The Nationalisation of Party Systems Revisited:
A New Measure Based on Parties’ Entry Decisions, Electoral
Results, and District Magnitude

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Abstract: In this paper, a new measure of party system nationalisation is proposed. Instead of analyzing the homogeneity of parties’ vote shares across districts within countries, we measure the phenomenon in terms of a combination of the homogeneity of the supply of parties across districts, their electoral results, and the number of seats to be filled in those districts where parties compete. The advantages of our measure of party system nationalisation over the existing measures are illustrated by performing a longitudinal analysis of 256 elections in eighteen Western European countries from 1945 to 1998.

Keywords: Party system nationalisation; Measurement; Party linkage and aggregation.

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The nationalisation of politics matters, and the nationalisation of party systems matters, too. In the 1970s, the masterful contribution by Stein Rokkan underlined the structuring of mass politics in Western Europe for the formation of a democratic citizenship. For Rokkan (1970: 226), behind the longue durée histories of Western European countries since the French Revolution are three great achievements in institutionalizing democratic politics. Indeed, the introduction of universal suffrage, the development of nationwide mass parties, and the process of politicization lead to “a decline in strictly territorial politics and an increasing emphasis on functional cleavages, [which cut] across the traditional divisions into localities and provinces”. More recently, Daniele Caramani (2004) devoted his remarkable book to explaining the nationalisation of electorates and party systems in Western Europe, two central components of the lengthy processes by which the most prominent countries became democratized. The transformation of clientelistic, fragmented local organizations dominated by social or political elites, into disciplined, competitive national parties has contributed significantly to the responsiveness of party officials, the accountability of party politicians, and the nationwide representation of citizens. As Caramani (2004: 5) has written, the replacement of territorial cleavages by nationwide functional alignments in most European countries led to the nationalisation or homogenization of politics - that is to say, “to the increasing integration of peripheral electorates into national political life and the transformation of local electorates and segmented party systems into national electoral constellations”.

Between the 1970 Rokkan and the 2004 Caramani books, the nationalisation of party systems has only been included intermittently in the electoral and party politics research agendas. It has been dealt with slightly more often in the United States, where Elmer E. Schattschneider (1960: chapter 5) examined the extent to which American parties achieved the nationalisation of politics through the lens of their competitiveness. Here, nationalisation is a normatively-valued goal since it ought to increase the likelihood of the alternation in power, strengthen linkages to voters, and in general make elections more relevant. Schattschneider operationalized the concept of nationalisation by measuring the Democratic Party’s deviation from 50 percent in every state and then summing this value for all 50 states. The nationalisation of the American political system thus entails the shift from a system dominated by sectional party cleavages to one boasting a national electoral alignment, a universality of political trends, and consequently the creation of a national electorate (Schattschneider 1960, 93-95; see also Sundquist 1973). Later, Donald E. Stokes (1965, 1975 [1967]) improved the specification of the variables measuring national versus local influences, on the one hand, and national versus local trends in electoral volatility, on the other. Stokes decomposed the vote for congressional elections into two elements: the degree of similarity between voting at the district and national levels, and the degree of homogeneity of voting shifts between two consecutive elections also at the district and national levels. The process of nationalisation of American parties depended upon the extent to which party strength and turnout at the state and national levels had shown significantly parallel movements (Stokes 1975 [1967]: 185). With some variations, many other scholars have followed in the paths opened up by Schattschneider and Stokes either by partitioning the district vote into different elements (Katz 1973; Kawato 1987; Clagget, Flanigan, and Zingale 1984; Verts, Freundreis, and Gibson 1987; Bartels 1998) and/or by including a larger set of countries in their comparative analyses (Coppejde 1998; Morgenstern and Potthoff 2005; Morgenstern and Swindle 2005; Alemán and Kellam 2008; Lupu 2008).
In any case, this literature on American party nationalisation soon became an exception. In Europe, the Rokkan’s pioneering studies (1970, 1973) on the territorial dimension of the polity and competition between center and periphery have lacked, until recently, further and systematic development. Indeed, in the early 2000s, Mark P. Jones and Scott Mainwaring (2003: 139) were able to begin an article by stating the necessity to address “an under-analysed issue in the comparative study of parties and party systems: their degree of nationalisation”. The territorial dimension has neither been analyzed by Giovanni Sartori (1976), nor academics since. The large literature on the several dimensions of party systems has not yet included that of nationalisation. This remarkable void can be tellingly illustrated by Maurice Duverger’s (1954 [1951]) extremely influential book on political parties. Although Duverger recognized that the logic of one of his well-known laws — that first-past-the-post electoral rules lead to two-party systems — applies only to the district level, he nevertheless posited that national two-party systems would automatically follow the evolution of district-level two-party systems since “increased centralization of organization within the parties and consequent tendency to see political problems from the wider national standpoint tend of themselves to project on to the entire country the localized two-party systems brought about by the ballot procedure” (Duverger 1954 [1951]: 228). It took several decades that Gary W. Cox (1997: chapter 10; 1999a) had convincingly revisited the Duvergerian assumption that separate local and national party systems somewhat magically merge, forming a national party system; that is, the process of creating a national party was considered as a subsequent and different stage than coordination activities within individual districts.

The nationalisation of party systems has entered into the research agenda of the last ten years. Books by Caramani (2004) and Pradeep Chhibber and Ken Kollman (2004) have provided systematic examinations of the historic processes by which Western countries (plus India in the latter case) transited towards deterritorialization or nationalisation in the last century and half. This has stimulated comparative analysis of the nationalisation of party systems in more recent elections. In this vein of scholarship, practitioners appear to agree on the topic’s relevance: according to Eduardo

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2 See also Rokkan and Urwin (1982, 1983), Flora (1999), and many of the chapters included in Torsvik (1981).

3 For instance, in Donovan and Broughton’s standard book on party systems (1999: 258), they listed up to six system properties, none of which made any reference to nationalization. Furthermore, when referring later (p. 265) to the “territorial differentiation” as a challenge to the core party systems in Western Europe, in reality they were underlining the center-periphery cleavage. As far as we know, something similar can be said of most work on party systems in Western Europe (Ware 1996; Webb, Farrell, and Holliday 2002; Kitschelt 2007), Eastern Europe (Kitschelt et al. 1999), Latin America (Mainwaring and Scully 1995), and new democracies of both Eastern Europe and Latin America (Webb and White 2007). In fact, even a recent handbook on parties (Katz and Crotty 2006) lacked a chapter on the topic. The only partial exception to the above is Deschouwer (2006: 292) where he mentioned the dimension of “territorial pervasiveness” of multi-level political systems.

4 See Nikolenyi (2009) for further details.

Alemán and Marisa Kellam (2008: 193), “comparative nationalisation interests scholars because it helps to distinguish party systems from one another in ways that have implications for governability and political representation”. To begin with, countries vary significantly in the levels to which party systems are nationalized; and these variations should be comparatively reported, measured, and examined to achieve a full understanding of Western Europe’s party politics. Moreover, party nationalisation is of paramount importance for analysing party competition from both the supply and demand sides (Kasuya and Moenius 2008: 126). Party nationalisation should therefore distinguish among party systems with similar formats and centripetal or centrifugal directions of competition, but different levels of nationalisation. As Jones and Mainwaring (2003: 140) have written, “in case of high nationalisation, electoral competition follows a roughly similar pattern across the country’s sub-national units. In a case of low nationalisation, the parties that fare well in some sub-national units are minor electoral competitors elsewhere”. Accordingly, parties should develop distinctive political and, in particular, electoral strategies depending on the extent to which they are nationalized – i.e., receiving similar voting-shares across all or most districts –, or not – i.e., oscillating between being hegemonic in some districts and secondary if not irrelevant in others. And there are other facets of comparative research that should be considered when countries exhibit different levels of party nationalisation. For instance, the validity of certain indicators, such as the effective number of parties at the national level, could be affected when party systems suffer from low nationalisation. Many comparative dimensions of politics, such as the outcomes of decentralization processes, the range of public policies, the legislative careers of representatives, the politics of coalition-making in parliamentary regimes, and even the consolidation of new democracies might have different results in highly or low party-nationalized countries (Jones and Mainwaring 2003: 143-144).

Nearly all the growing literature on the nationalisation of party systems has focused upon the measurement of the phenomenon; with some exceptions (Caramani 2004; Chhibber and Kollman 2004; Cox and Knoll, 2003; Hicken, 2009; Hicken and Stoll, 2007; Lago-Peñas and Lago-Peñas 2009; Harbers 2009), the causes or consequences of its variation remain largely unexplored. This is a very legitimate point of departure, given that description must come before explanation: no meaningful causal explanation can be constructed without good descriptions (King, Keohane, and Verba 1994: 34); in our case, without a good measurement of party system nationalisation. But, as we hope to demonstrate, existing measures of the nationalisation of party systems suffer conceptual or methodological problems, and are thus not compelling.

In this paper, we present the most relevant measures which have been used recently, discuss their weaknesses, and propose a new measure of party system nationalisation. Our new measure is based on three variables containing the homogeneity of the supply of parties across districts, their electoral results, and the number of seats to be filled in those districts where parties compete. As we hope to demonstrate, this combination of dimensions belonging to the fields of party supply, party vote shares, and electoral system overcomes the problems of existing measures. The paper then proceeds as follows. In the next section, we critically review the measures of party system nationalisation found in the literature, which are mainly based on the homogeneity of electoral results across districts or geographic units. Secondly, the logic and interpretation of our measure of party system nationalisation are shown. Thirdly, the advantages of our measure compared to those existing are illustrated by performing a
longitudinal analysis of 256 elections in eighteen Western European countries from 1945 to 1998. The final section concludes.

The nationalisation of party systems: concepts and measures

As would be expected of new concepts which are at the same time apparently self-evident, the concept of party system nationalisation is afflicted by its polysemic and multidimensional nature. The label has “suffered from a conflation of terms and imprecise, if not ambiguous, definitions” (Morgenstern and Potthoff 2005: 18). The list of other terms taken more or less as synonymous is rather long. In chronological order, a short selection would include “a national arena” (Chambers 1966: 82-83); the “permeation” of the party system which may lead to a far-reaching “homogenization between parties at the center and in regional areas” (Daalder 1966: 64); the “ politicization” process by which national organized parties broke the traditional rules of local elites through the entry into municipal elections (Rokkan 1970: 227); the “vote structuring” function of parties, which may determine their predominance in “national patterns” (Epstein 1993 [1979]: chapter 4); the “party linkages”, characterized as a process by which politicians contesting elections in different districts get to run under a common party label (Cox 1997: chapter 10), or defined as an outcome as “the degree to which parties are uniformly successful in winning votes across districts” (Moenius and Kasuya 2004: 545); and, similarly, “party aggregation”, the process by which politicians coordinate candidates and/or voters in order to aggregate votes across districts and to create national parties (Chhibber and Kollman 1998: 330; 2004: chapter 3).

We favor a concept of party system nationalisation which focuses on both the different territorial levels of the polity and the political or electoral dimensions of party competition. And we take it more as an outcome than as a process. As a process, in Caramani’s (2004: 1) words, “the highly localized and territorialized politics (…) is replaced by national electoral alignments and oppositions. Peripheral and regional specificities disappear, and sectional cleavages progressively transform into nationwide functional alignments”. As an outcome, according to Kasuya and Moenius (2008: 136), “‘nationalisation of party systems’ (…) refers to the extent to which parties compete with equal strength across various geographic units within a nation. Strongly nationalized party systems are systems where the vote share of each party is similar across geographic units (e.g., districts, provinces, and regions), while weakly nationalized party systems exhibit large variation in the vote shares of parties across sub-national units”. These definitions entail that, among the several elements attached to the idea of nationalisation (such as the territorial homogenization of support for political parties, the influence local or national parties may have, and whether swings in two consecutive elections are uniform across districts [Clagget, Flanagan, and Zingale 1984]), we stick, as Caramani (2004: 12) and Jones and Mainwaring (2003: 142) do, to the first: it is the only element which allows for comparative analyses across time and space.

In a similar vein, Chhibber and Kollman (2004: 4) define a national party system as one in which “the same parties compete at different levels of vote aggregation”; and Jones and Mainwaring (2003: 140) make it clear that “by a highly nationalized party system, we mean one in which the major parties’ respective vote shares do not differ much from one province to the next. In weakly nationalized party systems, the major parties’ vote shares vary widely across provinces”.

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countries. The concept of party system nationalisation should then refer solely to the structure of the party system, and not to the electorate and whether it responds to electoral change in a similar fashion in all or most districts. Moreover, for measuring the change in the territorial distribution of voting behaviour between two elections, the identical organization of districts is *conditio sine qua non*; and in the long-term historical perspective, this condition is not satisfied (Caramani 2004: 59).

There are two broad operative definitions of party system nationalisation when it is conceptualized as geographic homogeneity of electoral results: the homogeneity of parties’ electoral support across districts, the most widely used, and the territorial coverage by parties (the number of districts in which a party enters the race). Let’s discuss these to some detail. Later we will examine our own definition and measure.

**Measures of homogeneity of parties’ electoral support**
Beginning with Schattschneider’s (1960) pioneering analysis, the measures put later into circulation include the absolute deviation, the mean squared deviation, the variance, the standard deviation, the variability coefficient, the index adjusted for party size and number of regions, the cumulative regional inequality index, or Lee’s (1988) regional voting index. These are applied most frequently to two distinct dimensions of party nationalisation: dispersion —the extent to which parties receive similar levels of electoral support throughout the country (Jones and Mainwaring 2003: 140); and inflation —the extent to which the number of parties at some level of aggregation may be higher than the number of parties at another level of aggregation (Nikolenyi 2009: 99).

The most prominent measure to gauge the degree of party nationalisation in terms of dispersion is the *Party Nationalisation Score (PNS)* created by Jones and Mainwaring (2003: 142). Its formula is the following:

\[
PNS = 1 - \text{Gini coefficient}
\]

The Gini coefficient ranges from 0 in cases of perfect equality across all units to 1 in cases of perfect inequality. A Gini coefficient of 0 signifies that a party received the

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7 Against this element of homogeneity, and in the wake of the American tradition of decomposing district vote into several elements, Morgenstern and Potthoff (2005: 19) have proposed “district heterogeneity” and “district-time effects” as more statistically precise terms.

8 Other measures include the already mentioned standard deviation of parties’ vote shares (Schattschneider 1960), the mean absolute deviation and the cumulative regional inequality index (Rose and Urwin 1975), or the index of regional distinctiveness through the absolute differences between regional and mean statewide party vote-shares (Hearl, Budge, and Pearson 1996).

9 See Caramani (2004: chapters 2 and 3) for an assessment and application to Western European countries of almost all these measures and indices, as well as those based on the territorial coverage by parties.

10 Jones and Mainwaring (2003: 143) build on the PNS for measuring the nationalization of party systems through the *Party System Nationalization Score (PSNS)*, which is obtained by multiplying every party of the party system by its share of the national valid vote, and then summing this product for all the parties. PSNS is thus “a summary expression of the level of nationalization of the party system (…) [which enable] scholars to trace changes over time within the same system and to compare across countries”.

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same share of the vote in every sub-national unit; a Gini coefficient of 1 means that it received 100 percent of its vote in one sub-national unit and 0 percent in all the rest. The Gini coefficient is inverted and subtracted from 1, so that high scores indicate high levels of nationalisation.

Secondly, Bochsler (2009) proposes a standardises party nationalisation score, that weights for the sizes of territorial units within a country, and considers the different numbers of territorial units in different countries. The following formula establishes the party nationalisation score with weighted units (PNSw) for a country with \(d\) weighted units \([1; \ldots; I; \ldots; d]\), ordered according to the increasing vote share of party \(p\). Each territorial unit \(i\) has \(v_i\) voters, and \(p_i\) of them vote for political party \(p\).

\[
PNSw = 2 \cdot \frac{\sum_{i=1}^{d} (v_i \cdot (\sum_{i}^{d} p_j - \frac{p_i}{2}))}{\sum_{i}^{d} v_i \cdot \sum_{i}^{d} p_i}
\]

There are also different ways to measure party system inflation. As devised by Cox (1999a: 155-156), there is no inflation where countries have as large a national party system as one would expect if each local party system were a microcosm of the whole. At the other end of the scale, there is inflation of the national party system over the local baseline when countries have substantially larger national party systems than one would expect were their local party systems largely the same throughout the nation. This conception is developed through four relatively distinct measures. First, Chhibber and Kollman (1998, 2004) measure the nationalisation of party systems by using the difference between the effective number of electoral parties in the national party system and the average effective number of parties in the local party systems. As this measure of deviation \((D)\) becomes larger, the nationalisation is poorer. Its formal expression is as follows:

\[
D = ENP_{nat} - ENP_{avg},
\]

where \(ENP\), or the effective number of parties, measures how many “serious” parties are in the race;\(^{11}\) \(ENP_{nat}\), the effective number of electoral parties at the national level, and \(ENP_{avg}\), the average effective number of electoral parties at the district level.\(^{12}\)

Secondly, Cox’s measure (1999a) builds upon \(D\) and provides an estimation of party system inflation on a percentage basis. As inflation \((I)\) gets larger, party linkage is poorer. If for instance \(I\) is 10, then about 10 percent of the overall size of the national party system can be attributed to different parties obtaining votes in different sub-units of the country, and 90 percent to the average size of the local party systems (Cox 1999a: 155-156). Its formal expression is the following:

\[
I = \frac{\sum_{i}^{n} \frac{1}{P_{i}}}{\sum_{i}^{n} P_{i}}
\]

\(^{11}\) This is of course calculated in accordance with Laakso and Taagepera (1979). For \(n\) parties receiving votes, \(ENP = \frac{1}{\sum_{i=1}^{n} P_{i}^2} \); \(P\) is the proportion of votes obtained by party \(i\) in the election.

\(^{12}\) For a comparison between their measure \(D\) and the Jones and Mainwaring’s (2003) \(PNS\) an \(PSNS\), see Chhibber and Kollman (2004: 175-178).
Thirdly, by a loose analogy to the monetary inflation rate, Moenius and Kasuya (2004: 504) (see also Kasuya and Moenius 2008: 129) define the inflation (I) rate of party system linkage as follows:

\[
I = \left( \frac{ENP_{\text{nat}} - ENP_{\text{avg}}}{ENP_{\text{nat}}} \right) \times 100.
\]

Their index \(I\) differs from the standard inflation rate of commodity prices in that the latter is calculated over time, while the former is built across districts. Here, inflation emerges as the difference in parties’ vote-shares in the district versus the national level. Or, in their own words,

Our measure \(I\) relates the size of the national-level party system to the average size of the district-level party systems. If the size of the national-level party system is larger than the average size of party systems across districts, our measure indicates that there is inflation of the party system from the district level to the national level. If the average size of the party system across districts is larger than the size of the party system at the national level, we observe party system deflation. In short, the higher the inflation or the lower the deflation rate, the poorer the linkage across district-level party systems (Moenius and Kasuya 2004: 549).

But, given that district size is not a constant in most countries, Moenius and Kasuya (2004: 550) (see also Kasuya and Moenius 2008: 130) introduce a weighted measure:

\[
I_w = \frac{\sum_{i=1}^{n} \frac{vot_{\text{nat}} \times ENP_{\text{nat}} - ENP_{\text{avg}}}{ENP_{\text{avg}}}}{\sum_{i=1}^{n} \frac{vot_{i} \times ENP_{i}}{n}} - 1 \times 100,
\]

where \(vot_{\text{nat}}\) is the total number of votes cast at the national level; \(vot_{i}\) is the number of votes cast in district \(i\), and \(ENP_{i}\) is the effective number of electoral parties in district \(i\).

Finally, Kasuya and Moenius (2008: 131) provide still an additional measure of party system nationalisation (\(N\)) combining the dimensions of inflation (\(I\)) and dispersion (\(D\)). Its formal expression is the following:

\[
N = I_w^\alpha D^{1-\alpha},
\]

where \(I_w^\alpha\) is the weighted inflation measure mentioned above; and \(D = CV(I_i)^\gamma k(I_i)^{\gamma'}\), where \(I_i\) measures how much the party system size in district \(i\) differs from the national-level party system size, \(CV\) is the coefficient of variation, and \(k\) is the kurtosis. Absent
any theoretical reason, the parameters $\alpha$ and $\gamma$ are arbitrary numbers. Therefore, Kasuya and Moenius give equal weight to the inflation and dispersion parameters, implying $\alpha = 0.5$ and $\gamma = 0.5$. $N$ is always larger than zero and has no upper bound. A lower $N$ indicates a more strongly nationalized party system.\(^{13}\)

Measures based on dispersion and/or inflation have different statistical shortcomings with straightforward solutions. For instance, some measures are too sensitive to the number of districts or do not take into account party size (see Bochsler 2009 for an excellent discussion). However, the most relevant problem from our point of view is that all these measures use electoral results as the only variable for estimating party system nationalisation. At least five crucial substantive shortcomings arise when operationalized definitions of party system nationalisation rely on the homogeneity of parties’ electoral support across districts.

1. Measures exclusively based on parties’ vote shares neglect that random variation exists in the political world. A slightly different total vote for a given party across districts will always result, due to non-systematic features of election campaigns —i.e., aspects of politics that do not persist from one district to the next, even if the campaigns begin on identical footing. In other words, in countries with more than one district (which of course are the vast majority), the degree of nationalisation can never be perfect if it is defined as the extent to which parties are uniformly successful in obtaining a similar share of votes across districts.

2. When the degree of nationalisation is measured with the index of inflation, based on the comparison between the effective number of electoral parties at the national level and the average effective number of electoral parties at the district level, the results depend on the underlying distributions of votes and/or the order of parties receiving votes. Consider that a three-way context producing a 49%-38%-13% outcome and a five-way race ending 60%-10%-10%-10%-10% get scored as nearly identical with effective parties counts of 2.49 and 2.5 (Gaines, 2009: 125). And things might be even worse if the order of parties winning votes is not the same across districts\(^{14}\). Additionally, the average effective number of electoral parties at the district level is clearly biased in favour of small districts and is an ecological fallacy: it assumes that all districts have the average fragmentation of the national party system.

3. Parties behave strategically in election campaigns. As is well known, elites mobilize voters only when the probability that their effort is decisive, times the benefit of winning rather than losing, exceeds the costs of mobilization (Cox 1999b). Closeness or electoral competitiveness thus boosts mobilisation efforts and hence correlates positively with turnout (Key 1949). Given that closeness varies across districts within a given country, parties have good reason to avoid a highly nationalized party system if nationalisation is defined as the extent to which parties are uniformly successful in receiving votes across districts:

\(^{13}\) For a comparison between this $N$ and the measures of PNS and PSNS proposed by Jones and Mainwaring (2003), see Kasuya and Moenius (2008: 131).

\(^{14}\) See Dunleavy and Boucek (2003) or Gaines (2009) for more details.
resources are scarce and parties invest them in marginal districts above all. But strategic resource allocation is a different story than nationalisation.

4. The supply of a given party is not exactly the same in every district within a country. Take, for instance, the case of party candidates: they obviously vary from one district to the other, and their influence in the party vote also varies across districts. Additionally, since districts do not have exactly the same characteristics, parties may not obtain the same vote share in each district for reasons not necessarily connected with the nationalisation of party systems.

5. All else equal, when the nationalisation of party systems is based on parties’ vote shares, nationalisation is weaker in countries with variations in district magnitude due to strategic behaviours behind the variance effect (i.e., the partisan political consequences of districts of varying magnitude) (Monroe and Rose 2002: 71-72). Especially in low magnitude districts, there may be (i) strategic non-entry (i.e., parties expecting defeat may join forces with other parties, or stay out of a district race altogether) by potential parties; (ii) strategic resource allocation by political parties; (iii) strategic voting, by which voters have incentives to choose among only likely winning lists; and (iv) (strategic) turnout, by which voters simply do not bother to show up for non-competitive elections at the district level. Therefore, parties’ vote shares should differ across low and high magnitude districts. Said differently, variation in district magnitude hampers the possibilities of parties to be uniformly successful in winning votes across districts.

When these five problems are considered, it follows that measures of party system nationalisation based on the indices of dispersion and inflation do not accurately estimate the phenomenon. See, for instance, Table 1. According to our own calculations based on the Moenius and Kasuya’s (2004) weighted and non-weighted measures, party system nationalisation in Iceland is weaker than in Spain. This is an odd result. While Iceland is a very homogeneous country by any account, where it is not possible to speak of proper regionalist parties, Spain’s social diversity is much higher and sub-national parties are particularly strong in Spain (Caramani 2004: chapter 4). In comparative terms, the Spanish levels of both regional voting and voting for nationalist-regionalist parties in national elections are among the highest in Europe (Hearl, Budge, and Pearson 1996: 172-173; Linz and Montero 2001: 181); but no Icelandic party was included in any of the most recent books on regionalist parties in Europe for the rather convincing argument that none was regionalist (De Winter, Gómez-Reino, and Lynch 2006). After the April 2009 Icelandic general election, the number of effective electoral and parliamentary parties was 4.5 and 4.1, respectively; whereas in Spain, those indices were 2.8 and 2.3, also respectively, after the March 2008 general election. Yet, party fragmentation is indeed different from party nationalisation.

The inaccuracy diagnosis is particularly evident in across-time comparisons. One of the desirable criteria of any measure of party system nationalisation is stability over time. Given instrumentally rational voters and the existence of good information about the relative chances of potential competitors, electoral coordination may push local party systems toward an equilibrium in which only viable or serious competitors enter the fray (Cox 1997). All else equal, once this equilibrium is reached, local party systems
tend to be stable, above all in consolidated democracies.\textsuperscript{15} Although we know much less about the formation of national electorates and party systems, a similar argument should work in linking the various local party systems into national parties (Cox 1999a). Therefore, once equilibrium is reached, national party systems should also be stable. But, as can be seen in Table 1, when using the Moenius and Kasuya’s (2004) weighted and non weighted measures, the nationalisation of party systems is an extremely volatile feature: the dispersion of the variable in all countries is huge. This is again a very odd result which runs contrary to conventional wisdom on party system and on electoral systems.

In our opinion, these problems cannot be solved: they are inherent to any measure of party system nationalisation based solely or mainly on parties’ vote shares. In order to have a robust measure, the role of voting behaviour should be minimized or, at most, be used as a weighting variable, given that parties can’t have the same size. In addition, the sole inclusion of parties’ vote shares is also problematic in methodological terms. As stated by Scott Morgestern and Richard F. Potthoff (2005: 18),

Indicators of these concepts [volatility, personal voting, or geographic heterogeneity on a party’s support] based on electoral data may improperly attribute some electoral shifts to the singular variable of interest instead of separating out movements that should be attributed to other forces. A focus on overall volatility, for example, may attribute some electoral shifts to the national level that should be accounted for by local forces. Methodologies that fail to account for these other types of electoral variance therefore yield misleading (if not biased) indicators.

\textit{Measures of territorial coverage by parties}

A minimalist definition of a national party should consider, according to Derek W. Urwin (1982: 220), the extent to which a given party is able to enter the race in “all, or all but a handful, of constituencies in every region of a country”. And according to Schattschneider (1960: 82), nationalisation should consist in the fact that major parties were able to contest “elections on remarkably equal terms throughout (…) the country [the United States]”. Nationalisation of party systems here refers to the territorial coverage of parties or to the number of districts in which a party is present as a percentage of the total number of districts. Strongly nationalized party systems are those where each party is present in all districts, while weakly nationalized party systems exhibit a large variation in the number of parties present across districts. By considering the average values across parties, it is possible to obtain systematic measures of party system nationalisation.

This measure, proposed also by Caramani (2004; 61, 64, and 76), does not depend on votes and consequently does not suffer the five problems mentioned above. Nonetheless, it has two shortcomings\textsuperscript{16}. First, it is only appropriate when district magnitude (i.e., population) does not vary substantially within electoral systems. This is the case, for instance, of countries using single-member districts, such as the United Kingdom. But when variations in district magnitude are a significant feature, such as in Portugal, Spain, or Switzerland, Caramani’s measure over-represents the contribution of


\textsuperscript{16} See also Bochsler (2009: 2)
small districts to the degree of nationalisation. For instance, the weight of Lisbon, a 48-seat district, in the 2005 Portugal general election, is the same as that of Portalegre, a 2-seat district. Similarly, Caramani’s measure does not require weighting parties by their levels of electoral support. In Spain, also for instance, the contribution to the degree of nationalisation of the Socialdemocrat Partido Socialista Obrero Español (PSOE) and the tiny regionalist and conservative Unió Valenciana (UV) was the same, given that they are weighted one-to-one. But the former had a mean vote share of 37.34 percent from 1977 to 1996, while the latter’s was 0.18 (Caramani 2004: 114). Again, the means of territorial coverage are clearly biased in favour of small parties. In sum, Caramani’s measure yields misleading (and also biased) degrees of nationalisation. It seems to suffer as well from how static the post-World War II estimations are. Throughout his book, Caramani (2004: passim, but particularly 80, 90, 107, 165-6, 172 ff., and 291 ff.) claims that most if not all European countries have stabilized their process of homogenization: their respective patterns of party nationalisation has endured since the late 1940s in spite of the occasional appearance of new parties. But, as we will see later, a closer look with a more fine-grained measure of the countries’ evolution in the last half century allows us to capture some interesting ups and downs for many Western European countries.

Proposing a concept and a measure

Although subject to some problems, Caramani’s operationalization is the best reflection of the meaning of party system nationalisation in both conceptual and empirical terms. The measure we propose is clearly inspired by Caramani’s, but with some crucial differences. Our obvious and tautological point of departure is that a highly nationalized party system is a party system with only national parties. Or, the other way round, a weakly nationalized party system is a party system with only local parties. Apart from Caramani’s characterization, quoted on the second page of this paper, this definition of nationalisation is exactly what can be found in the path-breaking contributions by Cox’s (1997, 1999a) and Chhibber and Kollman’s (1998). From the former,

The next step in the process of creating a national party system is linking the members of the various local party systems into national parties. At one extreme, each party in a country might field candidates in just one district, so that every local party system was sui generis. (…) At the opposite extreme, every party might run candidates in every district, so that every local party system is a microcosm of the national party system (Cox 1999a: 155).

And from the latter,

National party systems are best understood as aggregations of local party systems (…). If candidates in other districts do not adhere to the same party label, then district-level votes will not aggregate into sizable or competitive national-level vote totals. In other words, for a two-party system to emerge at the national level, candidates and voters across electoral districts must coordinate on party labels (Chhibber and Kollman 1998: 329-330).

We define party system nationalisation as a combination of the homogeneity of the supply of parties across districts, their electoral results, and the number of seats to be filled in those districts where parties compete. To begin with, nationalisation depends
upon the extent to which parties enter the electoral fray in every district within a country or, in other words, as the extent to which the supply of parties is the same in every district within a country. If every party runs candidates in every district, there are only national parties; the degree of nationalisation is then perfect. At the opposite extreme, if each party fields candidates in just one district, there are only local parties; the degree of nationalisation is thus virtually zero. In sum, parties’ entry decisions, rather than that parties receiving votes uniformly across districts, are the key variable to measure the nationalisation of party systems. But given that parties have not the same (electoral) size, and that districts do not necessarily allocate the same number of seats, the two problems in the measure proposed by Caramani (2004), parties and districts should not receive equal weight in their contribution to the nationalisation of the party system. Accordingly, our measure incorporates a weighted average of party system nationalisation by which parties’ entry decisions are the primary variable and the national vote share of each party and the proportion of seats on the national total allocated in each district are the secondary variables. Therefore, the index is adjusted so that it controls for the different size of the territorial units and the vote share of parties, as Bochsler (2009) suggests. Our measure of nationalisation is thus defined as:

\[ E = \sum_{i=1}^{n} v_i \times s_i, \]

where \( v_i \) is the proportion of votes obtained by party \( i \) at the national level, and \( s_i \) is the proportion of seats of the national total to be allocated in those districts where party \( i \) entered the race.

We call this the local entrant measure, \( E \). If every party runs candidates in every district, \( E \) equals 1, and the party system is perfectly nationalized, independent of the distribution of national vote shares and the number of seats across districts. At the opposite extreme, if each party fields candidates in just one district, the party system is poorly nationalized, and \( E \) approaches 0. As \( E \) increases, the nationalisation of a party system does as well. The two weights, party electoral size and district magnitude, do not apply when parties enter the race in every district and in countries whose national legislatures are elected using districts that do not vary in magnitude; that is, in countries that have single-member districts (e.g., plurality systems as in the United Kingdom, runoff systems as in France, or alternative vote systems as in Australia) or that have a single national district (e.g., Israel or the Netherlands).

Finally, it is worth to emphasize the trade-off between local coordination and nationalisation that is inherent in any concept and measure of party system nationalisation. In countries where social diversity or minorities are concentrated in one region—as Swedes in Finland, Scots in the United Kingdom, or Basques, Catalans, and Galicians in Spain—and/or in countries with major variations in district magnitudes, certain parties are only viable in some districts. According to local coordination

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17 Certain clarifications on how this measure is calculated are in order. First, only parties’ entry decisions in primary districts or single-tiers are considered; it follows that second or third tiers, as for instance in Greece or Germany, are not considered. Second, when there are cooperation agreements between national and sub-national parties to coordinate their entry decisions in some regions, they are considered a single unit; for example, the CSU and the CDU in the Bavarian districts in Germany. Finally, when two parties form a coalition in some districts within the country, but enter the race alone in the remaining districts, the number of seats to be filled in those districts where they enter together are counted as a half.
incentives (Cox 1997, 1999a), they should only enter those districts where they have a good chance of winning a seat. In other words, local coordination pushes national party systems toward a poor nationalisation, irrespective of whether or not party system nationalisation is defined as the homogeneity of parties’ vote shares across districts or as the territorial coverage by parties. If the contrary were true, a highly nationalized party system would imply that these parties enter into electoral competition regardless of their chances of winning seats. A deficient local coordination pushes national party systems toward a high nationalisation, whatever the definition of party system nationalisation might be. Thus, to some extent, nationalisation is based on the existence of contamination effects (Ferrara, Herron, and Nishikawa 2005: 8) among districts within countries: national incentives for party linkage go against local coordination when there is a variable number of viable parties across districts.

Empirical applications of two party system nationalisation measures
We can now proceed to illustrate the advantages of our measure of party system nationalisation over the existing measures by performing a longitudinal analysis of 256 elections in eighteen Western European countries over the period 1945-1998. The countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. We have calculated three indices of nationalisation for each country and election: our local entrant measure, $E$, and Moenius and Kasuya’s (2004) weighted (in terms of district size) and non-weighted inflation measures, probably the most widely used in the otherwise not large literature (see, for instance, Nikolenly 2009). As far as we know, this is the most comprehensive analysis of party system nationalisation existing in the literature, at least in a longitudinal perspective.\footnote{Leaving aside the case of Caramani (2004), who covers 18 countries over the previous 150 years, it should be noted that Chhibber and Kollman (2004) cover in depth four countries; Jones and Mainwaring (2003) include Canada, the United States, and 15 Latin American countries; Harbers (2009) also apply the Gini coefficient to 16 Latin American countries; Morgenstern and Pathhoff (2005) examine Canada, the United States, 12 Western European and six Latin American countries; Alemán and Kellam (2008) include the United States and seven Latin American countries; and Kasuya and Moenius (2008) apply their formula to 27 countries belonging to Western and Eastern Europe, North, Central, and South America, Africa, and Asia, but, with the exception of the United States, only for the elections held in and around 1995; and Cox and Knoll (2003) cover 208 elections held from 1972 to 2000 in 33 countries.}

Table 1 shows the mean rates of party system nationalisation for the eighteen countries. As is readily apparent, there is considerable variation in the scores of the national party systems displayed. Excluded the Netherlands, a perfectly nationalized party system by definition, Austria, Sweden, and Greece have the highest nationalized party systems in our sample according to the three measures. These last three countries have nearly as large a national party system as one would expect were each local party system a microcosm of the whole (4 percent inflation). According to our own measure, virtually all parties in Austria, Sweden, and Greece enter all the local races; the territorial coverage of parties is 98 percent. At the other extreme, Switzerland and Belgium have substantially larger national parties that one would expect if their local party systems were largely the same throughout the country (60 percent inflation according to the Moenius and Kasuya’s non-weighted measure, and 26-50 percent according to the weighted one). According to our own measure, Switzerland and
Belgium have also the lowest nationalized party systems: in both countries, there is a considerable variation in the number and identity of parties entering local races.

Table 1. The Nationalisation of Party Systems in Europe, 1945-1998

<table>
<thead>
<tr>
<th>Country</th>
<th>Moenius and Kasuya’s non-weighted measure, $I^b$</th>
<th>Moenius and Kasuya’s weighted measure, $I_w^b$</th>
<th>Lago and Montero’s measure, $E^c$</th>
<th>Elections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>CV (%)</td>
<td>Mean</td>
<td>CV (%)</td>
</tr>
<tr>
<td>Austria</td>
<td>4.19</td>
<td>67.31</td>
<td>4.63</td>
<td>43.41</td>
</tr>
<tr>
<td>Belgium</td>
<td>60.01</td>
<td>71.51</td>
<td>49.72</td>
<td>80.35</td>
</tr>
<tr>
<td>Denmark</td>
<td>7.39</td>
<td>48.58</td>
<td>6.59</td>
<td>61.00</td>
</tr>
<tr>
<td>Finland</td>
<td>24.32</td>
<td>9.32</td>
<td>16.12</td>
<td>16.63</td>
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<tr>
<td>France</td>
<td>18.57</td>
<td>36.60</td>
<td>16.43</td>
<td>43.15</td>
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<tr>
<td>Germany</td>
<td>6.84</td>
<td>121.60</td>
<td>6.83</td>
<td>127.77</td>
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<td>Greece</td>
<td>4.80</td>
<td>30.41</td>
<td>2.73</td>
<td>59.22</td>
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<tr>
<td>Iceland</td>
<td>18.41</td>
<td>99.95</td>
<td>14.13</td>
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</tr>
<tr>
<td>Ireland</td>
<td>6.63</td>
<td>49.65</td>
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<tr>
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<td>73.38</td>
<td>10.23</td>
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<tr>
<td>Luxembourg</td>
<td>8.93</td>
<td>30.78</td>
<td>13.11</td>
<td>177.80</td>
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<tr>
<td>Netherlands</td>
<td>0</td>
<td>–</td>
<td>0</td>
<td>–</td>
</tr>
<tr>
<td>Norway</td>
<td>6.87</td>
<td>79.36</td>
<td>6.50</td>
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<tr>
<td>Portugal</td>
<td>13.79</td>
<td>55.11</td>
<td>9.58</td>
<td>59.29</td>
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<td>Spain</td>
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<td>34.25</td>
<td>11.37</td>
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<tr>
<td>Sweden</td>
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<td>17.07</td>
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<tr>
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<td>26.39</td>
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<tr>
<td>United Kingdom</td>
<td>14.17</td>
<td>50.39</td>
<td>14.16</td>
<td>53.22</td>
</tr>
</tbody>
</table>

* The CV, or coefficient of variation, is the standard deviation divided by the mean, and multiplied by 100 percent.

* The larger the figures, the poorer the nationalisation.

* The larger the figures, the higher the nationalisation.

In Figures 1 and 2, the relationship between our measure of party system nationalisation and the two indexes proposed by Moenius and Kasuya (2004) is displayed for in our sample of 256 elections. The correlations are indeed very high: -0.91 between our measure and the non-weighted version of Moenius and Kasuya’s
measure and -0.83 between our measure and their weighted measure. Both correlations are statistically significant at the .01 level.

**Figure 1. Correlations between Lago and Montero’s measure and Moenius and Kasuya’s non-weighted measure in Western European countries, 1945-1988**

The black triangles [4] indicate (some) elections in Iceland.

**Figure 2. Correlations between Lago and Montero’s measure and Moenius and Kasuya’s weighted measure in Western European countries, 1945-1988**
In spite of these strong correlations, our measure of party system nationalisation has two advantages in empirical terms over Moenius and Kasuya’s. First, Lago and Montero’s index estimates the phenomenon more accurately. For example, in contrast to Moenius and Kasuya’s already mentioned odd finding that Spain has a stronger nationalized party system than Iceland, we find that Spain has a more weakly nationalized party system. In fact, as seen in Figures 1 and 2, elections in Iceland are clearly outliers. Along the same vein, the odd finding that in Table 1 Ireland had a higher nationalized party system than Luxembourg according with the two Moenius and Kasuyas’s measures is reversed in our case. Our estimation seems to be closer to the fact that in the June 2009 general election the six parliamentary Luxembourgian parties received similarly vote shares across all the four districts, whereas both the STV electoral system and the partial dealignment taking place in Ireland manifested in the May 2007 general election through the relatively uneven results obtained by the six parliamentary parties across the 43 districts.\footnote{See \url{www.elections.public.lu/fr/index.html} for the 2009 electoral results in Luxembourg and \url{www.parties-and-elections.de/ireland.html} for the 2007 electoral results in Ireland; see also Mair and Marsh (2004).}

Second, as also mentioned above, party system nationalisation should be relatively stable from one election to the next within countries, at least once certain equilibrium is reached. However, the nationalisation of party systems seems to be an extremely volatile feature when using the Moenius and Kasuya’s inflation measures. In this

\footnote{The black triangles\cite{4} indicate (some) elections in Iceland.}
regard, standard deviations should be substituted by the coefficient of variation (CV), which provides a much more accurate estimation. The standard deviations of both the Lago and Montero’s and the Moenius and Kasuya’s measures cannot be compared in a meaningful way to determine which variable has greater dispersion: they vary greatly in their units and the means about which they occur. Instead, when using the CV the standard deviation and mean of each variable are expressed in the same units, so taking the ratio of these two allows the units to cancel. As can be seen in Table 1, the Lago and Montero’s estimations have a much smaller CV (i.e., less dispersion) than the Moenius and Kasuya’s in all countries. The differences are particularly strong in Germany (9.24 vs. 127.77 or 121.6), Iceland (1.93 vs. 78.91 or 9.95), Luxembourg (2.38 vs. 177.8 or 30.78), and Austria (1.33 vs. 2.01 or 67.31). The differences across countries between the two set of estimations are remarkable: while the CV goes from 49.11 in Belgium to 1.38 in Austria for the Lago and Montero’s measure, it moves from 177.8 in Luxembourg to 2.01 in Austria for the Moenius and Kasuya’s indices.

In a complementary analysis, we examine the performance of our measure in comparisons over time using again our sample of eighteen countries. Figure 3 shows the values yielded by $E$ in each country - from the first election held after World War II to the most recent that was included in the Caramani (2000) dataset. As a consequence of using a measure based on the homogeneity of the supply of parties across districts, the nationalisation of party systems is not as volatile as previous measures had indicated. But neither is the picture dominated by a general stability, as emphasized by Caramani (2004: 88 ff.). The sensitivity of our index is able to distinguish patterns and trends among the different European countries and over time. Although the analysis of their origins and consequences should be the thrust of another paper, it is interesting at least to note the stable patterns shown by Germany and Austria (in spite of certain recent changes) and the basically unstable patterns manifested in the cases of Iceland, Ireland, Norway, Sweden, and Switzerland. On another note, while France and the United Kingdom show a tendency towards higher nationalisation, Belgium, Finland, Italy, and Luxembourg follow exactly the inverse pattern. Finally, the new democracies of Greece, Portugal, and Spain share common trends of party system nationalisation once they have moved past a stage of initial but relevant variation.
Figure 3. The Nationalisation of Party Systems in Europe, 1945-1998
Conclusions
The nationalisation of party systems has invigorated the research agenda in the last ten years. Nevertheless, even though the recent literature on the topic has focused upon the measurement of the phenomenon, leaving the causes or consequences of its variation largely unexplored, existing measures of the phenomenon have been, as yet, not entirely convincing.

In this article we have proposed a new measure of party system nationalisation based on three variables, namely the homogeneity of the supply of parties across districts, their respective electoral outcomes, and the number of seats to be filled in those districts where parties compete. Our local entrant measure, $E$, analyzes the extent to which parties enter the electoral fray in every district within a country. Given that parties have not the same electoral size and that districts do not necessarily allocate the same number of seats, $E$ is a weighted average based on the national vote share of each party and the proportion of seats on the national total allocated in each district. If every party runs candidates in every district, the party system is perfectly nationalized, and $E$ equals to 1, no matter how the national vote shares and the seats among districts are distributed. At the opposite extreme, if each party fields candidates in just one district, the party systems is poorly nationalized and $E$ approaches 0. As $E$ increases, the nationalisation of a party system does too.

We have empirically tested our measure $E$ in a longitudinal analysis of 256 elections in eighteen Western European countries over the period 1945-1998, which to our knowledge is, leaving aside Caramani’s (2004) book, the most comprehensive examination of party system nationalisation existing in the literature to date. As we hope to have demonstrated, our measure of party system nationalisation has some advantages over previous indices. First, it captures the substantive meaning of the concept, at least as the crucial contributions of Chhibber and Kollman (1998, 2004), Cox (1999a), or Caramani (2004) characterize it. That is, a highly nationalized party system is a party system with only national parties or, the other way round, a weakly nationalized party system is a party system with only local parties. Second, it overcomes the evident and acute problems of measurement based on the homogeneity of parties’ electoral support across districts, which have also been the most widely used. Roughly speaking, party systems nationalisation must not be only a function of electoral results. Third, $E$ measures more accurately the phenomenon than previous measures. Using the Lago and Montero’s measure, certain extremely questionable findings resulting from the Moenius and Kasuya’s measures disappear. Similarly, the level of variations of the means, standarized in both set of indices through the coefficient of variation (CV), shows much more reliable figures in Lago and Montero’s estimations than in those obtained by Moenius and Kasuya. Fourth, it is easy to calculate and understand. Finally, the nationalisation of party systems should not be a volatile feature from one election to the next within a country. Lago and Montero’s measure also improves on this aspect of the existing measures. Additionally, contrary to the pattern of general stability in the degree of nationalisation over time in Western European countries (see Caramani, 2004), we have shown the existence of very different trends among European countries. In order to explain these divergences, other studies, that are both country-specific and cross-national, are crucial.
References


Laakso, Markku, and Rein Taagepera. 1979. “’Effective’ Number of Parties. A Measure with Applications to West Europe”. *Comparative Political Studies* 12: 3-27.


