AN ECONOMIC EXPLANATION OF THE NATIONALIZATION OF ELECTORAL POLITICS*

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Abstract: The literature on the nationalization of electoral politics focuses on the institutional characteristics of political regimes and the structure and organization of social cleavages. We argue that the nationalization of electoral politics is also driven by economic performance. Short-term economic perturbations increase vote transfers from large (and highly nationalized) parties to small (and weakly nationalized) parties. On the contrary, sharp improvements in economic performance may generate vote shifts towards large parties, and then nationalization should increase. Permissive electoral systems exacerbate the influence of economic performance on nationalization. Pooled cross-sectional time-series regression analysis is conducted on data from 43 countries and 475 elections between 1950 and 2012. The party-level mechanisms are shown through a closer look at Austria and Portugal.

Key words: Cleavages, decentralization, economic voting, electoral system, nationalization.

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HIGHLIGHTS:

- An economic explanation of the nationalization of electoral politics is proposed.
- The mechanisms rely on economic voting and the size of parties.
- Our argument is tested with data from 43 countries and 475 elections between 1950 and 2012.
- The party-level mechanisms are shown through a closer look at Austria and Portugal.

1. INTRODUCTION

In less than four years, between the May 2007 and the February 2011 lower house elections, nationalization in the Irish party system suffered an abrupt decline. According to the *Standardized and Weighted Party System Nationalization Score* by Bochsler (2010), nationalization dramatically dropped from 0.73 to 0.39. To what extent can existing research explain this short-term variation in Ireland?

For us, the nationalization of party systems refers to “the extent to which parties compete with equal strength across various geographical units within a nation. Strongly nationalized party systems are systems where the vote share of each party is similar across geographical 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” (Kasuya and Moenius, 2008: 136).ⁱ In the comparative literature on parties and party systems, there are two major theoretical approaches to the study of the nationalization of electoral politics. The first approach is institutional, as it links nationalization to the value of the offices sought and how important coordination is to obtain them. The second is sociological, and relates nationalization to the survival of territorial politics; more specifically, the existence of geographically-concentrated groups increases the chances of mal-coordination. However, as neither institutions nor cleavages change very often, institutional and sociological explanations can hardly account for short-term variations in nationalization. The abrupt decline of nationalization in Ireland is, therefore, intriguing.

In this paper, we propose a third approach to the study of nationalization: aggregate economic voting, which presumes that nationalization in the short term is driven by the nation’s economic performance. Economic perturbations (i.e. economic crises) increase vote transfers from large parties to small parties. As the latter are less nationalized than the former, the aggregated consequence is that economic crises weaken the nationalization of the party system. On the contrary, sharp improvements in economic performance may generate vote shifts towards large parties, in particular towards the incumbent, and so nationalization should increase. Permissive electoral systems exacerbate the influence of economic performance on nationalization, as the ability to voice discontent with the perceived economic management by big parties

increases with the number of parties. In Ireland, according to Eurostat, the GDP growth rate was over 5 percent in 2007 but it fell sharply to -2.1 percent in 2008, with a further steep decline to -5.5 percent in 2009. In 2010, the growth rate recovered somewhat but remained negative at -0.8 percent.ⁱⁱ Not surprisingly, support for the two biggest parties, *Fianna Fáil* and *Fine Gael*, dropped from 68.9 percent in 2007 to 53.6 percent in 2011.

This paper tests the economic voting explanation using data from 475 elections in 43 countries between 1950 and 2012, and the party-level mechanisms are shown by means of a more in-depth analysis of elections and parties in Austria and Portugal.

The article continues as follows. In the next section, previous research is discussed and the argument that economic voting should affect the nationalization of electoral politics is presented. The third section describes the methods and the aggregate and party-level data and shows the results of the empirical analyses. The last section brings together our conclusions.

2. ARGUMENTS

Explanations of the degree of nationalization of electoral politics, or the extent to which parties' vote shares are similar across districts (or other subnational units), have focused on institutional and sociological variables. While the institutional characteristics of political regimes affect the expected benefits of cross-district coordination, or more specifically the available opportunities to trade votes across districts in order to maximize the chances of winning the offices sought, the preferences of the elite and mass actors who must coordinate across districts are determined by the structure of cleavages.

Institutional explanation

The incentives faced by politicians to coordinate their electoral actions across districts in order to win more seats and executive portfolios (i.e. the expected benefits of cross-district coordination) are affected by the electoral system, the nature of the executive, and the degree of political and economic centralization.

– *Electoral system*

The nationalization of parties and party systems is influenced by national election thresholds, district magnitudes, the number of districts, and personal votes. First, as Cox (1999: 157) explains, election thresholds operating at the national level or at the level of the secondary electoral district in mixed-member electoral systems are an obvious incentive to politicians to ally across district boundaries. Among mixed-member systems, it can be hypothesized that cross-district alliances will be greater in mixed-member proportional ones than in mixed-member majoritarian ones due to the presence of a seat linkage between the single-member district and PR tiers.

Second, the role of district magnitude is not clear. According to Cox (1999: 156), there is no theoretical reason to expect district magnitude to affect nationalization. On the contrary, Cox and Knoll (2003: 6) argue that the larger the district magnitude in the system, the fewer wasted votes there will be in each district and so fewer incentives for politicians to combine votes across districts. Consequently, nationalization should decrease with average district magnitude. In the same vein, Brancati (2008) argues that PR systems may increase the strength of regional parties because PR systems are more open to small parties and because regional parties tend to be small. Finally, Morgenstern et al (2009: 1327-8) suggest that single-member district plurality systems should decrease nationalization relative to proportional representation systems: ‘Since a plurality is required to win the seat in SMD systems, parties may avoid spending the resources (good candidates, costs, and effort) to compete where they have little chance of winning. In proportional representation (PR) systems, by contrast, wasted vote-winning opportunities are costly, because it takes far fewer votes to win a legislative seat’. In our view, nationalization is clearly affected by district magnitude variation within electoral systems. When the number of seats to be filled differs greatly, election results do also and then nationalization will reduce. To the best of our knowledge, this hypothesis has not been explicitly tested.

Third, Harbers (2010) argues that nationalization does not depend on district magnitude, but on the number of districts within an electoral system. The argument is that linkage across districts becomes more challenging as the number of districts increases. The larger the number of districts, the more demanding it is for a party to maintain an organizational structure.

Fourth, it can be hypothesized that the nationalization of party systems is negatively related to the incentives to cultivate a personal vote provided by electoral systems (Carey and Shugart 1995). The less important personal reputation is (or the more important party labels are), the greater the nationalization. This expectation is strongly supported by Golosov (2014): party-list proportional representation systems lead to higher levels of nationalization, while SNTV/STV and mixed-superposition systems reduce nationalization scores. Similarly, Simón (2013a) shows that the impact of decentralization on nationalization is conditional on the extent to which electoral laws encourage personal voting. When electoral laws are candidate-centred, party labels are not very relevant to the (re-)election of politicians; this makes candidates more likely to compete locally in a decentralized country and to weaken party system nationalization.

– *The Nature of the Executive*

In contrast with parliamentary elections, presidential elections are usually considered a key variable driving the alliance of legislative candidates across districts. The mechanism underlying this effect is that when there are presidential elections candidates for the lower house often want to link with national-party candidates (Brancati, 2008; Shugart and Carey, 1992). However, as presidential coattails affect legislative fragmentation differently depending on the number of presidential candidates (Golder, 2006), they can reduce, increase or have no effect on the nationalization of electoral politics. On the contrary, Morgenstern et al (2009: 1327) argue that having a presidential or a parliamentary system does not matter, given that the incentives for parties to spread their support across the nation are the same in both cases. This claim is supported by a recent paper by Golosov (2014) using data from 80 countries worldwide.

– *The Degree of Political and Economic Centralization*

According to Chhibber and Kollman (1998, 2004), party systems are shaped by the authority granted to different levels of government or, in other words, by fiscal and political decentralization. Voters are more likely to support national political parties as the national government becomes more important in their lives. As this happens, candidates are also more likely to forsake local parties and assume the labels of national parties. The mechanism behind the impact of decentralization is controversial. Chhibber and Kollman argue that as national governments exert more political or economic

control over local areas candidates have greater incentives to associate themselves with national organizations, and voters have greater incentives to abandon locally competitive but nationally non-competitive parties. However, both when power is centralized and when it is decentralized, local candidates or parties are never nationally competitive. According to Brancati (2008), what matters is political decentralization, or the existence of multiple levels of government in which each level is democratically elected, independently of fiscal decentralization. When states carry out significant decentralization and regionalization reforms, local parties or candidates can be viable competitors for the regional government (but not the national one). As Lago and Montero (2009) show, although they have no chances of winning the national offices, to do their best in sub-national elections local competitors need to run candidates in national elections under their own party's banner.

In sum, decentralization is a centrifugal force that increases the number of electoral parties in national elections due to the existence of *interaction* or *contamination* effects between national and sub-national electoral arenas. The evidence for this is at best mixed, particularly in Western countries. While Morgenstern et al (2009) and Lago-Peñas and Lago Peñas (2011) find limited evidence that decentralization (federalism) reduces nationalization, Chhibber and Kollman (1998, 2004), Jones and Mainwaring (2003) and Harbers (2010) show that federal countries have lower nationalization scores than unitary countries. Finally, Golosov (2014) finds that federalism has a short-term reductive effect on nationalization, which becomes positive as the number of years during which the given country has been a federation increases.

Sociological explanation

As Caramani (2004: 196-97) explains, the survival of territorial politics is principally due to the presence of cultural cleavages, or in other words the geographic concentration of social groups. The expectation is that as geo-ethnic fragmentation increases the nationalization of the party system should decline. First, geographically concentrated groups increase the distinctiveness of local electoral units (Morgenstern et al., 2009: 1328) and thus the variation in the vote shares of parties across districts. Second, when social diversity is concentrated in specific districts or regions, national alliances are less likely than when cleavages are national. The adjustment of groups to local electoral

realities thus accentuates the differences between the parties contesting in different districts (Cox, 1999: 159) and so hampers cross-district coordination. Not surprisingly, district diversity (i.e. variation in the effective number of district parties) has a reductive effect on nationalization (Golosov, 2014).

Explaining short-term variations in nationalization: economic voting

While the institutional and sociological explanations account for cross-national differences in nationalization, short-term variations within countries are beyond their reach. However, as can be seen from Figure 1, nationalization scores (using Bochsler's measure) show sharp changes across elections in most of the countries in our sample. The average standard deviation is 0.05. In Argentina, Belgium, Ireland, and Italy, the four most extreme cases, the standard deviation is 0.24, 0.12, 0.12 and 0.11, while the mean is relatively small: 0.57, 0.64, 0.78 and 0.80 respectively. As institutional arrangements and social diversity rarely change over time and definitely not as quickly as nationalization scores, the gap in explanations of the nationalization of electoral politics is immediately apparent.

Figure 1: Variation in Bochsler's Nationalization Scores (Standard Deviation)

Our argument in this article is that changes in nationalization scores within countries across elections are a function of short-term economic perturbations, and more specifically of aggregate economic voting.ⁱⁱⁱ Economic voting means that voters reward the incumbent party when the economy is performing well and turn to the opposition during economic downturns. As Lewis-Beck and Stegmaier (2000: 211) explain, opinions on economic performance can alter dramatically from one election to the next, whereas party identification and other long-term forces change little. Thus, electoral volatility is more likely to come from a shift in economic evaluations than from a shift in party attachments. When voters cast an economic vote, the nationalization of the party system is profoundly affected: it decreases in response to sharp negative changes in economic performance and increases with positive economic performance.

The economic-voting explanation of nationalization rests on two complementary mechanisms at the party and individual levels. First, large parties (i.e. parties seriously in the running for national office)^{iv} are more nationalized than small parties. Data from 17 democracies and dozens of parties in the Americas (Jones and Mainwaring, 2003: 159-160) and Spain (Simón, 2013b) are conclusive. The positive correlation between party size and nationalization has at least two explanations.

a) Large parties are viable competitors in virtually all districts within an electoral system and thus face incentives to invest everywhere in the development of a nationwide party structure and during campaigns. However, small parties have weaker incentives to develop and maintain a party structure, present candidates, and provide these candidates with campaign resources in districts where they have little chance of success (Jones and Mainwaring, 2003: 160). The electoral support for small parties is therefore expected to be more dependent on the socio-demographic composition of districts and the number of seats to be filled in the district. Additionally, all parties, but particularly those seriously in the running for national office, face a clear incentive to run candidates in every corner of a nation or a region as a sign of seriousness, strength, commitment to the nation or some such thing (Gaines, 1999: 853).

b) Party age, a proxy for the degree of party system institutionalization, is the most consistent predictor of electoral stability (Roberts and Wibbels, 1999: 586). As Mainwaring and Zoco (2007: 161) explain, with the passage of time parties win over

some relatively stable clientele groups, routinize their electoral appeals, and build a more stable base. Not surprisingly, as time goes by parties become more nationalized (Caramani, 2004).^v In Central Europe after communism, the parties with older roots have a more clearly identified and stable electorate than the more recently created parties (Olson, 1998: 462). Therefore, large and stable parties should be more nationalized than small and new parties.^{vi}

Second, poor economic performance boosts electoral volatility, as voters will move away from government incumbents and vote for opposition parties (Remmer, 1991; Madrid, 2005; Mainwaring and Zoco, 2007; Roberts and Wibbels, 1999; Tavits, 2005). More specifically, economic hardship increases the fragmentation of party systems by undermining established political loyalties, increasing anti-incumbent voting, and encouraging voters to support new electoral alternatives (Roberts and Wibbels, 1999: 577). When explaining volatility caused by the entry and exit of parties in the political system, Powell and Tucker (2014) find that the country's economic performance is the only statistically significant predictor: the worse the economy is performing relative to where it was at the start of the transition, the more likely volatility is to be high. Therefore, support for small parties increases with sharp negative changes in economic performance, and decreases with positive economic performance. In sum, as Rosenstone et al. (1996: 162) put it, "it is the failure of major parties to do what the electorate expects of them ... that most increases the likelihood of voters to back a minor party."

When the two mechanisms are put together, the relationship between nationalization and economic performance is straightforward. Economic hardship increases electoral support for small parties. As small parties are less nationalized than large parties, the consequence is a tendency towards less nationalization of the party system. The greater the fragmentation of the party system from one election to the next, the greater the decrease in nationalization. A healthy economy should generate vote shifts toward large parties and so nationalization will increase.

Finally, although economic hardship is expected to decrease nationalization in all party systems, permissive electoral systems should exacerbate this effect; citizens must have options (parties) on which to place their vote to voice discontent. If not, there

is no opportunity to cast an economic vote and abstention results (Rowe, 2015). In permissive electoral systems (i.e. mixed-member systems and above all PR systems, in contrast with majoritarian systems), there are more viable parties (or at least better opportunities to create them) and so the nationalization of the party system should be more affected by economic performance.

3. COUNTRY-LEVEL ANALYSIS: NATIONALIZATION AND ECONOMIC PERFORMANCE

The economic voting explanation of the nationalization of electoral politics is examined through a regression analysis of 475 elections in 43 countries worldwide between 1950 and 2012. The sample includes all lower house elections covered by *The Constituency-Level Elections Archive (CLEA)* (Kolman et al, 2014) for which information about GDP is available. We start in 1950, in order to exclude World War II and the first post-war years. The sample includes a number of cases in which the competition conditions were not entirely free and fair. Following Roberts and Wibbels (1999), in order to maximize the sample size and cover not only Western countries, we err on the side of including all but the most extreme cases.^{vii} For instance, the 2000 election in Ghana is included, which scored 2 in the Polity IV database and so the country was considered an open anocracy. See the Appendix for a description of the 43 countries included in the sample.

Dependent variables

Measurement of the nationalization of parties and party systems has been extensively debated (Lago and Montero, 2014). We choose two measures of nationalization: capturing *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 first is the *Standardized and Weighted Party Nationalization Score (PNS_{sw})* by Bochsler (2010). The measure standardizes for the number of territorial units in a country and also weights for the size of the territorial units. The measure builds upon the weighted nationalization score (PNS_w)^{viii} by adding an additional correction for the unequal sizes of units across countries.^{ix} The formula is:

$$PNS_{sw} = (PNS_w)^{\frac{1}{\log(E)}},$$

where E is a constant calculated at the national level as follows:

$$E_{sw} = \frac{(\sum_1^d vot_{cst})^2}{\sum_1^d v_{cst}^2},$$

with vot_{cst} being the raw number of votes cast in constituency i . The higher its value, the more nationalized the party or the party system are.

Second, Moenius and Kasuya (2004: 504) define the inflation rate (I) of party system linkage as follows:

$$I = \left(\frac{ENP_{nat} - ENP_{avg}}{ENP_{avg}} \right) * 100$$

As Moenius and Kasuya (2004: 549) explain, “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”. 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:

$$I_w = \left(\frac{vot_{nat} * ENP_{nat}}{\sum_{i=1}^n ENP_i * vot_i} - 1 \right) * 100,$$

where vot_{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 . The higher the value, the less nationalized the party or the party system are.

The second measure that will be employed in our country-level empirical analysis is suggested by Kasuya and Moenius (2008) and combines the dimensions of inflation (I) and dispersion (D). Its formal expression is the following:

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

where I_w^α is the weighted inflation measure mentioned above, and $D = CV(I_i)^\gamma k(I_i)^{1-\gamma}$, with I_i measuring how much the party system size in district i differs from the national-level party system size, CV being the coefficient of variation, and k being the kurtosis. In the absence of any theoretical reason, the parameters α and γ 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.

Independent variables

Country economic performance is measured using the so-called output gap. The output gap is the difference between the actual output of an economy and the output it could achieve when it is at full capacity. A positive output gap value indicates an expansion, while a negative output gap means that there are recessionary pressures as the economy is under-producing with its current resources. The output gap is a more appropriate measure than the GDP growth rate to capture the effects of economic crises (or booms) on unemployment, income and public finances over several years. It is not only based on information for the current year, such as the annual GDP growth, but also for past years, and thus gives a better picture of a country's economic performance. To see this point, imagine that the annual GDP growth rate in a given country in year t is 3 percent, but the economy was shocked by a deep economic depression during the five previous years. Hence, in spite of the GDP growth rate in year t , the unemployment rate would be very high and households' income significantly lower than before the start of the depression. A similar argument applies when there is an economic boom after an economic crisis.

The output gap is mathematically defined as the ratio between the actual GDP level of a given country and the trend component computed using the Hodrick-Prescott

filter: $gap = \frac{actual\ GDP}{trend} - 1$. A value of 0.01, for instance, means that the actual GDP is 1 percent over its trend value. On average, it tends to 0 in the long term. As can be seen from Table 1, the average is -0.004, but the variation is substantial, with a minimum of -0.160 and a maximum of 0.151. The Ravn-Uhlig rule is used to set the smoothing parameter λ (Ravn and Uhlig, 2002). The data are taken from Lago-Peñas et al (2014). The variable is expected to enter the model positively when using Bochsler's measure and negatively when using Kasuya and Moenius' measure.

In order to test the extent to which the effect of the output gap on nationalization is affected by the electoral system employed in the country, we create a dummy variable that distinguishes between majoritarian systems and PR and mixed-member systems. As Ferrara and Herron (2005) show, the number of parties in mixed-member systems, especially when the proportional component is dominant, is higher than in pure first-past-the-post systems. Therefore, it makes sense to put together PR and mixed-member systems.

Finally, we control for the number of years after the inauguration of democracy. The data are taken from Mainwaring and Zoco (2007). For countries not included in Mainwaring and Zoco's sample, we also use a Polity 2 score of 0 or higher to operationalize the inauguration of a new democracy or semi-democracy. The variable is expected to have a positive impact on nationalization when using Bochsler's measure and negative when using Kasuya and Moenius' measure.

The model we estimate is the following:

$$Nationalization_{it} = \alpha_i + \rho \cdot Nationalization_{it-1} + \beta \cdot Output\ gap_{it} + \delta \cdot Years\ of\ Democracy_{it} + \varepsilon_{it}$$

When testing whether the impact of the output gap on nationalization is greater in countries using PR or mixed-member systems than in countries using majoritarian systems, a spline function is used. If the electoral system makes a difference for the economic-voting explanation of nationalization, we should observe (when using Bochsler's measure) that the effect of the output gap is stronger in countries employing PR or mixed-member systems. Furthermore, as countries rarely change their electoral

systems, if we ran an interaction between the output gap and the dummy variable separating electoral systems, the high correlation between individual fixed effects and the dummy variable would generate a severe problem of multicollinearity. The descriptive statistics are displayed in Table 1.^x

Table 1: Descriptive statistics*

	Nationalization	Output gap	Democracy	Majoritarian	PR and mixed
Mean	0.797	-0.004	54.48	0.266	0.734
Median	0.823	-0.003	42.00	0	1
Maximum	0.949	0.151	210.00	1	1
Minimum	0.387	-0.160	0	0	0
Std. deviation	0.104	0.046	46.38	0.442	0.442
Observations	384	384	384	384	384

*For model 3 using Bochsler's measure in Table 2.

The pooled time-series cross-sectional models are estimated using a fixed-effect specification to account for idiosyncratic effects for different countries. To correct for heteroscedasticity, standard errors are replaced with clustered residuals. Furthermore, the inclusion in the model of both fixed effects and the lagged value of the dependent variable makes the Least Square Dummy Variable (LSDV) biased (Nickell, 1981). To measure the bias in the estimates and to take into account the strongly unbalanced panel (the number of observations goes from 1 in Ghana to more than 20 in the United Kingdom and the United States), the bias-corrected LSDV estimators for standard autoregressive panel data models suggested by Bruno (2005) are also computed.^{xi} With respect to serially correlated errors, the LM test shows a first-order serial correlation in the residuals when using Bochsler's measure, but not when using Kasuya and Moenius' measure. As the lag of the dependent variable is included in the model, the model using Bochsler's measure is also estimated using a Marquardt NLLS algorithm, which follows an iterative procedure. In sum, the specification is run using the standard LSDV estimation, the Bruno correction of the Nickell bias in the LSDV estimation, and the NLLS estimator to deal with serial correlation.

Results

The first piece of evidence supporting the economic-voting explanation of the nationalization of electoral politics is shown in Figure 1. The coefficient of correlation between the nationalization scores using Bochsler's measure and the output gap in our sample of elections is positive (0.12) and statistically significant at the 0.05 level: positive output gaps increase the nationalization of party systems.

Figure 2: Country-level nationalization and economic performance

The results of the regression models are presented in Table 2. The first model explains about 79 percent of the variance in nationalization scores using Bochsler's measure. The output gap has the expected positive sign and is statistically significant at the 0.05 level. When the economy is performing well, nationalization increases. On average, an increase of 1 per cent in the output gap increases nationalization by 0.142 points. This is not a negligible effect, as the within standard deviation of *Nationalization* is substantially smaller (0.06) than the between one (0.11). Interestingly, the coefficient on the lag of the dependent variable is relatively small: 0.53. This means that there is substantial variation in nationalization scores across elections. Finally, the age of democracy does not behave as expected, but is not statistically significant. In model 1A, nationalization is measured with Kasuya and Moenius' measure. As can be seen, the results are qualitatively the same.

The second model, which is only estimated using Bochsler's measure to save space, shows that the bias generated when both fixed effects and the lagged value of nationalization are included in the specification is not a great concern. The coefficients in models 1 and 2 are virtually the same. However, when a Marquardt NLLS algorithm is used in model 3 the results are slightly different.^{xii} The coefficient on the output gap substantially decreases, and is again statistically significant at the 0.05 level, while the lag of nationalization shows a larger coefficient. The main difference is that now the age of democracy is statistically significant at the 0.05 level: nationalization drops with increasing years after the inauguration of democracy.

Finally, the hypothesis that permissive electoral systems exacerbate the impact of economic performance on nationalization is supported by models 4 and 4A, using Boschler's and Kasuya and Moenius' measures respectively. As expected, the two splines affect nationalization in the same direction, but the output gap is only statistically significant at the 0.1 level in countries employing PR or mixed-member systems. The coefficient on the lag of the dependent variable is very stable in comparison with the previous models, while the effect of age of democracy is not robust across the models.^{xiii}

Table 2: Nationalization and economic performance

	Models					
	(1)	(1A)	(2)	(3)	(4)	(4A)
Nationalization _{t-1}	0.53*** (5.91)	0.61*** (11.53)	0.60*** (11.60)	0.69*** (7.58)	0.69*** (7.54)	0.61*** (11.49)
Output gap	0.142** (2.01)	-4.41*** (3.17)	0.143** (2.23)	0.086** (2.02)		
Output gap*Majoritarian					0.120 (1.19)	-6.103 (1.57)
Output gap*PR or mixed					0.074** (2.27)	-3.92* (1.87)
Years of Democracy	-0.000358 (1.28)	0.00278 (0.92)	-0.000317 (1.42)	-0.000255** (2.10)	-0.000262** (2.15)	0.00299 (1.03)
AR (1)				-0.37*** (2.69)	-0.37*** (2.76)	
R ²	0.790	0.811		0.803	0.804	0.811
Observations	432	419	432	384	384	419
Number of countries	43	42	43	40	40	42
Method	LSDV	LSDV	Bruno (2005)	Iterative NLLS	Iterative NLLS	LSDV

Note: t-statistics computed on clustered standard errors in parentheses in models 1, 1A, 3, 4, and 4A, and based on a bootstrap variance-covariance matrix for LSDV using 100 repetitions in model 2.

*p<0.1; **p<0.05; ***p < 0.01.

Models 1, 1A, 2, and 4A are estimated using Stata 13.1, and models 3 and 4 using Eviews 8.1.

4. PARTY-LEVEL ANALYSIS: AUSTRIA AND PORTUGAL

Above, the party-level mechanisms explaining the aggregated relationship between party system nationalization and economic performance have been hypothesized, but not shown. In this section, we rely on data from elections in Austria (1971-2008, twelve elections) and Portugal (1975-2011, fourteen elections) to examine (i) the extent to which the two main parties' electoral support is negatively affected by economic crises and (ii) whether there is a positive relationship between party size and the degree of nationalization.

The two countries have been selected according to the *most different system design*. Austria and Portugal are maximally different in all the institutional variables that might affect the nationalization of parties and party systems. Austria is a traditional parliamentary federal democracy using a PR system with a significant number of seats (between 7.65 and 60.66 percent since 1949, according to Bormann and Golder, 2013) allocated in an upper tier and a 4 percent election threshold at the national level. Portugal, on the contrary, is a third-wave, semi-presidential and unitary democracy using a PR system without upper tiers or election thresholds.

The party system in both countries has been relatively stable in recent decades and this facilitates a comparison over time. Clearly, stability works in favour of the null hypothesis that economic performance does not affect party nationalization and so it is a more demanding test for our argument. The Austrian party system has been dominated since 1949 by the centre-left Socialist Party (SPO) and the centre-right People's Party (OVP). There are several minor parties: the right-wing Freedom Party (FPO), the third party in all the elections since WW II; the Greens, a small liberal party founded in 1993; the Liberal Forum (LIF); and the Communist Party (KPO). The SPO and the OVP have obtained the highest numbers of votes in all elections, with the exception of 1999 when there was a tie between the OVP and the FPO for second place. Similarly, the Portuguese party system consists of two major political parties – the centre-left Socialist Party (PS) and the centre-right Social Democratic Party (PPD/PSD) – and two minor parties – the Portuguese Communist Party (PCP-PEV) and the conservative People's Party (CDS-PP). Since 1999, a relatively new far-left party, the Left Bloc (BE), has also entered Parliament. In all the elections held from 1975 to 2011 the PS and the PPS/PSD were the most popular parties.

As can be seen from Figure 3, in both Austria and Portugal there is a positive relationship between the output gap and the electoral support of the two main parties in the last 12 and 14 elections respectively. The better the economic performance, the better their election results. However, the correlation is greater in the third-wave democracy, Portugal, than in the more traditional democracy, Austria. The coefficient of correlation is 0.60 (statistically significant at the 0.05 level) in the former and 0.19 (not statistically significant) in the latter.

Figure 3: Two main parties' electoral support and economic performance in Austria and Portugal

The relationship between party size and the degree of nationalization (according to Bochslers' *Standardized and Weighted Party System Nationalization Score*) in the two countries is displayed in Figure 4. Our argument is again strongly supported. In both Austria and Portugal, the two main parties – the SPO and the OV, and the PS and the PSD/PPD respectively – are much more nationalized than small parties. In Austria, the average nationalization scores are 0.91 for the SPO, 0.89 for the OV, 0.84 for the Greens, 0.83 for the FPO, 0.81 for the KPO, and 0.82 for the LIF. In Portugal, the

average scores are 0.93 for the PS, 0.85 for the PSD/PPD, 0.80 for the BE, 0.74 for the PCP, and 0.71 for the CDS-PP.

Figure 4: Party-level nationalization in Austria and Portugal

5. CONCLUSIONS

When explaining political phenomena, there are typically two sources of variation: across countries and over time within countries. The lion's share of this variation in the nationalization of party systems is clearly cross-national. Not surprisingly, the two major theoretical approaches to the study of the nationalization of electoral politics have focused on the institutional characteristics of political regimes and the structure and organization of social cleavages.

In this paper, we have shown that the variation in the nationalization of party systems from one election to the next within countries is not negligible: the coefficient on the lag of nationalization scores in our regression models is relatively small, always below 0.7. As institutions and cleavages are largely time-invariant, we consider that there is a clear gap in the literature. We have suggested a third approach to the study of

nationalization – aggregate economic voting – to fill the gap. Economic perturbations increase vote transfers from large (and highly nationalized) parties to small (and weakly nationalized) parties and thus weaken the nationalization of party system. On the contrary, sharp improvements in economic performance may generate vote shifts towards large parties and so nationalization should increase. As the ability to voice discontent when the economy is performing badly increases with the number of parties, the influence of economic performance is greater in permissive electoral systems.

Our argument has been strongly supported when observing how nationalization scores change across consecutive elections in a sample of 475 elections and 43 countries. The party-level mechanisms accounting for the correlation between economic performance and nationalization have been shown through a closer look at two countries, Austria and Portugal, which differ in all the institutional variables that might affect the nationalization of parties and party systems. Large parties do better when the economy is going well and worse when it is going badly, and they are more nationalized than small parties.

APPENDIX

Sample

Argentina (1983-2007), Australia (1951-1984), Austria (1953-2008), Belgium (1950-1995), Bolivia (1985-2005), Brazil (1954-2006), Bulgaria (1991-1997); Canada (1953-2011), Colombia (1998-2006), Costa Rica (1953-2010), Denmark (1950-2011), Dominican Republic (1970-2006), Finland (1951-2007), France (1973-2002), Germany (1953-2009), Ghana (2000-2004), Greece (1956-2000), Honduras (1980-2001), Hungary (1990-2010), Iceland (1953-1995), India (1977-2004), Indonesia (1999-2004), Ireland (1951-2011), Italy (1953-1996), Japan (1952-2009), Mexico (1997-2009), The Netherlands (1952-2010), New Zealand (1951-2011), Norway (1953-2009), Pakistan (2002-2008), Peru (1985-2011), Philippines (1992-2010), Poland (1991-2005), Portugal (1975-2011), Romania (1996-2000), Russia (2003-2011), Spain (1977-2011), Sweden (1952-2006), Switzerland (1951-1995), Thailand (1969-1992), Turkey (1969-2011), United Kingdom (1950-2010), United States (1950-2010).

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ⁱ In Morgenstern et al.'s terms (2009), this is the static or distributional dimension of nationalization.

ⁱⁱ Similarly, from 2000 to 2007 the unemployment rate in Ireland remained fairly stable at around 4.5%, and then increased to 5.7% in 2008. In 2009, it more than doubled to 12%. The rate continued to increase over the next three years to stand at 14.7% in 2012.

ⁱⁱⁱ Golosov (2014) argues that more economically-developed countries should have more nationalized party systems. However, the empirical evidence does not support the hypothesis. Contrary to Golosov, we do not focus on cross-national differences in nationalization, but on changes from one election to the next.

^{iv} For Jones and Mainwaring (2003: 160), large parties are those that win over 30 percent of the vote.

^v Nationalization has been employed as a measure of party institutionalization (Lupu, 2015).

^{vi} For Morgenstern et al (2009: 1329), however, democratic or party age should not affect nationalization, as some new parties gain widespread support and some older parties consolidate their support bases in limited geographical regions.

^{vii} The results of our regression analysis do not change appreciably if only democratic elections are included in the sample (a country is deemed to be democratic when it obtains a score of at least 6 in the Polity IV database). Results are available upon request.

^{viii} The *Party Nationalization Score (PNS)* was created by Jones and Mainwaring (2003). 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 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 nationalization.

^{ix} The formula establishes the party nationalization score with weighted units (PNS_w) for a country with d weighted units $[1; \dots; I; \dots; d]$, 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 .

$$PNS_w = 2 \cdot \frac{\sum_1^d (v_i \cdot (\sum_1^i p_j - \frac{p_i}{2}))}{\sum_1^d v_i \cdot \sum_1^d p_i}$$

^x As the lagged value of the dependent variable is included in the model, the first election is lost. This explains why we have 475 elections in our sample but a maximum of 432 observations in the models.

^{xi} To implement this method, the bias correction is initialized with the Arellano and Bond estimator and the bias correction is up to order $O(1/T)$. The analytical standard errors are not provided, but bootstrapped errors are.

^{xii} This model is not run using Kasuya and Moenius' composite measure as there is not first-order serial correlation in this case.

^{xiii} When elections which are non-democratic are excluded, the results are virtually the same. For instance, the coefficient on the output gap in model 1A is -4.26 and the t-statistic is 2.46 (i.e. it is statistically significant at the 0.01 level) while in model 3 the coefficient is 0.086 and the t-statistic is 1.87 (i.e. also statistically significant at the 0.1 level).