equilibrium in which there are no incentives for strategic voting and only viable parties are expected to compete.

³ It is important to stress that this argument is not related with the level of organizational strength and institutionalization of the party system (Olson 1998; Mainwaring and Zoco 2007). Institutional reforms are not necessarily taken in a context of instability but can be the product of very different intrinsic and extrinsic factors (Shugart and Wattenberg 2001).

reform may not put into danger the party's survival but only deteriorate its electoral expectations; then regional parties may consider that competing nationally-oriented would deprive the support of their regional bases and, as a consequence, do not change their territorial orientation (Brancati 2008).

Secondly, when institutional reforms entail a reallocation of power across different levels, incentives for changing the structure of party competition are not immediate either. If centralization increases, it should take a time for local politicians to realize that the national level is now more powerful and that competing under a national brand they will have better electoral prospects (Chhibber and Kollman 1998). If voters desert regional parties in favor of national competitive parties as well, this process should involve time until they understand the new rules. Moreover, in multilevel environments voters require a learning process to learn where the power is allocated and who is the responsible for each policy area (León 2012). Thus, we expect the effects of territorial reforms to take some time until a new equilibrium is reached.

The dynamic approach can not only shed light into the speed at which institutional reforms will affect party system nationalization, but it may also contribute at elucidating the direction of this impact. Concerning decentralization, some scholars have confirmed its effect at eroding party system nationalization, either alone (Chhibber and Kollman 1998; Brancati 2008; Harbers 2010) or in interaction with the electoral system (Simón 2013). However, other studies have failed in establishing a direct causality (Bochsler 2010a; Lago-Peñas and Lago-Peñas 2011). Similarly, in the case of district magnitude, some studies have found that SMD systems and the number of districts erode party system nationalization (Morgenstern, Swindle, and Castagnola 2011) while others have found exactly the opposite (Cox and Knoll 2003).

To sum up, although institutions have been shown to affect party system nationalization, the literature still lacks a dynamic perspective that assesses the speed at which institutional reforms will affect it. Hitherto we have argued that this will chiefly depend on whether the reform affects or not the anticipation of the mechanical and the psychological effects among party elites and voters. When effects are immediate –such as reforms affecting electoral proportionality–, we expect a quickly coordination; however, when reforms entail strategic considerations or processes of coordination across districts, then we expect the effect to be distributed over future elections.

Table 1 summarizes the expectations that each institutional reform will imply concerning both the impact on party system nationalization –whether positive or negative– and the speed at which this impact will take place. We expect reforms on the percentage of seats elected in an upper tier and decentralization to take place over several elections, but while the first will boost nationalization, the second one will decrease it. An increase in the number of districts is expected to quickly reduce party system nationalization, whereas changes in the district magnitude will take place in the short-run although its impact is unclear.

[Table 1 about here]

Data and methods

In order to test hypotheses linked with the dynamic effect of institutional change on party system nationalization we will focus on data coming from electoral reforms taken place in European countries. We center our analysis into this region because we need the number and intensity of cleavages to remain stable over time, and this region is the one that better fits this requisite (Caramani 2004; Bartolini and Mair 1990). Moreover, our research design needs an institutionalized party system with low inter-election volatility and parties with important degrees of organizational strength. These elements, which have been precluded by some cross-national studies, advice in favor of selecting European countries.

To test our arguments we will use two different measures of party system nationalization. Until date, the literature has used up to four different families of nationalization indices: indices of frequency; of variance; of distribution; and inflation measures (Bochsler 2010b, 159–160). Among these, there are over 16 different indices of static nationalization (see Bochsler 2010b) and at least another one which is focused on dynamic or inter-electoral nationalization (Morgenstern, Swindle, and Castagnola 2011). Despite from a conceptual point of view it can be argued that they are different measures (see Lago and Montero 2014), we will check the robustness of our estimates by using the two more popular measures among scholars, i.e. the inflation and the distribution indices.

First, inflation measures (Cox 1997; Cox 1999) are based on the comparison between the party system at the national and the district level. The most popular of these inflation indices is calculated as the difference between the effective number of parties⁴ at the national level and the average of the number of parties competing at the district level. Therefore, as deviation becomes higher, the inflation of the national party system also increases and the nationalization is lower. This index, that we label *Party System Inflation* (PSI), has been broadly employed and discussed in the literature (Bochsler 2010b). It is operationalized as follows:

$$PSI = ENP_{nat} - ENP_{avg}$$

Where:

ENP_{nat} is the effective number of parties at the national level

ENP_{avg} is the average of the number of parties at the local level

⁴ The effective number of parties is calculated as follows: $ENP = \frac{1}{\sum_{i=1}^n p_i^2}$, where p is the proportion of votes obtained by party i in the election (Laakso and Taagepera 1979) .

Second, we also employ the most recently created index in the literature, the *Standardized and Weighted Party System Nationalization Score* (PSNS). This indicator, which belongs to the family of distribution indices, is based on the transformation of a Gini coefficient into a measure of the territorial vote distribution of a political party. In the case of an homogeneous distribution (high party nationalization), every territorial unit will cast a number of votes for this political party which is approximately proportional to the unit's size, or the party will win a similar vote share in every territorial unit. In the case of heterogeneous vote distributions, however, most of the votes are concentrated in a few territorial units (Bochsler 2010b). It is operationalized as follows:

$$PSNS = \sum_{i=1}^n PNS_i \cdot p_i$$

Where p_i is the party's share of the national vote.

Concerning the independent variables we rely on data from different databases focusing on institutional reforms. First, we operationalize the degree of decentralization through data coming from the project Electoral System Changes in Europe (ESCE), coordinated by Alan Renwick and Jean-Benoit Pilet. The project is covering all cases of electoral system changes in Europe since 1945. A wide range of dimensions of the electoral system is registered, such as the number of districts, district magnitude or the percentage of seats elected in an upper tier. The observations are legislative terms and the time-span considered for the analysis for each country ranges from the second election after WWII (or the second election after the transition to democracy) and until 2012.⁵

For what concerns the level of decentralization we rely on the Regional Authority Index by Hoogue et al. (2008). The measure encompasses two different dimensions of regional authority, shared rule –competences shared between the national and the regional government– and self-rule –the ones owned exclusively by the subnational government. This measure allows us overcoming two commonplace problems among scholars working on decentralization. First, in measuring decentralization, some scholars have taken into account only the level of expenditure and revenues of the subnational institution while omitting other dimensions crucially related to the regional power (Chhibber and Kollman 1998; Chhibber and Kollman 2004; Cox and Knoll 2003). Second, other scholars have simplified the measures of regional authority to mere dichotomous variables (Brancati 2008; Harbers 2010), thus obviating the rich variation in self-government over time and across different polities. The variable in our database ranges from 0 (e.g. Czech Republic between 1992 and 1998, or Ireland between 1948 and 1987) to 32.2 (Belgium, 1991-1995), corresponding the higher values to the most decentralized countries.

⁵ We exclude foundational elections. The first post-war elections were often held to elect members of constituent assemblies which often contemplated changes in the electoral rules (most notably assembly size) in a context of extreme uncertainty.

Consistent with previous research (see, for instance, Cox 1997; Simón 2015) we have logarithmically transformed the number of districts and the mean of district magnitude, to better identify a linear relationship with our dependent variables. Finally, the variable Upper Tier is the percentage of seats elected in the PR bound in mixed-member systems (MMS). The variable ranges from 0, corresponding to all countries without MMS, to 60.66 (Austria, 2008). The source for the three variables is the project Electoral System Changes in Europe (ESCE).

Table 2 summarizes the number of institutional changes experienced in the 22 countries in Western and Eastern Europe that have undergone a reform on their electoral system or in the level of decentralization, as well as the first election for which we have data and the number of elections included in the analysis.

[Table 2 about here]

Additionally, table 3 displays the summary statistics for the countries under analysis.⁶

[Table 3 about here]

In performing the empirical analysis our strategy is to include all the institutional and organizational changes occurred, irrespective of the dimension of the shift. For instance, as a major change we have the 1994 Italian electoral reform that substituted the PR system for a mixed member system, and which entailed an increase in the number of constituencies and the *scorporo* or upper tier; or the substitution of the run-off system by a proportional system in the French V Republic. We put together these major changes with minor adjustments in the number of constituencies (as in the United Kingdom) or in district magnitude (Sweden, Switzerland or Ireland).

The strategy is quite similar in the case of decentralization reforms⁷. The general trend has been to increase the powers of the regional governments, but while there are countries that have suffered only minor changes in the level decentralization (for instance, Austria in 1986 or Germany in 1990), in others there has been a drastic change (Italy, in 1972, with its process of regionalization; or Belgium with its major federal reform in the seventies).

Error-correction models

⁶ Data are from Constituency Level Elections Archive (CLEA)

⁷ Many reforms take place out of one election year. The strategy followed has been to place the reform as linked to the first election when this decentralization reform is applied.

To assess the short- and the long-term impact of changes in the electoral system or in the level of decentralization of a country on party system nationalization we will make use of an error-correction model (ECM). Error-correction models are able to estimate the speed at which a given dependent variable changes to return to equilibrium after the administration of a treatment –in our case, an electoral reform or change in the level of decentralization– (De Boef and Keele 2008).

The basic form of an error-correction model is as follows:

$$\Delta Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_0 \Delta X_t + \beta_1 X_{t-1} + \varepsilon_t$$

Where α_1 (the lagged level of the dependent variable) represents the speed at which X and Y will return to an equilibrium situation state after the administration of a treatment; β_0 captures the impact of a change of X on Y at time = 1; while β_1/α_1 will provide us with the long-run multiplier (LRM), this is, the total change in Y distributed over future time periods occurred after several unit changes in X. We will directly estimate the LRM and its standard error through the transformation proposed by Bewley (1979).

The ECM will therefore allow us assessing the immediate effect of a change in the electoral system or in the level of decentralization on the two measures of party system nationalization, as well as the impact of this change over the upcoming elections, and the total amount of change that the change may impinge. ECM therefore are perfectly suited for the purpose of this research.

We will run four different specification models on Party System Inflation (D). The first one includes only decentralization as a covariate, the second and the third models include all variables related to the electoral system. Given the high correlation between the (log)number of districts and the (log)district magnitude (-0.77, significant at the 0.001 level) in each model we only include of the these covariates. Model four pools together all the independent variables except for the (log) district magnitude. We eliminate the (log) district magnitude and instead keep the (log) number of districts given the higher predictive power of this later variable in the previous models.

Therefore:

$$\text{Model 1: } \Delta D_t = \alpha_0 + \alpha_1 D_{t-1} + \beta_0 \Delta \text{Decentralization}_t + \beta_1 \text{Decentralization}_{t-1} + \varepsilon_t$$

$$\text{Model 2: } \Delta D_t = \alpha_0 + \alpha_1 D_{t-1} + \beta_0 \Delta \log \# \text{ districts}_t + \beta_1 \log \# \text{ districts}_{t-1} + \beta_2 \Delta \text{Upper tier}_t + \beta_3 \text{Upper tier}_{t-1} + \varepsilon_t$$

Model 3:

$$\Delta D_t = \alpha_0 + \alpha_1 D_{t-1} + \beta_0 \Delta \log \text{ district magnitude}_t + \beta_1 \log \text{ district magnitude}_{t-1} + \beta_2 \Delta \text{Upper tier}_t + \beta_3 \text{Upper tier}_{t-1} + \varepsilon_t$$

$$\text{Model 4: } \Delta D_t = \alpha_0 + \alpha_1 D_{t-1} + \beta_0 \Delta \text{Decentralization}_t + \beta_1 \text{Decentralization}_{t-1} + \beta_2 \Delta \log \# \text{ districts}_t + \beta_3 \log \# \text{ districts}_{t-1} + \beta_4 \Delta \text{Upper tier}_t + \beta_5 \text{Upper tier}_{t-1} + \varepsilon_t$$

We will use the same specification models to test the robustness of our results with the measure of Party System Nationalization (PSNS).

Results

Table 4 displays the results of the four different ECM on Party System Inflation (PSI).

[Table 4 about here]

The estimates of the short-term effects tell us the immediate effect on the PSI of a one unit change in the level of decentralization, the (log) number of districts, the (log) average district magnitude and the percentage of seats elected in the upper tier in MMS. The models show that only an increase in the (log) number of districts elected in the country will have a short-term positive impact on the PSI.

When we take a longer view of changes in party system inflation we realize that although institutional reforms will hardly have a significant impact in the short-term, in the mid- and in the long-term they will indeed have an effect on the party system inflation. As it can be expected, the (log) number of districts in the country is also relevant in the long-term. In addition to this variable, now the level of decentralization of the country appears to be a powerful predictor of party system inflation. Regarding the coefficient for the (log) district magnitude, the variable is significant neither at the short- nor at the long-term, but the total long-term effects show that a shift in district magnitude, if any, will have a negative impact on party system inflation. This finding would support the evidence found by Morgenstern et al (2011) while challenging findings from Cox and Knoll (2003). Finally, a unit change in the percentage of upper seats elected in a MMS appears neither to boost nor to reduce party system inflation at the short- or the long-term.

Figure 1 displays the short- and the long-term effects of an institutional change for decentralization and the (log) number of districts. The dotted line signals the overall impact of the institutional reform on party system inflation.⁸ The plots clearly show that, in line with our expectations, a change in the level of decentralization will gradually increase party system inflation, whereas the impact of a unit change in the (log) number of districts will be much faster.

[Figure 1 about here]

⁸ We will plot the impact of a unit change in X on the PSI based on the univariate error-correction models. By doing this we allow the lagged level of the dependent variable α_1 –that indicates the speed at which a variable will return to equilibrium– to vary across the different independent variables.

Next we test the robustness of our results by running the same ECM on the Party System Nationalization Score (PSNS). Recall that this is a measure of nationalization instead of inflation and therefore we expect the opposite coefficients than previously. Table 5 shows the results of these new series of ECM.

[Table 5 about here]

The evidence is fairly consistent with the previous findings. At the short-term only a change in the (log) number of districts will have an impact on the party system nationalization. At the long-term, also a change in the degree of decentralization will have a (negative) impact on the nationalization. Neither a change in the (log) district magnitude nor in the seats elected in the upper tier will have any substantive impact on our dependent variable at the short- or the long-term. Only a change in the upper tier seems to have a positive total long-term effect, as some literature had pointed.

Figure 1 plots the short- and the long-term effects of an institutional change for decentralization and the (log) number of districts on party system nationalization. The two figures are reasonably similar to the ones obtained when assessing party system inflation.

[Figure 2 about here]

Finally, in order to facilitate the understanding of the short- and the long-term impact of a unit change in the level of decentralization and the (log) number of districts on party system inflation/nationalization, Figure 3 plots the percentage of the total long-term effect achieved by year after the reform took place. The plot clearly shows that changes in the level of decentralization will more gradually affect party system nationalization than changes in the (log) number of districts. Indeed, the first year's impact of a change in the level of decentralization will modify between the 10% and the 30% of the total change, while the first year's change for the (log) number of districts will range from the 50% to the 70%. The evidence holds both for the inflation and the nationalization measure.

[Figure 3 about here]

The argument can be easily understood if we take as an example the case of Italy, a polity that has suffered several institutional reforms. According to the 1948 constitution, in Italy, there were only five regions with directly elected government, but a constitutional reform in 1970 expanded the number of elected regions up to 25 and provided them with powers in urban planning, health, education or culture (Hooghe, Marks, and Schakel 2010). According to the expectations suggested above, the party system should have progressively denationalized over the subsequent elections.

The case fits well with our expectations and findings. The emergence of important regionalist parties like the *Lega Nord*, among others, took place in 1991, a decade later the decentralization reform took place. The party was founded as the amalgamation of several regional parties, the most important of which the Lombard and the Venetian League, both founded during the eighties (Diamanti 1996; Giordano 2000). The *Lega Nord* took advantage of the preexisting regional institutions to deploy a new regionalist discourse for the north of Italy, the so-called “Padania” (Biorcio 1997), which eventually denationalized the Italian party system.

A second important institutional reform took place several years later, on this case concerning the electoral system. Italy enacted in 1993 a mixed member system called *Legge Mattarella*. In it, 475 seats (75% of the total) were distributed with plurality rule, while the rest was allocated in 26 multimember regional districts with a national threshold of 4% of the votes (Richard S Katz and Mair 1995; D’Alimonte 2005). Considering that the number of districts increased, we would expect coordination among political parties to decrease.

Evidence suggests, again, that this was the case. During the period in which this MMS was used, the level of nationalization of the party system quickly changed. Indeed, although 80% of the constituencies moved to a bipolar competition from 1994 to 1996 (Reed 2001), there were mostly local parties the ones that survived (R. S. Katz 1996), thus depleting party system nationalization.

Conclusions

Institutional arrangements play a crucial role at determining the level of party system nationalization. Although the growing interest of political science on this field during the recent years, the number of papers dealing with this issue are scarce and the empirical evidence still provides numerous conflictive results. These papers, moreover, approach to the phenomenon through pooled time series cross-national analysis, thus overlooking the possibility of changes to take place over large periods of elections. In contrast, our approach to the field using error-corrections models allows us to assess both the short- and the long-term impact of institutional changes on party system nationalizations.

We make use of data from the Electoral System Changes in Europe (ESCE) in 22 Western European countries and up to 263 elections since the second election after WWII and until 2012. We include both major and minor reforms, thus increasing the

number of changes in our institutional designs. We test our arguments through a measure of party system inflation and check the robustness of our findings through a dispersion measure.

Eventually, the ECM provides us clear evidence in favor of decentralization reforms depleting party system nationalization, as we were expecting; but evidence stresses that its effect is stronger in the long run. The models also show us that increasing the number of districts will also have a constraining effect on the nationalization of the party system both in the short- and the long-run. In contrast, changes in district magnitude appear to have no significant effect on the aggregation of party systems, whereas changes in the percentages of seats in an upper tier do not seem to increase party system nationalization, as some scholars had shown previously.

In sum, this paper has shown that some electoral reforms may immediately affect party systems, but others can have its effect diffused over the subsequent elections. Scholars focusing on the effect of institutions on political systems have largely relied on comparisons across countries, thus leading to a quite pessimistic view of institutional changes being able to drive real movements on political representation. However, cross-country comparisons are flawed if they do not consider the over time dynamic changes within countries. Political actors tend to adapt their behavior to the new institutional environments, but far from being immediate changes, these often occur throughout longer periods. Future scholars on electoral institutions should deep on the idea that in order to understand better institutional changes, the short- and long-run effects should be considered simultaneously.

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Tables

Table 1. Expected impact and speed of reforms on party system nationalization

		<i>Impact</i>	
		<i>Positive</i>	<i>Negative</i>
<i>Speed</i>	<i>Slow</i>	Upper Tier	Decentralization
	<i>Quick</i>	Number of districts	
		District Magnitude	

Table 2. Changes in decentralization and in the electoral system across countries

Country	First election	# Number of elections	Δ Regional Authority	Δ # of districts	Δ District Magnitude	Δ Upper Tier
Austria	1953	18	1	2	1	17
Belgium	1950	15	3	1	1	0
Czech Republic	1996	4	1	1	1	2
Denmark	1950	24	2	2	5	2
Estonia	1999	2	0	1	0	0
Finland	1951	16	1	0	0	0
France	1973	8	2	6	2	0
Germany	1957	15	4	1	12	0
Greece	1981	8	2	0	0	0
Hungary	1998	4	1	0	0	0
Iceland	1949	15	0	1	2	2
Ireland	1951	17	2	5	6	0
Italy	1953	12	6	2	4	6
Netherlands	1952	18	1	0	1	0
Norway	1953	15	1	2	5	2
Poland	1993	4	1	3	2	1
Portugal	1979	11	2	1	2	0
Romania	1996	2	1	0	2	0
Spain	1982	9	3	0	0	0
Sweden	1952	18	1	1	3	2
Switzerland	1951	12	0	1	3	0
United Kingdom	1951	16	4	7	0	0
TOTAL		263	39	37	52	34

Table 3. Summary statistics

	Observations	Mean	Standard deviation	Min	Max
<i>Inflation</i>	263	0.134	0.129	0.001	0.698
<i>PSNS</i>	263	0.797	0.091	0.498	0.945
<i>Regional Authority</i>	263	9.941	7.468	0.000	32.200
<i>(log) Number of districts</i>	263	3.357	1.435	0.000	6.491
<i>(log) District Magnitude</i>	263	2.172	1.116	0.000	5.011
<i>Upper Tier</i>	258	9.006	14.048	0.000	60.660

Table 4. The determinants of party inflation

	Decentralization (1)	Electoral systems (2)	Electoral systems (3)	Pooled (4)
<i>Short-term effects</i>				
Δ Decentralization	0.002 (0.003)			0.001 (0.003)
Δ (log) # districts		0.097*** (0.014)		0.100*** (0.014)
Δ (log) DM			-0.006 (0.020)	
Δ Upper tier		-0.001 (0.001)	0.002 (0.001)	-0.002 (0.001)
<i>Long-term effects</i>				
Inflation _{t-1}	-0.283*** (0.058)	-0.290*** (0.050)	-0.265*** (0.051)	-0.308*** (0.058)
Decentralization _{t-1}	0.006*** (0.002)			0.004** (0.002)
(log) # districts _{t-1}		0.040* (0.016)		0.045** (0.016)
(log) DM _{t-1}			-0.016 (0.018)	
Upper tier _{t-1}		-0.000 (0.001)	0.001+ (0.001)	-0.000 (0.001)
<i>Total long-term effects</i>				
Decentralization	0.022*** (0.002)			0.013*** (0.001)
(log) # districts		0.138*** (0.014)		0.145*** (0.014)
(log) DM			-0.059*** (0.017)	
Upper tier		-0.001 (0.001)	0.005*** (0.001)	-0.001+ (0.001)
Constant	-0.023 (0.017)	-0.089+ (0.046)	0.060 (0.039)	-0.143** (0.052)
Observations	253	245	244	236
R ²	0.109	0.271	0.121	0.282

Standard errors in parentheses

+p<0.1, * p<0.05, ** p<0.01, *** p<0.001

Table 5. The determinants of party system nationalization (PSNS)

	Decentralization (1)	Electoral systems (2)	Electoral systems (3)	Pooled (4)
<i>Short-term effects</i>				
Δ Decentralization	-0.003 (0.002)			-0.003 (0.002)
Δ (log) # districts		-0.034** (0.011)		-0.032** (0.011)
Δ (log) DM			-0.011 (0.015)	
Δ Upper tier		0.000 (0.001)	-0.001 (0.001)	0.000 (0.001)
<i>Long-term effects</i>				
Inflation _{t-1}	-0.354*** (0.061)	-0.348*** (0.050)	-0.330*** (0.050)	-0.385*** (0.057)
Decentralization _{t-1}	-0.005*** (0.001)			-0.004** (0.001)
(log) # districts _{t-1}		-0.017 (0.011)		-0.020 (0.012)
(log) DM _{t-1}			0.002 (0.013)	
Upper tier _{t-1}		0.001 (0.001)	0.000 (0.001)	0.001 (0.001)
<i>Total long-term effects</i>				
Decentralization	-0.014*** (0.001)			-0.009*** (0.001)
(log) # districts		-0.049*** (0.011)		-0.051*** (0.011)
(log) DM			0.005 (0.013)	
Upper tier		0.002*** (0.001)	0.000 (0.001)	0.002*** (0.001)
Constant	0.335*** (0.056)	0.328*** (0.061)	0.260*** (0.045)	0.402*** (0.072)
Observations	253	245	244	236
R^2	0.138	0.204	0.176	0.207

Standard errors in parentheses

+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001

Figures

Figure 1. The total long-term effects of a change in the level of decentralization on party system inflation

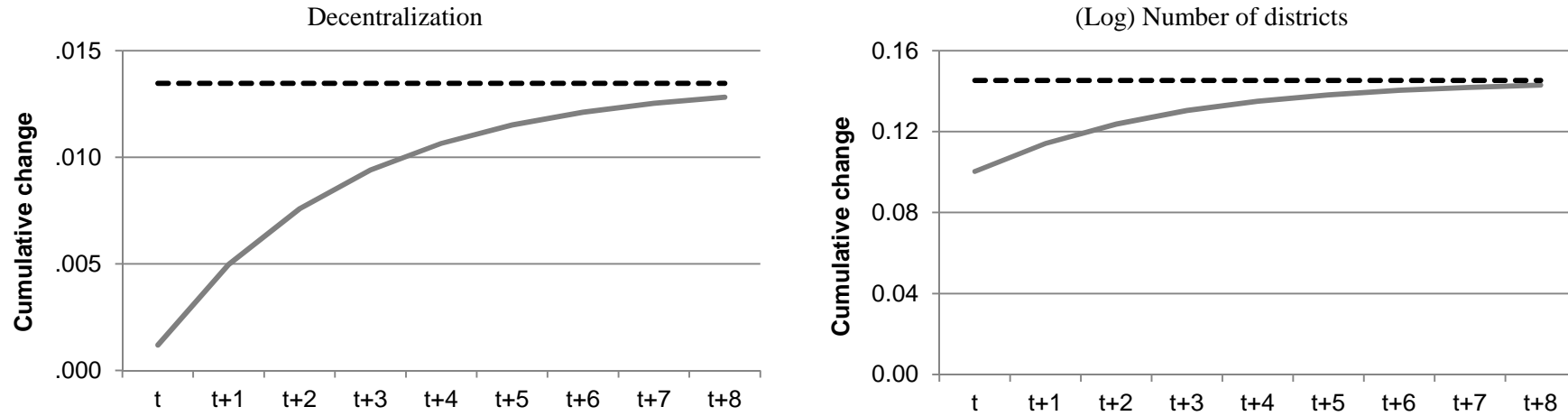


Figure 2. The total long-term effects of the level of decentralization on party system nationalization (PSNS)

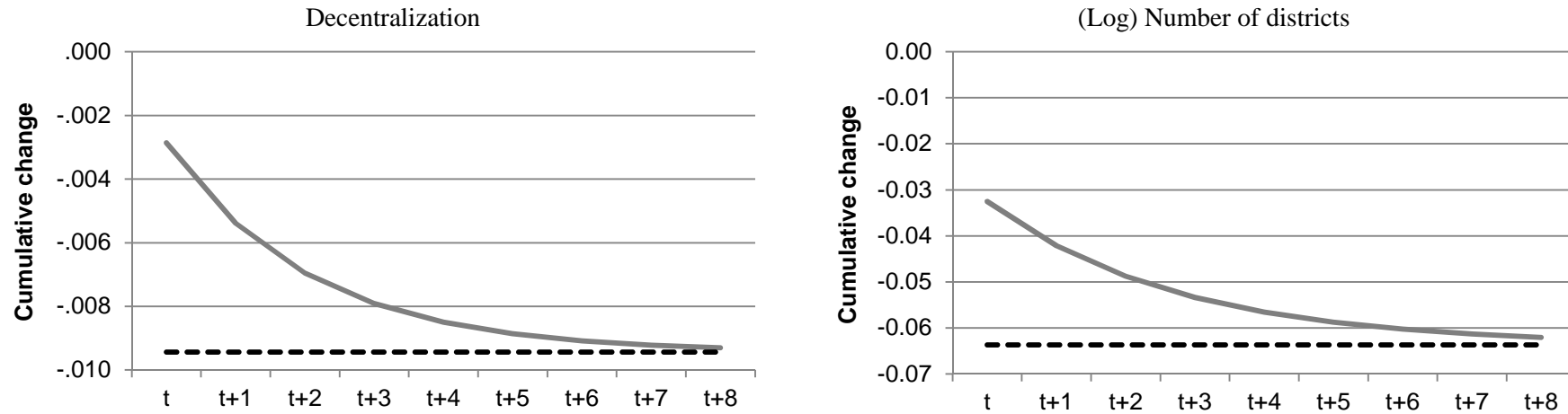


Figure 3. Percentage of the total long-term effect achieved by year after reform

