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THE POLITICS OF PUBLIC GOODS PROVISION UNDER ASYMMETRIC DECENTRALIZATION

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Abstract: This paper examines how asymmetric regional decentralization affects the politics of public goods provision. While global decentralization has increased since World War II, the political consequences of growing asymmetry in the distribution of authority across regions within states remain understudied. Using survey data from Belgium, Canada, Germany, and Spain, as well as panel data from 709 legislative elections in 73 democracies (1960–2018), the study explores how centralized, symmetric, and asymmetric territorial arrangements influence electoral accountability and party nationalization. We show that asymmetric decentralization decreases electoral accountability in national elections but increases it in regional elections. Moreover, it contributes to greater territorial heterogeneity in partisan support within countries.

Key Words: Accountability; Asymmetric decentralization; Economic voting; Nationalization; Public goods.

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1. Introduction

The post–World War II period has been defined as an 'era of regionalization' (Hooghe et al., 2010: chapter 4), marked by the increasing decentralization of economic and political power from the central state toward regions. A parallel, but largely overlooked, trend has been the increasing differentiation of governance at the subnational level within states. More specifically, between 1950 and 2016, the share of countries measured with the Regional Authority Index (RAI) having implemented asymmetric arrangements has doubled (Allain-Dupré et al., 2020, 5). According to data compiled by the RAI, in 2018 —the most recent year with available data— 57 out of 79 countries (72%) had at least one differentiated region in the most authoritative tier of government.[1]

Asymmetric decentralization refers to a differentiated assignment of competencies across subnational governments for the same level of administration (Allain-Dupré, Chatry and Moisio, 2020: 1). A country is considered asymmetrically decentralized if the authority granted to regional governments varies across regions, either in terms of self-rule —the extent to which a regional government exercises authority over its own territory— or shared-rule —the extent to which a regional government participates in decision-making at the national level. Thus, the world is not only becoming increasingly decentralized, but also increasingly asymmetric within countries (Stevens, 1977; Chassé et al., 2025).

In this paper, we explore whether regional asymmetric arrangements affect electoral politics. Our point of departure is the premise that politics in representative democracies is fundamentally rooted in the provision of public goods. We hypothesize that the nature of regional decentralization, specifically whether it is symmetric or asymmetric, significantly shapes both the type of public goods delivered across regions and the incumbents responsible for their provision.

In highly centralized systems, a single national incumbent handles the provision of public goods. When authority shifts toward regional governments and away from the central government, multiple incumbents —both national and regional— become involved in decision-making. If decentralization is symmetric, all regional incumbents

[1] The RAI defines two types of differentiated regions: (a) In countries without a regional tier, individual regions that possess either self-rule or shared rule; (b) In countries with a regional tier, regions that differ in their degree of self-rule or shared rule compared to standard regions.

make decisions about the same set of public goods. In contrast, in asymmetric decentralized systems, the set of public goods over which national and regional incumbents exercise authority varies across regions.

While extensive research has examined how symmetric decentralization affects the provision of public goods compared to centralized systems, the consequences of regional asymmetric arrangements have been largely overlooked. This paper explores whether the three institutional arrangements —centralization, symmetric decentralization and asymmetric decentralization— differ in two key outcomes: first, how voters reward or punish the provision of public goods (i.e., electoral accountability); and second, the number and strength of parties competing in elections to take responsibility for delivering those goods (i.e., electoral nationalization).

The analysis relies on both individual- and country-level data. To examine the reward-punishment mechanism under different models of territorial decentralization, we use survey data from the *Making Electoral Democracy Work* project (Blais, 2010) (https://electoraldemocracy.com/), covering three regions each in Belgium and Canada, and two regions each in Germany and Spain. These four countries are among the most decentralized in the world. In Germany and Spain, the selected regions —Bavaria and Lower Saxony in Germany, and Catalonia and Madrid in Spain— have relatively symmetric decentralization arrangements. In contrast, Belgium and Canada exhibit asymmetry in the distribution of power across regions. In Belgium, Flanders and Wallonia enjoy greater powers than Brussels (Shair-Rosenfield et al., 2021b). In Canada, self-government is more extensive in Quebec than in British Columbia and Ontario (Shair-Rosenfield, 2021c Vaillancourt, 2026).

To test how the number and type of parties are affected by different forms of regional decentralization, we use panel data from 709 legislative elections in 73 democratic countries, spanning the period from 1960 to 2018. Specifically, we examine whether party nationalization —which captures the geographic homogeneity of a party's vote share across subnational units within countries (Morgenstern, 2017)—varies across centralized, symmetrically decentralized, and asymmetrically decentralized countries.

2. Argument

The provision of public goods by the government constitutes a cornerstone of representative democracy. Agency theory (Shapiro, 2005) provides a valuable analytical framework for understanding how different models of decentralization shape the delivery

of public goods. Citizens —more specifically, voters— act as principals who select a party or candidate (the agent) from among several competitors in an election. The agent is expected to act on behalf of the principal by deciding which public goods to provide and implementing them. Citizens, in turn, are responsible for evaluating the agent's performance —specifically, the type and quality of public goods delivered— and for rewarding or punishing the incumbent accordingly, using whatever criteria they deem appropriate (Manin, 1997).

The decentralization of power significantly impacts this agency relationship by influencing both the number of agents involved in decisions about public goods and the variety of public goods delivered across the country. This, in turn, affects how voters choose their agents and how they reward or punish them. It is therefore crucial to take into account the institutional framework within which the provision of public goods occurs.

First, in highly centralized countries —where vertical decentralization is not a concern because powers rest entirely (or almost entirely) with the central government— there is a single agent, the national government, responsible for the choice and provision of all public goods (**scenario 1**).

Second, in symmetrically decentralized countries, where authority is shared between national and regional governments, two distinct agents are responsible for the provision of public goods: the national government and the regional governments. Vertical decentralization creates multiple, simultaneous agency relationships within the state. Due to the symmetrical nature of decentralization, the types of public goods provided by national and regional governments differ in scope but remain consistent across regions. Here, horizontal decentralization is absent and thus does not affect agency relationships (**scenario 2**).

Finally, in asymmetrically decentralized countries—where the authority given to regional governments varies across the country—the most complex agency relationships arise. Vertical decentralization results in multiple agents, including the national government and various regional governments, while horizontal decentralization causes the types of public goods provided to differ across regions. In other words, public goods are delivered by different levels of government—the national or regional—depending on the region in which citizens (the principals) reside (**scenario 3**).

Public goods provided at the national and regional levels are not randomly distributed. According to the OECD's *Regions and Cities at a Glance 2020* report

(OECD, 2020), using subnational spending as a proxy, the most important public goods provided at the regional level include education (approximately 30% of total subnational spending on average across OECD countries), health (about 20%), social protection (roughly 10–15%), general public services (around 10%), transport and infrastructure (about 8–10%), and environmental protection (5–7%).

Table 1 provides a summary of the three decentralization scenarios.

Table 1. Decentralization Models and the Agency Relationship

Scenario	Decentralization Model	Public Goods	Agent(s)
1	Highly centralized	National provision	National
2	Symmetrically decentralized	National and regional provision; vertical difference and horizontal uniformity	National and regional
3	Asymmetrically decentralized	National and regional provision, vertical and horizontal difference	National and regional

A large body of research in political science has examined how the transition from scenario 1 to scenario 2 —that is, from a highly centralized country to a symmetrically decentralized one— affects the agency relationship in representative democracies. Two crucial findings are that: (i) the decentralization of authority weakens the impact of economic evaluations on voting for incumbent national governments, and (ii) it increases both the number of political parties and the heterogeneity of their electoral support across the country.

First, the conventional wisdom holds that economic voting is weakest when multilevel governance is most prominent (Anderson, 2006; Gélineau and Remmer, 2005; Golder et al., 2017). As explained by Charbonneau and Anderson (2006: 215–219), decentralized institutional designs introduce externalities that shape the behavior of both citizens and government elites.

The first externality concerns the ability of citizens to hold governments accountable for their actions and policy outcomes. For voters to hold incumbents accountable —by re-electing them when they govern effectively or voting them out when they perform poorly— they must be able to determine who is responsible for policy outcomes. Without this attribution of responsibility, meaningful accountability is unlikely to occur (Rudolph, 2003). Beginning with Powell and Whitten (1993), the argument is

that clarity of responsibility within national governing institutions increases the likelihood that citizens will hold the incumbent government accountable for economic and political results. A substantial body of empirical evidence shows that decentralization — particularly in the form of multilevel governance— undermines the clarity of responsibility of national governments for national economic conditions (Anderson, 2006; Golder et al., 2017: chapter 7; León 2010, 2012; León and Jurado, 2021; Hunter, 2025). The key mechanism at work is the high informational demand placed on citizens by complex governance arrangements. In a centralized system with only a national government, political responsibility is concentrated and easily attributable. However, in systems with subnational governments, responsibility becomes more fragmented. In such contexts, voters must determine whether authority over specific issues is shared between different levels of government or held exclusively by one, thereby complicating the process of holding elected officials accountable.

The second externality relates to the strategic behavior of political elites who deliberately undermine clear lines of jurisdictional responsibility in order to blur attributions of authority and distort perceptions of government performance. Specifically, governments at different levels often engage in blame-shifting and credit-claiming regarding economic outcomes (Anderson, 2006). This makes it very difficult to determine which level of government should be rewarded or punished for a good or bad outcome.

The political and economic decentralization of power is also theorized to affect party systems by increasing the number of regional parties and the heterogeneity of electoral outcomes across the country—that is, reducing party nationalization. From the perspective of principal-agent theory, decentralization increases the number of political agents simultaneously involved in decision-making about public goods, as well as the diversity of those decisions across regions.

The classical argument by Chhibber and Kollman (1998, 2004) is that increasing decentralization makes party systems across different levels of vote aggregation less similar. More specifically, Morgenstern (2017: 118) identifies three mechanisms that contribute to this effect: (i) drawing additional focus to the regions; (ii) fostering the emergence of independent political forces; and (iii) increasing the difficulty of coordination for national parties (see also Morgenstern et al., 2009: 1328).

The evidence about the impact of decentralization on the number of regional parties is mixed, ranging from positive to negligible effects (see Ricard-Huguet and Sellars, 2023 and Lublin 2025 for a comprehensive review of the current literature). A

nuanced conclusion is that there are no universal effects; rather, the impact of decentralization is context dependent. It varies according to the type of decentralization and the differing political preferences across regions within countries. For instance, focusing on extreme events such as the Great Recession and the COVID-19 pandemic, Lublin (2025) shows that regions with stronger autonomous control over their internal affairs experienced fewer new parties compared to regions with limited internal power. In contrast, regions possessing powers that allowed them to influence central government actions saw a greater increase in the number of parties than those lacking such powers.

The evidence supporting a positive correlation between centralization and nationalized party systems is more robust, with no indication of a reverse process (see Kollman and Worthington, 2021). Additionally, there is evidence showing that ethnic heterogeneity plays a relevant role. Using Morgenstern's words (2017: 125), "a heterogeneous population that is given the political opportunity to express those preferences will take it."

Clearly, the so-called 'era of regionalization' has stimulated a substantial body of research focused on the shift of states from centralized governance structures toward increasingly decentralized settings. However, this research agenda has largely overlooked the widespread adoption of asymmetric decentralization arrangements worldwide. In other words, a gap persists in the literature concerning the consequences of moving from symmetrically decentralized systems to asymmetrically decentralized configurations. It is striking that existing scholarship relies on the implicit and empirically untested assumption that no substantive differences exist between symmetric and asymmetric models. This paper seeks to critically interrogate that assumption and contribute to addressing a significant gap in the literature.

In contrast to previous research, we argue that asymmetric decentralization leads to heterogeneous effects on economic voting and party systems across regions. While the provision of public goods may differ between highly centralized and symmetrically decentralized countries, the difference tends to be relatively uniform across regions. However, we contend that significant regional variation emerges in asymmetrically decentralized countries. When examining the agency relationship in such contexts, we expect that varying degrees of regional powers will result in divergent patterns of economic voting and party system dynamics across regions within the same country.

When examining how the agency relationship involved in the provision of public goods varies across scenarios of authority decentralization, we focus on two dependent

variables. First, electoral accountability, measured by the strength of economic voting. In line with the vast majority of studies on electoral behavior (Lewis-Beck and Stegmeier, 2018), we consider holding the government accountable for the state of the economy to be the minimal conception of electoral accountability. Second, the congruence between the nationwide vote and the national vote in the regions within countries. In order to make comparisons across decentralization models, election results will be aggregated into a nationalization measure capturing the consistency in party support across the country.

- *Economic voting*

Elections serve to hold governments responsible for their performance, mainly through economic retrospective voting. According to the most traditional interpretation of retrospective voting, voters use the past record of the government to predict future performance: they support the government when the economy has been improving and turn against it when the economy has been deteriorating (Key, 1964: 568).

Our expectation is that, all else being equal, economic voting should be stronger when more is at stake in elections. From a rational choice perspective, voters' behavior is influenced by the amount of power granted to the elected body. In decentralized countries, subnational governments with greater authority are expected to hold more significance in the eyes of voters. As a result, elections that determine the formation of these governments are likely to be more salient. Conversely, central governments in decentralized systems lose some of their authority, making them relatively less important (Blais et al., 2011). Survey data from countries with varying degrees of decentralization show that regional elections are generally considered to be less important than national elections (Golder et al., 2017: 70-71).

To formulate our hypotheses regarding economic voting, we identify four ideal types of regions:

- (a) Regions in highly centralized countries, where all regions have limited and identical powers; this corresponds to Scenario 1 in Table 1.
- (b) Regions in symmetrically decentralized countries, where all regions possess extensive and identical powers; this corresponds to Scenario 2 in Table 1.
- (c) Standard regions in countries with asymmetric decentralization, in contrast to differentiated regions that hold greater authority within the most authoritative regional

tier. This corresponds to Scenario 3 in Table 1, from the perspective of standard regions.

- (d) Differentiated regions with greater authority in countries with asymmetric decentralization, in contrast to standard regions within the most authoritative regional tier. This corresponds to Scenario 3 in Table 1, from the perspective of differentiated regions.

Symmetric decentralization should not produce significant variation across regions in the relative importance that parties and voters assign to national versus regional elections. In contrast, under conditions of asymmetric decentralization, where certain regions are granted greater authority than others, regional elections in the differentiated regions are likely to assume greater political salience than in the standard regions, while national elections may be perceived as relatively less consequential.

Our *first hypothesis is that the strength of economic voting in national elections decreases as regions are granted more authority*. In terms of the four types of regions we have identified, the strength of economic voting in national elections is expected to follow this order: $\boldsymbol{a > b \approx c > d.}$

If we focus now on regional elections, our *second hypothesis is that the strength of economic voting in regional elections increases as regions are granted more authority*. In terms of the four types of regions we have identified, the strength of economic voting in regional elections is expected to follow this order: $\boldsymbol{d > c \approx b > a.}$

In sum, we argue that asymmetrical arrangements are expected to enhance electoral accountability in regional elections while simultaneously diminishing it in national elections.

- *Nationalization*

As previously discussed, the conventional argument holds that the decentralization of authority decreases the uniformity of partisan support across regions or districts within a country. Building on this, we hypothesize that asymmetric regional arrangements are likely to further exacerbate this heterogeneity in the geographic distribution of parties' electoral support. Specifically, a region operating under a differentiated asymmetric arrangement in a highly decentralized country is expected to exhibit a stronger focus on local political issues during elections, compared to standard

regions within the same asymmetrically decentralized state, or regions in highly decentralized but symmetric countries.

The effect of asymmetric arrangements on electoral dynamics is anticipated to manifest similarly in both national and regional elections. However, due to the availability of data and the broader implications for national-level representation, our empirical analysis focuses on national elections. To capture the degree of heterogeneity in partisan support, we employ a measure of *static nationalization* as developed by Morgenstern (2017), which reflects the extent to which electoral support for parties is consistent across geographic units.

In terms of the three scenarios of decentralization outlined in Table 1, we hypothesize that the highest degree of nationalization will be found in highly centralized countries, followed by highly decentralized but symmetric systems, with the lowest levels of nationalization occurring in highly decentralized and asymmetric contexts: $\boldsymbol{Scenario\ 1 > Scenario\ 2 > Scenario\ 3.}$ Moving from Scenario 1 to Scenario 2 is captured by the RAI scores in each country, while the transition from Scenario 2 to Scenario 3 is captured through the interaction between the RAI score and the existence of an asymmetric region.

3. Empirical analysis

Our empirical analysis proceeds in two steps. First, using individual-level data, we examine how asymmetric arrangements affect economic voting. Second, using longitudinal country-level data, we explore how party nationalization is shaped by the degree of asymmetry in decentralization.

3.1 Economic voting

- *Data and methods*

In the first step of our empirical analysis on accountability, we draw on individual-level data from the *Making Electoral Democracy Work* (MEDW) project (https://electoraldemocracy.com/), which covers national and regional elections in two regions in Germany (Bavaria and Lower Saxony) and Spain (Catalonia and Madrid) and three regions in Belgium (Brussels, Flanders and Wallonia) and Canada (British

Columbia, Ontario and Quebec) (see Table 2).[2] The MEDW dataset is well-suited to our purposes for three main reasons. First, the samples are representative at the regional level. Second, the questionnaires were explicitly designed to study electoral accountability across different levels of government. Third, the country sample includes some of the most decentralized systems in the world. According to the 2018 RAI scores, based on a sample of 95 countries, Germany ranks first, Spain fourth, Belgium fifth, and Canada eighth.

Importantly, among the regions examined in these four countries, Germany and Spain exhibit symmetric decentralization, while Belgium and Canada include both standard and asymmetric regions. Notably, the most decentralized country in our sample —Germany— is characterized by symmetric arrangements, ensuring that differences between standard and asymmetric regions are not simply driven by overall levels of decentralization. Given that only highly decentralized counties are included in the analysis, we test for differences in economic voting between regions **b, c,** and **d**, based on the previous classification.

Table 2. Sample of countries and elections in the individual-level analysis

Country	Region	Year	Self-rule (region)	RAI (country)
Belgium	Brussels	2014	13	34.45
	Flanders	2014	14	
	Wallonia	2014	14	
Canada	British Columbia	2011	17	28.23
	Ontario	2011	17	
	Quebec	2011	18	
Germany	Bavaria	2013	15	37.67
	Lower Saxony	2013	15	
Spain	Madrid	2011	14	35.52
	Catalonia	2011	14	

The analysis will be conducted separately for national and regional elections. The dependent variable is a dichotomous variable coded 1 if the respondent voted for an

[2] Unfortunately, we do not have any available survey data for British Columbia and Madrid in regional elections.

incumbent party and 0 otherwise in the corresponding election. The main explanatory variables are a dummy identifying asymmetric regions (1 = Flanders, Wallonia, and Quebec) and standard regions (0 = Brussels, British Columbia, Ontario, Bavaria, Lower Saxony, Catalonia, and Madrid) and respondents' retrospective evaluations of the national and regional economy over the past 12 months.[3] The relevant survey items asked: *"Over the past 12 months has the [national/regional] economy improved, weakened or stayed the same? Gotten worse, Stayed the same, Gotten better."* The variable will be treated as continuous to maximize the degrees of freedom. The varying strength of economic voting in symmetric and standard regions, as well as between national and regional elections, is assessed through an interaction between these two variables. We expect the effect of economic evaluations (i.e., the slope of the variable) on incumbent support to be stronger in standard regions in national elections and in asymmetric regions in regional elections.

Controls include partisan alignment (incumbent, opposition, and no alignment), gender (male vs. female), age (in years), and relative attachment to the national versus regional level of government. Attachment was measured on an 11-point scale (0 = not attached at all; 10 = very strongly attached). We compute the difference between national and regional scores, where positive values indicate stronger attachment to the national level.[4]

We estimate logit models with country fixed effects. Standard errors are clustered at the national level in some models to account for the nested structure of the data and to ensure robust inference.

- *Results*

Table 3 presents the regression results on economic voting in national elections, using our sample of four countries and ten regions. In the additive Model 1, with standard errors clustered by country, we find that the probability of supporting the incumbent increases with more positive evaluations of the economy. This variable is statistically significant at the 0.01 percent level. As expected, incumbent partisans are more likely to

[3] We do not distinguish between the three types of regions — b, c, and d — because of a problem of collinearity with the country fixed effects.

[4] We do not include a control for the coincidence of national and regional incumbents, as it is highly collinear with the country fixed effects.

support incumbent parties, while opposition partisans are more likely to support opposition parties. Both variables are statistically significant at the 0.01 percent level. The only additional relevant control is gender, with women being more likely to support the incumbent.

Our hypothesis —that the strength of economic voting in national elections decreases as regions are granted more authority— is tested using the interaction term in Model 2. As predicted, the interaction term is negative and statistically significant at the 0.05 percent level. This indicates that evaluations of the national economy are associated with a weaker probability of supporting the incumbent in asymmetric regions compared to standard regions. This result strongly supports our hypothesis. When not clustering the data, as in Models 3 and 4, the results remain virtually the same.

Table 3. Accountability in National Elections

VARIABLES	Model 1	Model 2	Model 3	Model 4
Incumbent ID	2.816***	2.811***	2.816***	2.811***
	(0.194)	(0.198)	(0.0945)	(0.0946)
Opposition ID	-1.497***	-1.501***	-1.497***	-1.501***
	(0.448)	(0.449)	(0.0691)	(0.0694)
Age	0.00541	0.00556	0.00541***	0.00556***
	(0.00615)	(0.00600)	(0.00192)	(0.00192)
Female	0.241***	0.236***	0.241***	0.236***
	(0.0644)	(0.0676)	(0.0541)	(0.0542)
Dif. Attachment	0.0749	0.0688	0.0749***	0.0688***
	(0.0632)	(0.0615)	(0.0105)	(0.0108)
National Economy	0.926***	0.991***	0.926***	0.991***
	(0.126)	(0.0817)	(0.0414)	(0.0479)
Asymmetric Region		-0.0589		-0.0589
		(0.243)		(0.178)
Economy × Asymmetric Region		-0.239**		-0.239**
		(0.100)		(0.0950)
Country Fixed Effects	Yes	Yes	Yes	Yes
Clusters	Country	Country	No	No
Constant	-2.961***	-3.048***	-2.961***	-3.048***
	(0.288)	(0.245)	(0.125)	(0.128)
Pseudo R^2	0.333	0.336	0.333	0.336
Observations	10,317	10,317	10,317	10,317

Robust standard errors in parentheses.
*** p<0.01, ** p<0.05

In Table 4, we focus on regional elections and test our second hypothesis, which predicts that the interaction terms should exhibit the inverse pattern; that is, the strength of economic voting in regional elections should increase in asymmetric regions compared

to standard regions. In the additive Model 1, with standard errors clustered by country, and Model 3, without clustering, we find that the probability of supporting the incumbent increases with more positive evaluations of the economy. This variable is statistically significant at the 0.01 percent level in both models. As expected, incumbent (opposition) partisans are more likely to support incumbent (opposition) parties, and both variables are statistically significant at the 0.01 percent level. None of the other control variables has a statistically significant effect on the probability of voting for incumbent parties.

When including the interaction term, it has the expected positive sign and is statistically significant at the 0.1 percent level (specifically at the 0.06 percent level) in Model 2 and at the 0.05 percent level in Model 4. This indicates that the economy plays a more important role when deciding to support regional incumbents in asymmetric regions than in standard regions. This inverse effect relative to economic voting in national elections is consistent with our hypotheses. The dummy variable for asymmetric regions is negative in all models, but statistically significant only in Model 4.

Table 4. Accountability in Regional Elections

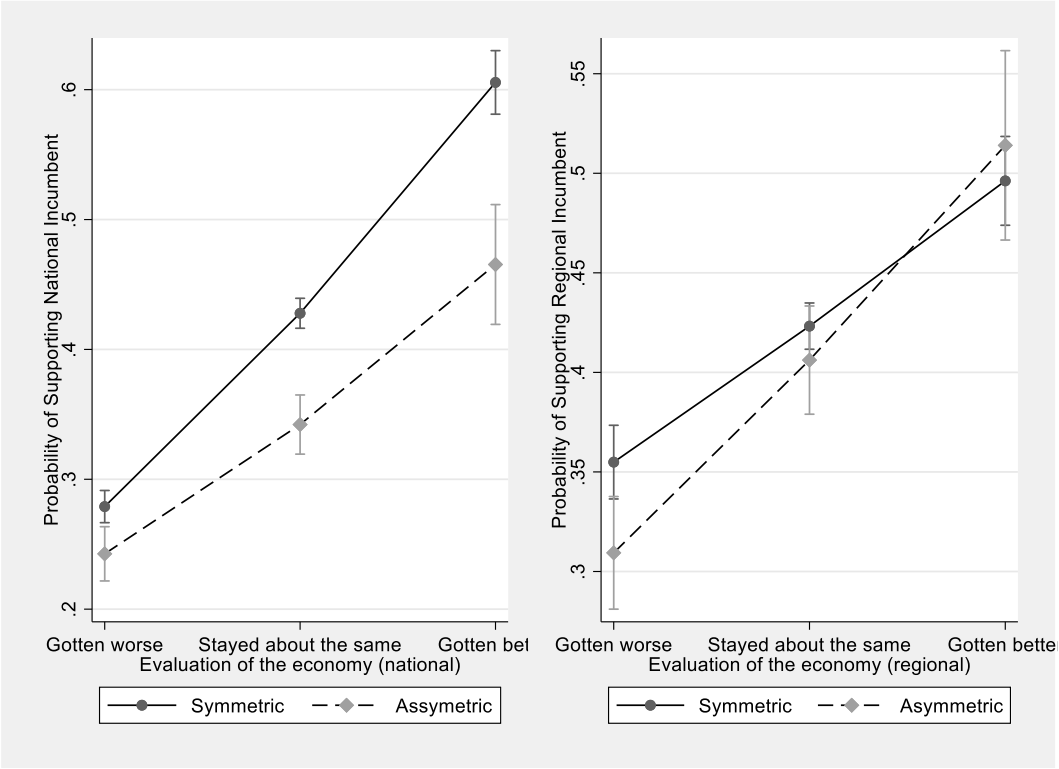
VARIABLES	Model 1	Model 2	Model 3	Model 4
Incumbent ID	2.669***	2.672***	2.669***	2.672***
	(0.0911)	(0.0913)	(0.0881)	(0.0881)
Opposition ID	-2.143***	-2.141***	-2.143***	-2.141***
	(0.133)	(0.139)	(0.106)	(0.106)
Age	-0.00277	-0.00288	-0.00277	-0.00288
	(0.00279)	(0.00287)	(0.00213)	(0.00213)
Female	-0.00659	-0.00827	-0.00659	-0.00827
	(0.0363)	(0.0373)	(0.0583)	(0.0584)
Dif. Attachment	-0.0543	-0.0572	-0.0543***	-0.0572***
	(0.0616)	(0.0555)	(0.0108)	(0.0111)
Regional Economy	0.502***	0.448***	0.502***	0.448***
	(0.120)	(0.109)	(0.0467)	(0.0547)
Asymmetric Region		-0.540		-0.540***
		(0.497)		(0.205)
Economy × Asymmetric Region		0.216*		0.216**
		(0.114)		(0.106)
Country Fixed Effects	Yes	Yes	Yes	Yes
Clusters	Country	Country	No	No
Constant	-1.977***	-1.918***	-1.977***	-1.918***
	(0.219)	(0.215)	(0.158)	(0.161)
Pseudo R^2	0.316	0.316	0.316	0.316
Observations	7,935	7,935	7,935	7,935

Robust standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

To facilitate the interpretation of the regression results, Figure 1 presents the average predicted probabilities of supporting the incumbent in standard and asymmetric regions, conditional on evaluations of both the national and the regional economy, with 95% confidence intervals. The simulations draw on the estimates from Model 4 in Tables 3 and 4.

The results displayed on the left-hand side indicate that economic voting in national elections is stronger in standard than in asymmetric regions. In standard regions, the predicted probability of supporting the incumbent increases substantially, from 0.28 to 0.61, as evaluations shift from negative to positive. By contrast, in asymmetric regions, the corresponding increase is more modest, rising from 0.24 to 0.47. Conversely, when focusing on the regional economy, the pattern is reversed. In asymmetric regions, the probability of incumbent support rises from 0.31 to 0.51 as evaluations of the regional economy improve. In standard regions, the effect of regional economic evaluations is slightly weaker, as the probability of supporting the incumbent increases from 0.36 to 0.50.

Figure 1. Simulated Effect of Economic Evaluation in Standard and Asymmetric Regions



In short, hypothesis 1, according to which the impact of economic evaluations on support for the incumbent party in national elections is weaker in asymmetric regions, is clearly confirmed while hypothesis 2, according to which the pattern is reversed in regional elections, is weakly confirmed.

3.2 Nationalization

- *Data and methods*

In the second step of our empirical analysis, we use panel data from 709 legislative elections held in 73 democratic countries between 1960 and 2018 —the first and last years for which RAI scores are available— to test our hypotheses about the effect of asymmetrical decentralization on the nationalization of partisan support. Following Boix et al. (2013), we define democratic countries as those that hold free and fair legislative elections, have an executive accountable either directly to the electorate or to the elected legislature, and where at least half of the male population has the right to vote. A detailed list of the countries and elections included in the sample is provided in the Appendix.

The dependent variable is party system nationalization, measured at the country-election-year level and including all parties receiving votes. Nationalization captures the homogeneity (or heterogeneity) of partisan support across subnational units (i.e., districts). We expect nationalization to decrease with both decentralization and the existence of asymmetric regions. We focus on the standardized and weighted party system nationalization score (*PSNS_sw*) from Bochsler (2010), using data provided by the Constituency Level Election Archive (CLEA) database (http://www.electiondataarchive.org, Kollman et al., 2019). The *PSNS_sw* measure employs the Gini coefficient of inequality in vote shares across districts to gauge the nationalization of party systems. The calculation involves taking the inverse of the Gini coefficient. Higher scores indicate more inequality in the distribution of vote shares, reflecting stronger nationalization (for the exact computation of the measure see Kollman and Worthington (2021) and the original contribution by Bochsler (2010). *PSNS_sw* ranges from 0.139 in Argentina in 2009 to 0.949 in Honduras in 1985; the average is 0.772, with a standard deviation of 0.14.

The key independent variables in this analysis are the country's RAI score and the *Degree of Asymmetry* in decentralization across regions within countries. Asymmetric regions are defined as those that deviate from the standard model in terms of self-rule or shared rule. Due to significant variation in population sizes across regions within

countries —which impacts the calculation of nationalization scores— regions are weighted according to their proportion of the national population (as estimated in 2010).[5] The variable ranges from 0 in approximately two-thirds of the elections (indicating no asymmetric decentralization) to a maximum of 0.76 in Turkey in 2014 and 2018. In those years, 76% of the Turkish population lived in differentiated regions at the most authoritative tier. The average of the variable is 0.05 and the standard deviation 0.12. Data for both variables are sourced from Shair-Rosenfield et al. (2021a).

The RAI scores are used to test the hypothesis that when regions are granted greater authority (i.e., when moving from region type **a** to region type **b, c, d**), the congruence between the nationwide vote and the regional vote decreases in national elections. In contrast, the variable capturing the existence of asymmetric regions tests the hypothesis that asymmetry affects the heterogeneity of partisan support across regions. Since our hypothesis states that the impact of decentralization is particularly strong when it is accompanied by asymmetry between regions (i.e., when moving from region type **c** to type **d**), the effect of asymmetric decentralization on nationalization will be examined using the interaction term *RAI score* × *Degree of Asymmetry.*

Country-level *PNSN_sw* scores are regressed on their conventional institutional, economic, and sociological determinants (Morgenstern 2017: Chapters 5 and 6) using ordinary least squares (OLS) with a time-series cross-section (TSCS) design. To address autocorrelation, the model includes lagged (by one election) *PNSN_sw* scores on the right-hand side of the equation. Robust standard errors are clustered by country to account for within-country dependencies in the data.

The institutional, economic, and sociological determinants of nationalization are as follows:

- Lago and Lago-Peñas (2025) show that, in OECD (Organisation for Economic Co-operation and Development) countries, nationalization is negatively correlated with the *Rural Population*. Accordingly, we control for the rural population as a percentage of the total population in each election year for every country. The rural population refers to individuals living in rural areas as defined by national statistical offices. It is calculated as the difference between the total population and the urban population. The source for this data is the World Bank (2020a).

[5] This weight reflects the relative size of each region in the national election results, assuming there is no malapportionment.

- The rate of change in annual gross domestic product (*GDP*) in constant US dollars in the year prior to each election is included as an economic control (World Bank 2020b). Economic disruptions tend to increase vote transfers from large (and highly nationalized) parties to small (and weakly nationalized) parties, thereby reducing the overall nationalization of the party system (Lago and Lago-Peñas, 2016).

- A categorical variable is used to capture the *Electoral System* in place during each election: it is coded 1 if the system is majoritarian (plurality or majority), 2 if it is proportional representation (PR), and 3 if it is mixed. Countries using PR are expected to exhibit higher levels of nationalization than those using majoritarian systems, due to the greater incentives for personal vote cultivation and the typically higher number of electoral districts under majoritarian rules. The source is Bormann and Golder (2022).

- *Ethnic Fragmentation* is taken from Alesina et al. (2003). When ethnic groups are geographically concentrated and possess interests distinct from other sectors of society, higher levels of ethnic fragmentation are expected to reduce nationalization.

- A dummy variable is included to indicate OECD membership, coded as 1 if the country is an OECD member. The expectation is that established democracies —such as those typically found in the OECD— are more likely to exhibit institutionalized and nationalized party systems.

- Finally, *Country Size* (in millions of square kilometres) is included as a control (World Bank 2020c). Larger countries are generally more heterogeneous than smaller ones, which may affect levels of party system nationalization.

- *Results*

The results of the panel estimates incorporating nationalization scores are presented in Table 5. Model 1, which includes all control variables, shows that the degree of decentralization significantly reduces nationalization, with the effect being statistically significant at the 0.05 percent level. This finding supports the conventional argument that nationalization decreases when regions are granted greater authority. As expected, nationalization is highly persistent across elections: the coefficient for nationalization in the previous election is 0.773 and statistically significant at the 0.01 percent level. However, the *Degree of Asymmetry* does not shape nationalization. None of the control variables are statistically significant. The model explains a substantial portion of the variance, with an R-squared of 0.692.

Model 2 adds the interaction term *RAI score × Degree of Asymmetry* to the previous model. The interaction term has the expected negative sign and is statistically significant at the 0.05 level. This indicates that the negative effect of decentralization on nationalization scores is stronger in countries with a greater population in asymmetric regions. This finding supports the argument that moving from the ideal type of region c to region d reduces the congruence between the nationwide vote and the regional vote.

Table 5: Nationalization of Party Systems

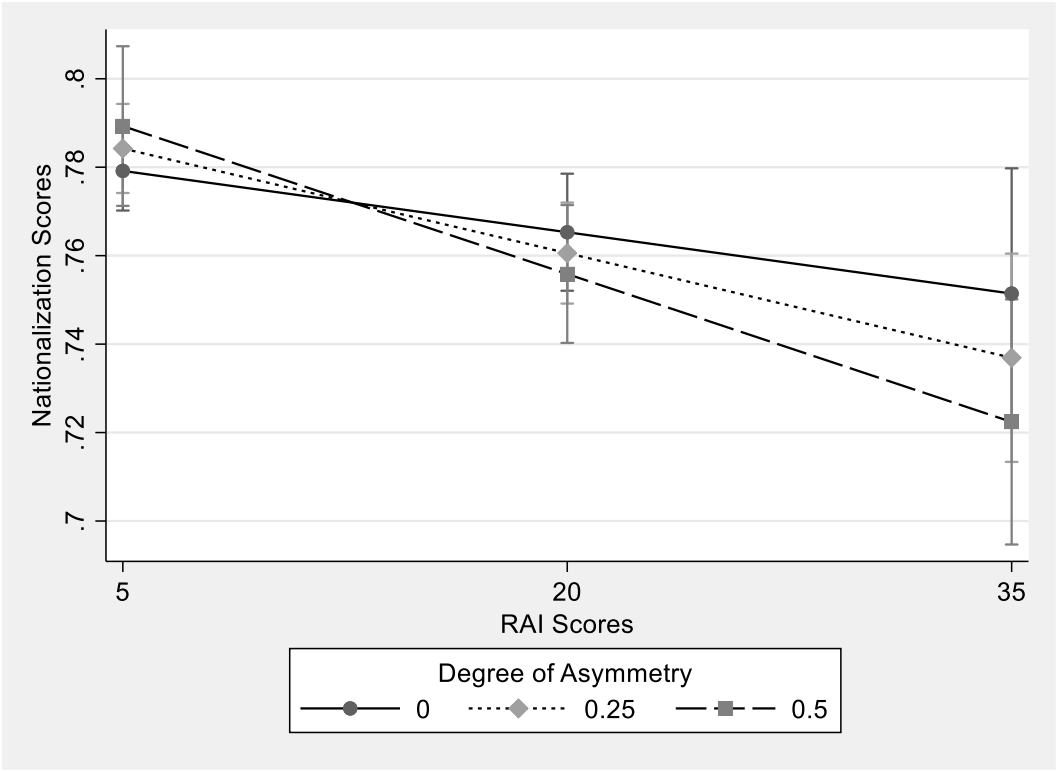
VARIABLES	Model 1	Model 2
Nationalization Scores (e-1)	0.773***	0.771***
	(0.0406)	(0.0406)
Rural Population	0.0041	0.0007
	(0.0338)	(0.0340)
GDP Annual Growth Rate	0.000018	0.0001
	(0.0011)	(0.0011)
Electoral System (ref.: Majoritarian)		
Proportional	-0.0067	-0.0068
	(0.0092)	(0.0092)
Mixed	-0.0258	-0.0279
	(0.0171)	(0.0172)
Ethnic Fragmentation	-0.0330	-0.0295
	(0.0224)	(0.0227)
OECD Member	0.0170	0.0173
	(0.0120)	(0.0122)
Country Size	0.0021	0.0019
	(0.0018)	(0.0018)
RAI Score	-0.0011**	-0.0009*
	(0.0005)	(0.0005)
Degree of Asymmetry	-0.0122	0.0333
	(0.0178)	(0.0244)
RAI Score × Degree of Asymmetry		-0.0026**
		(0.0013)
Constant	0.189***	0.189***
	(0.0383)	(0.0384)
Observations	709	709
# of Countries	73	73
R^2	0.692	0.693
Estimator	OLS	OLS

Country-clustered robust standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

As interaction effects are not always easy to interpret, Figure 2 plots the predicted nationalization scores with 95% confidence intervals based on the results of Model 2 in Table 5, conditional on different degrees of asymmetrical arrangements. Two key findings emerge. First, nationalization decreases as decentralization increases. Second, this negative effect of decentralization on nationalization is stronger in countries with a higher degree of asymmetry. Specifically, nationalization drops by only 4%, from 0.779 to 0.751, when the RAI score increases from 5 to 35 in countries without asymmetric

arrangements. In contrast, in countries where 50 percent of the population lives in regions with greater authority than the standard region, nationalization falls more sharply, by 8% (from 0.789 to 0.722) over the same range of RAI scores.

Figure 2: Simulated Effect of Decentralization Conditional on the Degree of Asymmetry



Our results confirm previous findings that decentralization increases the heterogeneity of the vote across regions but add an important qualification, that is, the effect of decentralization is much more strongly felt in countries with asymmetric power.

4. Conclusions

A large literature has documented the substantial trend towards decentralization in many countries over the last few decades and has examined how this trend has affected electoral politics. We have argued in this paper that it is important to go beyond that global trend and to distinguish two types of decentralization, symmetric and asymmetric. In the latter case, not only are some powers delegated to regional authorities, but some regional authorities are granted more powers than others.

We have postulated that asymmetric decentralization should produce a cleavage between differentiated (with greater powers) and standard regions. We looked at a common aspect of accountability, retrospective economic voting. We hypothesized that changes in the national economy have a weaker effect on support for the national incumbent in differentiated regions while the reverse should apply for the impact of the regional economy on the vote for the regional incumbent. Data from four decentralized countries, two with symmetric and two with asymmetric arrangements, confirm our hypothesis.

Our assumption is that voters in differentiated regions come to focus more on the economic performance of the region and to pay less attention to that of the country. Further work could determine whether this is the case, in particular how (un)informed citizens are about the relative economic performance of the region and country. In this respect, it would be important to ascertain the amount of coverage given by the media to the national/regional economy as well as to the policies adopted by the national/regional governments.

Asymmetric decentralization also affects electoral outcomes. We predicted that it should increase the heterogeneity of the vote across regions. To that effect, we examined panel data from 709 legislative elections held in 73 democratic countries between 1960 and 2018. We found, as expected, that the heterogeneity of the vote is highest in countries that are both highly decentralized and characterized by asymmetric arrangements.

We assume that the differentiated regions are mostly responsible for this pattern. Further work could test that assumption. If we are right, there should be more regional parties (that run only in one region) in differentiated regions, and it is the presence of these parties that should explain the greatest heterogeneity of the vote.

In this paper, we have focused on two specific consequences of asymmetric decentralization, that is, economic voting and the nationalization of the vote. Additional research needs to be conducted to examine other consequences. One important aspect is turnout. We would expect decentralization to lead to higher turnout in regional elections at the expense of lower turnout in national elections. But the pattern should depend on whether decentralization is symmetric or not. The consequences of decentralization on turnout should be strongest in differentiated regions. It is in those regions that we should observe the most substantial increase in regional turnout and decrease in national turnout.

The basic message is simple. It does not suffice to study the overall degree of decentralization in a given country. We need to consider the type of decentralization. Symmetric and asymmetric decentralization have different consequences.

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6. Appendix

A. Sample of Countries and Elections

Country	Elections	Country	Elections	Country	Elections
Albania	5	Argentina	16	Australia	22
Austria	16	Bahamas	5	Bangladesh	4
Barbados	10	Belgium	17	Bolivia	2
Bosnia and Herzegovina	4	Bulgaria	9	Brazil	10
Canada	18	Chile	7	Colombia	5
Costa Rica	15	Croatia	6	Cyprus	8
Czech Republic	5	Denmark	20	Dominican Republic	6
Ecuador	7	El Salvador	8	Estonia	6
Finland	15	France	11	Germany	14
Greece	20	Guatemala	7	Guyana	6
Honduras	5	Hungary	8	Indonesia	4
Iceland	9	Ireland	14	Italy	15
Jamaica	13	Japan	20	South Korea	8
Latvia	8	Lithuania	7	Luxembourg	12
Macedonia	4	Malta	12	Mexico	8
Mongolia	6	New Zealand	13	Netherlands	18
Nicaragua	5	Nigeria	4	Panama	4
Norway	15	Pakistan	4	Peru	6
Philippines	5	Paraguay	5	Portugal	15
Poland	8	Romania	6	Slovakia	2
Slovenia	7	Spain	13	Sri Lanka	6
Sweden	18	Suriname	4	Switzerland	10
Thailand	10	Trinidad and Tobago	14	Ukraine	6
Turkey	14	UK	15	United States	17
Uruguay	8				