# Absolute and benchmarked economic voting A decade of elections in Southern Europe

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### Abstract

The article analyses the fifteen elections that took place in four South-European countries – Greece, Italy, Portugal and Spain – during the 2010-2019 decade. It does so by adopting NUTS3 sub-national territories as observation units. The theoretical framework used is the classic retrospective economic vote theory, updated with a taxonomy of retrospective behaviour derived from how voters benchmark their assessment against some external reference point. While the electoral reactions of absolute economic voters depend solely on local economic conditions, benchmarking compares them with regional or national reference points, as well as diachronically with past economic horizons of voters, and substantiate the idea of (electoral) South-Europeanness, in a critical decade like the one covered by the article. South-European voters were called to the ballot box numerous times during the past 2010-2019 decade. In Greece, Italy, Spain and Portugal, the four countries considered by the present article, this happened fifteen times, which is almost twice the ordinary number of elections according to the respective durations of parliamentary terms and the last ballot before the decade. It is another sign of the political instability of the period in that European region, which was marked by the strenuous effort to recover from the economic downturns of the Great Recession and by the challenge posed by new and populist parties (Morlino & Raniolo 2017; Morlino & Sottilotta 2020).

The non-ordinary character of the period does not necessarily require extraordinary explanations of voting behaviours, which may still be driven – with some adjustments – by standard factors such as the variable state of the economy (Lewis-Beck & Lobo 2017). At the same time, it is undeniable that the economic crises hit the different areas within each South-European country with intensities whose degree of variation was even larger than those among nations, something that most traditional retrospective analyses based on objective national economic conditions fail to acknowledge.

Shifting the analyses of economic voting from the national to the local level not only offers a more plausible rationale for the behaviours of such variegate electorates; it also makes it possible to test a range of hypotheses regarding the actual economic drivers of their actions. Amongst them are the possibility that South-European voters share a similar reference system to assess the relevant state of the economy, or use external benchmarks to compare the local economic conditions against the regional or national average, or judge their present status against the situation before the Great Recession. The answers to these research questions contribute to a more general understanding of how Southern-Europe reacted to those difficult times, each country experiencing its own decade of crisis and resilience, or all of them sharing some common regional fate.

My analysis thus takes a subnational perspective. It pools together NUTS3-level observations from the four major South-European countries and investigates their electoral reactions to the economy during the years between 2010 and 2019. The article is organized as follows. In the next section, I present a descriptive picture of the cross- and within-country

variation of major economic and political dynamics. Next, I introduce the sub-national declination of the economic vote theory and how the idea of benchmarking helps to better distinguish different types of voting behaviours. In the empirical sections, I first present the data and model used, and then compare the empirical results of several conventional and benchmarked models. The final section reviews the findings and reflects on their meanings for regional South-European studies.

### Disaggregating the economic and political outlook

The world had just exited one crisis – the Great Recession – when it entered two new ones, the Covid-19 pandemic and the war in Ukraine, both with significant socio-economic correlates.

Southern Europe did not experience even an interlude between the two emergency periods, with economic data that show scant recovery to pre-2008 levels compared to other areas within the European Union (EU). The overall number of people employed in Greece, Italy, Portugal, Spain, Cyprus and Malta reached its lowest point in 2013, almost 10% fewer than in 2007, but in 2019 the quantity was still 2 percentage points below the pre-crisis reference level. At that time, the other 22 member-states had already improved their employment rates by 8 percentage points compared to 2007, with West-European countries leading the recovery, closely followed by Nordic ones and by those in Central-Eastern Europe. Their aggregate gross domestic product recovered sooner, but while the level of Southern-Europe GDP in 2019 was only 11% higher than before the Great Recession, the rest of the EU increased its production capacity by more than 32%, this time in a reverse regional order compared to the employment rankings.

At the same time, the four major South-European countries did not experience exactly the same downturn, and their markets did not react in a perfectly similar manner to the global challenges (Capriati 2019; Parker & Tsarouhas 2018). Greece was the country that paid the highest toll to the Great Recession, especially in terms of wealth reduction, and had to agree to multiple international bailout agreements and conditions (Featherstone 2011). The Italian economy showed the least reactive capacity, continuing to stagnate when others started to recover, although it was somehow better able than others to absorb the tensions on the labour market (Bull 2018). Like Greece, and unlike Italy, both Iberian countries received financial aid through separate Memorandums of Understanding signed with the Eurogroup (Costa 2019; Salmon 2017). Their economies show a much sharper upswing in the mid-2010s, though that did not prevent the incomplete recovery of the occupation levels before the crisis.

However, also national data, in turn, conceal subnational heterogeneities. It is well known that, especially in Southern Europe, some areas may have a dynamic economy similar to the best cases in West- or North-European countries, while others lag well behind their national averages. Exploring this within-country variety helps gain better understanding of the real distress experienced by large portions of the population, and furnishes further insights into the political consequences of the crisis. In Figure 1, I have plotted the subnational trajectories of the labour market and of the gross product for each NUTS3-level territorial unit of the four major South-European countries<sup>1</sup>. Light-dotted lines correspond to those subnational trajectories, while the solid darker lines represent the national average, each compared to its corresponding 2007 quantity. The graphs confirm the magnitude and therefore the substantive importance of within-country variation.

<sup>&</sup>lt;sup>1</sup> NUTS3-level areas correspond approximately to provinces in Spain and Italy, to groups of regional units in Greece, and to inter-municipal entities in Portugal (Eurostat: <u>https://ec.europa.eu/eurostat/web/nuts/national-structures</u>)



Figure 1. NUTS3 employment and GDP trajectories (2007-2019) Source: Eurostat

In the upper part of Figure 1, Greece stands out as having the highest within-country heterogeneity in the labour market – a feature also confirmed on checking the annual relative standard deviations, whose average is double those of the other three countries. Eleven years after 2007, some areas had lost almost 30% of the employment rate while others had increased it by the same amount, although most units were comprised between a 20% decrease and a 10% increase. Apart from some outliers, the other three countries are internally relatively more homogeneous, with a roughly  $\pm$  10% variation compared to the respective national average. However, while the Italian labour market remained substantially stagnant, Portugal and Spain showed first some retreat and then, respectively, a larger and smaller recovery.

The picture regarding the size of the local economy, in the lower part of Figure 1, is even more varied. Compared to 2007, in 2019 some Greek territorial units lost just 10% of their gross product, whereas others lost almost 40%; in Italy and Spain, the range was approximately from a 10% reduction to a 20% increase, while in Portugal, the country with the best economic dynamism, subnational economies improved by between 10% and 40%. A precise comparison of the annual relative standard deviations confirms the visual impression that subnational divergencies were larger in Greece and Italy, compared to Spain and Portugal, although the average indices are not radically different from country to country. In any case, cross-territorial within-country variation of the domestic product is much larger than its corresponding longitudinal variation.

Such a disruptive economic period could not pass without significant political consequences, as testified by the electoral and government epidemics described by Bosco & Verney (2012, 2016). The economic distress triggered increasing political disaffection, so that during the years between 2010 and 2019 electoral participation diminished compared to the preceding decade. While turnout sank almost everywhere in the EU, Southern Europe experienced the sharpest decline, with the share of voting citizens dropping from 77% to only 68.5% (Döring & Manow 2020). The decrease is three times higher than the 2.7 points reduction that happened in Central-Eastern

countries, more than five times higher than the 1.7 points average decrease in Western member states, to say nothing about the countertrend increase experienced in the Northern countries.

Again, the Southern landscape is not homogeneous, with significant cross- and within-country differences that are highlighted in the left panel of Figure 2. The vertical sequences of marks correspond to the range of subnational levels of turnout for each country/election, while the solid line connects the respective national measure. Within-country heterogeneity is twice, if not three times, larger than the cross-country or longitudinal one. Portugal had lower levels of turnout even before the crisis, and continued to do so in the 2010-2019 period, eventually surpassing the symbolic threshold of more people deserting the polling stations than those actually voting. Greece is the South-European nation with the highest within-country variation, whilst Italy and Spain are the two countries in which the participation decreased the least, although in the latter country the multiple elections show also some fluctuations.

The aggregate and extra-system volatilities confirm the instability of the decade (Emanuele 2020a, 2020b). Also in this case, the phenomenon is not new and exclusive to Southern Europe (Chiaramonte & Emanuele 2018, 2019); but its magnitude in recent years is unprecedented, and South-European countries have made a sizeable contribution to that increase. Comparing the 2010s to the 2000s shows that total volatility more than doubled in these countries, compared to a 13% increase in Northern Europe and a 35% one in West-European systems.<sup>2</sup> Votes for new parties, counted as such only on their first appearance in a national election, increased almost six times in Southern Europe, which was twice the expansion in Northern countries, whilst they grew by just 18% in West-European systems. Because of the different starting levels, these expansions correspond to an average extra-system volatility in Southern Europe in the 2010-2019 decade which was more than twice the one in Western Europe and more than four times the one in Northern Europe.

<sup>&</sup>lt;sup>2</sup> I excluded Central-East European states from this analysis given their still young and insufficiently structured party system in the first decade.

With the exception of Portugal (De Giorgi & Santana-Pereira 2020), each of the South-European political systems considered here had its own electoral upheaval, producing record peaks of volatility and party-system breakdowns and renewals (Chiaramonte 2014; Conti & Memoli 2015; Orriols & Cordero 2016; Teperoglou & Tsatsanis 2014; Tsakatika 2016). Because of the severe economic conditions, mainstream incumbent parties were those that suffered the most from those exceptional levels of volatility, which contributed to the success of either opposition or new parties.



Figure 2. Subnational turnout levels and costs of incumbency (2010-2019) Source: Ministries of the Interior in Greece, Italy, Portugal and Spain

If the recovery from the Great Recession in Southern Europe was slower than elsewhere, it is not surprising that, in accordance with the macroexpectations of the theory of economic voting, the electoral costs for the incumbent governments were more intense in those countries. Whereas in the 2000s these costs were limited to a decrease in support that in the three major 8 European regions ranged between 2.5 and 3.9 percentage points, during the 2010s they grew by almost four times in Southern Europe, which was double the amount of the increase in North and Western Europe.<sup>3</sup>

The right panel of Figure 2 details the change in support for the incumbent governments in legislative elections, at both the national (solid line) and the subnational level (different markers in correspondence with the election date). With the exception of the 2019 Portuguese election, in which the Socialist cabinet led by António Costa improved its 2015 result, all the other governments lost substantial parts of their electorate in each of the remaining 14 ballots of the decade. Even more, on these occasions, there was only one territorial unit in which the cabinet did not lose voters, whereas in all the others the loss ranged from a few votes to 40 percent of the previous support, with PASOK even exceeding that threshold in some districts during the two 2012 Greek elections.

# An economic vote perspective on multi-country longitudinal subnational units

This section introduces the framework of this study – the retrospective economic vote theory based on objective indicators – characterizes its variants adopting a within-country approach, and illustrates the advantages and drawbacks of cumulating multiple countries and elections in an aggregated subnational perspective.

Put briefly, the retrospective economic vote theory is based on a simple assumption and on a simple mechanism. The assumption is that a sufficiently large portion of the electorate makes its voting decisions by looking backward rather than forward. Voters reward or punish the parties composing the cabinet according to a positive or negative evaluation of their past performances, rather than by judging their promises or comparing their

<sup>&</sup>lt;sup>3</sup> I again excluded Central-East European countries for the reasons stated in the previous footnote. Nonetheless, their average incumbents' losses were slightly smaller than in Southern countries. In the appendix I detail how exactly I operationalized the concept of incumbency in each of the four South-European countries covered by the analysis, especially in the case of caretaker governments, majority changes shortly before the ballot, or repeated elections in a short time period.

policies (Fiorina 1981; Key 1966). Because of the complexity and variety of government actions and policies, this partial retrospective evaluation needs some further cognitive shortcut, so that the voters' concrete heuristic focuses only on the state of the economy. The corresponding mechanism thus holds that the actual or perceived economic situation drives the overall evaluation of the government's performance, and consequently orients the electorate's voting behaviour (Lewis-Beck & Stegmaier 2000; Stegmaier, Lewis-Beck, & Park 2017).

There is a major methodological divide cutting across this broad theoretical field. It distinguishes between those scholars who take a subjective perspective and use individual survey data, and those who opt for aggregated territorial data with objective economic indicators. Besides avoiding any risk of ecological fallacy, the former perspective has some undeniable advantages. To begin with, it directly assumes the perspective of the agent, of the person who votes on the basis of his or her personal take on the improvement/deterioration of economic conditions, either personal or of the society at large. Secondly, it resolves any information problem from the outset, since it is irrelevant if the voter is actually aware of the state of the economy as long as s/he behaves according to her/his own perceptions. Thirdly, in this approach, hypotheses regarding the likelihood and magnitude of the economic vote can be interestingly fine-tuned by interacting the retrospective judgment with micro-level conditional factors such as the salience of the economic issue, levels of education or information, and political sophistication (Gomez & Wilson 2001; Lobo & Pannico 2020; Magalhães 2014).

However, also the approach based on objective economic conditions, besides reducing the risk of restricted variance that limits the usefulness of surveys in situations of persistent and widespread crisis (Lewis-Beck & Lobo 2017), has its advantages. First, the perspective focuses on the origin of the causal chain, that is, on the actual economic situation, which is certainly to be preferred in terms of priority (Gerring 2005) and avoids any risk of respondents rationalizing their distaste for the incumbents (Fraile & Lewis-Beck 2014; van der Eijk et al. 2007). Secondly, its empirical test is intrinsically conservative, given the abundance of potentially confounding

elements, and the range of economic quantities potentially triggering the electoral outcome. Thirdly, it allows multiple sophisticated cross-country and longitudinal research designs, thus enabling better investigation of macro-level conditional factors such as different institutional set-ups (Dassonneville & Lewis-Beck 2017; Powell & Whitten 1993), levels and types of globalization (Giuliani 2019; Hellwig 2015), and policy constraints (Giuliani 2022a; Hernandez & Kriesi 2016).

This study opts for the second of the above-described approaches and therefore uses objective economic quantities at an aggregate level, although one of its distinctive features is that the observations consist of subnational territorial units. Within this approach, the use of subnational observations is minoritarian, but not unknown, so that a range of alternative research designs is available (Bosch 2016).

Local units are the ideal items of observation when the research question focuses on the link between the local economy and the electoral prospects of local incumbents, like mayors, municipal or regional governments (Dassonneville, Claes, & Lewis-Beck 2016). They also offer the opportunity to investigate if local elections are plebiscites in favour or against the national incumbent, i.e. if they are 'second-order' events, and if the electoral prospects of local governments depend on the performance of the national rather than the local economy (Fauvelle-Aymar & Lewis-Beck 2011; León & Orriols 2016; Martins & Veiga 2013).

Alternatively, subnational units can be used to check if national incumbents perform locally – in national, but also supranational electoral competitions – according to the local economic situation (Auberger 2012, 2014; Giuliani 2017, 2022b; Veiga & Veiga 2010). There are three major advantages of this approach compared to large cross-country studies. First, they better reflect the economic conditions which voters happen to experience, without embracing the egotropic viewpoint adopted in some micro-studies; this is close to what Cutler (2002) calls the 'intermediate-level collectives' approach, and Rogers (2014) the communotropic perspective. Secondly, the data presented in the previous sections confirm the magnitude of subnational variations on both economic and political variables; a richness of information that a cross-country analysis based on national averages

inevitably blurs. Lastly, this formulation makes it possible to control for many of the potential confounding factors that typically complicate large cross-country analyses, and make their results less stable (Lewis-Beck & Stegmaier 2007; Powell & Whitten 1993).

The present analysis cumulates subnational observations longitudinally, for each election that took place during the 2010s in the four major South-European countries: Greece, Italy, Portugal and Spain. This kind of aggregation furnishes interesting insights into the economic drivers of retrospective voting behaviours that are theoretically connected to what is usually called the problem of 'benchmarking'.

### **Benchmarking in Southern Europe?**

A retrospective approach based on objective economic data simply tests for the existence of some proportionality between an appropriate index of the economic situation and the electoral punishment or reward of the incumbent government. When researchers aggregate multiple observations in a single regression and set aside the multilevel structure of the model, they implicitly assume some common reaction to comparable economic situations.

This assumption is potentially problematic. Depending on past performances, exposure to global dynamics, or supranational constraints, voters may perceive the same objective economic situation as good or bad (Kayser & Peress 2012, 2016). A 1% growth would probably be considered a positive result in a usually stagnant or recessing economy, but it is a negative outcome in a highly dynamic economic context used to more sustained growth. The same considerations apply to unemployment, debt, or any other aggregate index, because different contexts may compare themselves to different benchmarks (Olsen 2017).

Large cross-country and cross-continent comparisons, as well as long time series covering distinctive economic conjunctures that do not identify area or time-specific yardsticks, tacitly assume for each observation a common reference system. As stated by Kayser & Peress (2012, p. 662), 'implicit in research designs that do not benchmark economic performance at home against that abroad is the assumption that voters do not assess performance relative to [area or] period-specific expectations". Alternatively, scholars may test appropriate reference points that identify meaningful benchmark economies, or average levels that are used to compare the actual national performance against some area or period-specific background.

To my knowledge, this idea of relative economic voting (Aytaç 2018; Park 2019) has never been applied in within-country or multi-country subnational analyses, although it could be an interesting test of the actual economic horizons of the voters. Given the large geographical variation, local performances could be either judged directly by voters, or compared against some regional or national benchmark, or even contrasted against one's own past performances before the recession.

The difference between an absolute and a relative economic voting perspective can be summarized with the following questions. Would we expect to find that Spanish voters in the province of León punished/rewarded the People's Party in 2015 for the local 1.6 growth rate in the same way in which Greek voters in Central Athens punished/rewarded SYRIZA in 2019 for the same level of growth, or would we expect to find that the former behaved similarly to the Italian voters in Foggia in 2018, whose local economy was growing at half the pace of the Spanish province but, similarly to León, approximately two percentage points more slowly than the national average (while Central Athens was growing slightly quicker than the Greek average)? Or, again, would we expect to find that they behaved no differently from the Portuguese electorate in the Intermunicipal community of Lezíria do Tejo, which in 2011 grew, like the province of León, at a rate 8 percentage points lower than in its 'golden age' before the Great Recession?

The answers to these questions are not only interesting *per se*, in that they shed light on the economic drivers of voting behaviours in such a turbulent period; they are also interesting for what they can say about the idea of a common South European political identity. Setting aside the different political histories, as well as more recent institutional and electoral contingencies, an absolute economic vote would be evidence that South European voters share a similar belonging and reference system. On the contrary, a relative economic vote would be proof of separate benchmarking behaviours, in which citizens discount their country's national, regional or

longitudinal dynamics in order to evaluate the local economy. This would corroborate an interpretation of the South-European region as mainly a geographical entity composed of idiosyncratic electorates.

When Kayser & Peress (2012) first specified the benchmarking hypothesis at the cross-country level, they decomposed the covariate of interest – e.g. growth – into an international and a domestic component. The international component was equal to the benchmark value of the covariate (the median of the sample or some other common reference), while the domestic component, representing the surplus/shortage of growth compared to that reference level, was equal to the observed national value minus the international component. Next, they included both the domestic and international components in the right-hand side of their equation. 'Voters who compare their country's growth to that abroad should reward incumbents when [the coefficient for the local component] is positive – that is, when national growth exceeds global growth – and punish them when it is negative. [...] The international component [...] should have no effect on the vote if all voters benchmark fully. [...] If some but not all voters benchmark, or if all voters partially benchmark, [...] we expect the international component to have an effect on the vote but a smaller one than the local component' (p. 665).

Kayser and Peress's approach was highly influential until Arel-Bundock, Blais, & Dassonneville (2021) identified some flaws in their model specification, claimed that their coefficients' interpretation was misleading, and suggested a more direct test of the same hypothesis. They instead included the observed economic domestic quantity and the international reference level directly in their equation. In the case of benchmarking, the coefficient for international growth should be negative, because, keeping constant the national economy, the increasing gap between the domestic situation and the progress of 'the others' would trigger a negative evaluation of the managerial capacities of the national government. In practice, if voters apply that relative perspective, the better the economic state of the benchmark, the worse the domestic underperformance – that is, the distance between the national situation and the international comparison – and the stronger the punishment of the incumbent government. The same perspective applies even more to within-country analyses based on subnational observations, in which the potential benchmarks – the national, regional or own past economic conditions – are certainly more proximate, evident and concrete in the voters' eyes than some median continental or world reference situation. This closeness opens up the possibility of multiple forms of benchmarked economic voting not taken into consideration by the previous literature. They are summarized in Table 1 together with the expected signs of the coefficient for the local and benchmark components of the model.

Type of	economic Local		Benchmark
voting			
Absolute		+	insignificant
Coattail		insignificant	+
Relative		+	-
Spill over		+	+

Table 1 Types of economic voting and expectations

Note: The sign of the coefficients assumes some positively valued quantity, like growth or levels of employment

In the case of absolute economic voting, only the coefficient for the local state of the economy should be significant, because the benchmark, whatever it is, is irrelevant to forming the opinion of citizens, for whom only the immediate situation in their neighbourhood counts.

The second type of voting behaviour explicitly refers to the so-called 'coattail effect' usually applied in the political arena to the relationship between votes for presidential and congressional candidates (Norpoth 2001), and recently extended 'to refer to any electoral influence from a higher level of government onto a lower level candidature' (Bosch 2016, p. 118). I applied the same logic to the economic arena, with the economic situation at higher

levels subtracting explanatory power from that of lower levels, and there exercising its influence on retrospective voting. In this case, the coefficient for the benchmark is significant, while the one for the local level is not.

The third type of voting behaviour is the classic benchmarking introduced above for cross-country analyses, also referred to as 'relative economic voting' (Aytaç 2018; Park 2019). As said, the coefficients of the two levels are both expected to be significant but with opposite signs. More specifically, when using variables such as growth or the employment rate, the sign of the local coefficient is expected to be positive, whilst the one for the benchmark is expected to be negative, highlighting how increasing the gap between the two levels is negatively perceived by local voters.

Finally, the fourth type of voting behaviour points up the possibility that retrospective voters directly assess the local state of the economy, but, on top of that, also the positive performance of the benchmark spills over on their judgements and electoral behaviours. Instead of simply reciprocally subtracting explanatory power, as in the first two types of economic voting, or triggering some relative deprivation considerations, as in the third type, in this case both levels positively contribute to activating the retrospective assessment. To simplify, whilst the driver of relative voting is envy, there is an element of altruism in case of spillover.

#### Data, measurement and model

This work uses NUTS3 level data, for which Eurostat provides a range of economic time series. For a country like Spain, the NUTS3 level corresponds to provinces, which are also administrative units and electoral districts, making it simple to match economic information and electoral results. In Italy, NUTS3 also corresponds to provinces, but they are not electoral districts; however, and in spite of the change of the electoral system, voting results at the municipal level can be aggregated into the appropriate units, also solving the problems of administrative re-zoning in some parts of the country during the decade 2010-2019. Something similar happened in the case of Portugal, with voting results aggregated from the level of '*concelhos*'. The matching was slightly more complex for Greece: apart from a partial

redistricting occurred in 2018, in some cases I had to aggregate the electoral results of multiple districts into a single NUTS3 unit, while in others the same district result had to be spread across multiple units.<sup>4</sup>

The dependent variable is the total percentage of votes for the parties composing the incumbent government, which is matched in the right-hand side of the equation with the corresponding value in the previous election.<sup>5</sup>

The independent variables are the objective indicators of the economic situation, for which I used the employment rate and growth computed in the year preceding each election.<sup>6</sup> The level of unemployment is not available from Eurostat at such a level of disaggregation, because of the difficulty of estimating the number of job-seekers in such small samples. Mainly for this reason, employment statistics are often considered more reliable than unemployment ones (Brown 1979). Secondly, because of the crisis that dominated the decade, some short-term growth in a long-compromised economy may not be sufficient to produce the positive electoral reaction expected in normal times. I expected both factors to be positively associated with electoral support for the incumbent government, although a level variable such as the employment rate is more likely to show consistent results compared to a trend variable like growth, which may exhibit some random short-term fluctuations insufficient to convince the electorate.

As for control variables, some confounding factors are already controlled for by the lagged dependent variable, which accounts for the political and electoral specificity of a country, and by the multilevel structure of the model, which defines the random effects associated with the different areas and elections (*see infra*). I further added the district magnitude of the NUTS3

<sup>&</sup>lt;sup>4</sup> After concluding this research, Schraff, Vergioglou, & Demirci (2022) made public their EU-NED database covering legislative and European parliament electoral data at the subnational level for all European countries. This new tool will greatly facilitate this kind of analysis in the future, opening new and interesting research avenues.

<sup>&</sup>lt;sup>5</sup> I did not consider as incumbents parties that ruled for less than 1 year, thus resolving the problem of repeated elections in Greece and Spain; in that event, the lagged value was referred to the last standard election. I also avoided comparing support for government parties that had disappeared or had been formed during the mandate. More details are provided in the supplementary material.

<sup>&</sup>lt;sup>6</sup> To better reflect that standard 1-year time horizon of the electorate, and in the absence of more precise quarter data, it is common to use quarterly weighted averages of annual indices. The analysis reported in this article followed that same good practice.

territory in which the election was held to capture the local permissiveness of the system, and the effective number of electoral parties and level of disproportionality to reflect the national structure of opportunity of each election (Rowe 2015). In this regard, I expected the presence of a larger number of alternatives to facilitate the defection of those previously supporting the incumbent government parties, whereas strategic behaviour derived from disproportionality should consolidate the major mainstream parties (but see Anderson 2000). The inclusion of change in turnout compared to the previous election accounts for the possibility that the poor economic situation triggered a larger amount of abstentions instead of the punishment of incumbents, while a coalition dummy follows the tradition investigating the blurring of responsibilities (Powell & Whitten 1993). Another dummy variable controls for early election, something that happened several times during the decade, while I also added a series of variables to capture the demographic and geographic specificity of each NUTS3 territory: a categorical variable distinguishing the urban/rural characteristics of the area, a dummy for larger metropolitan areas, and finally a variable for whether the area is located in a border region.<sup>7</sup>

It is important to specify the regression model in order to account for the complex structure of the data, with units nested at the same time, but not singularly, in countries and in election years. I followed the advice of Schmidt-Catran & Fairbrother (2016) and included random effects at each potentially relevant level in which the observations might share some common characteristics, incorporated or otherwise in the model. Thus, I chose a multilevel model in which observations are cross-classified in NUTS3 territories and in country-specific election years, and with both levels nested within nations. Consequently, the structure reflects the multiple sources of commonalities embedded in each electoral competition: the fact that happened in a specific area, during a specific national electoral campaign, and in a country with its distinctive political history.

<sup>&</sup>lt;sup>7</sup> All operationalization and measurement issues are detailed in the online supplementary material.

### **Empirical results**

A preliminary test with an empty model, whose coefficients are reported in the online appendix, confirmed the appropriateness of a multilevel structure compared to a standard OLS. It also revealed that most of the variability (62%) resided at the level of the single election, with another 19% at the level of NUTS3 territories, 18% of residual variance for single observations, and almost no random effects for the upper country level.<sup>8</sup>

0.62*** 0.04** 0.02 3.01	$(0.02) \\ (0.02) \\ (0.05) \\ (2.60)$
0.04 <sup>**</sup> 0.02 3.01	(0.02) (0.05) (2.60)
0.02 3.01	(0.05)
3.01	(2, 60)
	(3.00)
-0.21***	(0.05)
-2.67	(3.44)
$0.04^{**}$	(0.02)
-3.21**	(1.28)
-0.43	(0.52)
$1.37^{***}$	(0.50)
2.16***	(0.59)
$1.01^{**}$	(0.40)
$0.93^{*}$	(0.51)
	· · · ·
	-3.21** -0.43 1.37*** 2.16*** 1.01** 0.93*

Table 2 A conventional retrospective economic model

<sup>&</sup>lt;sup>8</sup> The fact that random effects at the national level almost disappear is due to the fact that cross-country variability is already mostly captured at the level of single elections. Completely cancelling that hierarchical level from the multilevel model does not substantially modify the results, but I decided to keep it following the methodological advice of Schmidt-Catran & Fairbrother (2016). The complete table is presented in the supplementary material.

Random part (var)		
Country	0.00	(0.00)
R.NUTS3	3.08	(0.52)
R.Election	33.13	(12.30)
Residual	8.25	(0.48)
AIC	4395.41	
BIC	4480.33	

LR test vs OLS chi2(3) = 639.52 Prob > chi2 = 0.00

Standard errors in parentheses: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 2 presents the results of a conventional model that takes into consideration the two indices reflecting the local economic situation, together with the control variables presented above. To begin with, the AIC BIC information criteria confirm the preferability of this retrospective analysis compared to the empty model, as highlighted also by the reduction of the variances of the random part at each level, which are now explained by the several covariates.

Starting with the control variables, in spite of the volatile period, there is a comprehensible path-dependency in the support for the incumbent governments, with 62% of the electorate confirming their choices. Maybe because the dependent variable is the aggregate support for all government parties, but also in accordance with Dassonneville & Lewis-Beck (2017), coalition governments do not blur their economic responsibilities in the eyes of the voters, and anticipated elections do not impact on retrospective assessments. Change in turnout has a negative and significant coefficient, which means that political alienation due to a negative economic conjuncture paradoxically moderates the incumbents' punishment in times of crisis. Instead of favouring government alternation by voting for some other parties, ballot box defections help incumbents preserve their power, a finding that matches what previous quantitative and qualitative studies have reported (Morlino & Raniolo 2017; Weschle 2014). The local permissiveness of the electoral system has a positive coefficient, although the effective national number of parties – a proxy for the existence of alternative to the ruling parties – is inversely associated with their support, while disproportionality and strategic voting do not seem to affect the retrospective evaluation. Finally, some characteristics of the NUTS3 territory seem to influence the results, with intermediate and rural areas being systematically more conservative than the baseline urban ones (but with metropolitan areas also showing a weakly significant positive effect), and with border regions compensating more than other areas for any potential punishment of incumbent parties, as if they were less affected by domestic concerns.

The two economic covariates of interest show the expected positive coefficients, confirming that the main retrospective mechanism also operates at this aggregate subnational level: positive economic situations are associated with positive electoral results for government parties. However, only the employment rate has some systematic relationship, confirming that level variables reflect the troublesome period better than trend variables like growth. After years of recession, there may be some temporary increase of the GDP, but those dynamics do not represent substantial improvements of the economic conditions. In those circumstances, having an election immediately after an imperceptible and temporary upturn cannot really make a difference for the voters, contrary to what usually happens in normal periods.

The fact that NUTS3 multi-country longitudinal data confirm an economic vote interpretation should not have been taken for granted, and it is *per se* an interesting finding. However, those figures only represent the starting point for comparison with alternative benchmark models that use different reference economies. Recalling the expectations illustrated in Table 1, the first model uses NUTS2-level regional benchmarks; the second one uses country-level quantities; the third adds both these upper levels; while the fourth model introduces a longitudinal yardstick such as the maximum level (of employment and growth) reached between the year 2000 and the beginning of the Great Recession.

	(1)	(2)	(3)	(4)
Lag incumbent	0.63***	$0.62^{***}$	0.63***	0.62***
	(0.02)	(0.02)	(0.02)	(0.02)
Employment rate	-0.02	$0.04^{**}$	-0.01	0.13***
	(0.03)	(0.02)	(0.03)	(0.04)
Regional employment	0.13***		$0.12^{***}$	
	(0.04)		(0.04)	
National employment		0.57	0.51	
		(0.40)	(0.40)	
Max employment				-0.10***
				(0.04)
Growth	0.04	0.00	0.04	0.02
	(0.07)	(0.05)	(0.07)	(0.05)
Regional growth	-0.05		-0.09	
	(0.10)		(0.10)	
National growth		$1.47^{***}$	1.53***	
		(0.29)	(0.30)	
Max growth				-0.09*
				(0.05)
Random part (var)				
Country	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
R.NUTS3	2.95	3.08	2.94	2.69
	(0.50)	(0.52)	(0.50)	(0.49)
R.Election	33.57	8.49	8.46	32.66
	(12.57)	(3.19)	(3.18)	(12.13)
Residual	8.18	8.25	8.18	8.32
	(0.47)	(0.48)	(0.47)	(0.48)
AIC	4388.30	4379.16	4371.67	4388.76
BIC	4482.65	4473.52	4475.46	4483.12

Table 3 Benchmark models of retrospective voting

Complete set of coefficients reported in Table A.4 in the supplementary material

Standard errors in parentheses: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

For clarity of representation, Table 3 reports a shortened version of the results with only the main economic covariates of interest, while the complete tables with the control variables, which do not show behaviours significantly different from those already discussed for Table 2, are reported in the supplementary material.

In model 1, the NUTS2 benchmark, corresponding to the administrative organization of regions and of autonomous communities in the South-European countries covered by the analysis, absorbs all the explanatory potential previously shown by the employment rate at the lower level. This corresponds to the coattail effect described in the theoretical section, according to which voters react more to the economic situation at a higher common level than they do to the one in their close neighbourhood. In this specific case, the higher benchmark level is not so distant, because it is located at a subnational level, and thus still somehow refers to what have been dubbed 'mecro-economies, so called because they are somewhere between the macro-and micro-economy' (Ansolabehere, Meredith, & Snowberg 2014, p. 381). On the other hand, the coefficients for local and regional growths both remain insignificant, without improvements compared to more conventional retrospective models.

Moving the benchmarks to an even higher level, the national one in model 2, further differentiates between the two economic quantities. While the local employment rate regains its original significance even against the state of the labour market at the country level, national growth stimulates the expected electoral reactions: all other things being equal, each percentage point of national growth triggers 1.5 percentage points of electoral rewards. The apparent divergent economic horizons of the same electorate should not be surprising. Labour statistics are probably more connected to some local or regional direct knowledge and experience, while GDP dynamics, although they are also locally relevant, are cognitively perceived as shortcuts to assess government capacities at a higher, national level.

Model 3 includes at the same time the regional and national benchmarks in order to better assess the retrospective outlook of local voters. In fact, this model cumulates the empirical evidence highlighted by the two previous regressions. The regional employment rate replaces the local one as the main explanatory factor of the association with the incumbents' electoral support, while the national labour market seems to be beyond the voters' horizons. The 0.12 magnitude of the highly significant regional coefficient corresponds to a gap of almost 4% votes between the highest and lowest regional employment rates, to which growth adds another 1.53% votes for each onepoint difference between national GDP dynamics.

Interestingly, in none of these models is there any trace of genuine relative voting, in which the distance compared to the benchmark triggers the retrospective reaction. These results are consistent with the cross-country null evidence produced by Arel-Bundock, Blais, & Dassonneville (2021) with respect to international benchmarks, although there were more solid expectations of finding relative comparisons at work in a within-country context. There is also no sign of a spillover effect whereby both levels contribute in the same direction to that reaction. All the models show either a competition for the same explanatory power, as in the coattail effect illustrated for the employment variable, or the emergence of the appropriate absolute reference system, as with growth which becomes locally significant only if measured at the national level.

Relative economic voting appears only in the last longitudinal model, in which local performance is assessed against some golden age situation before the Great Recession. NUTS3 employment rate and growth have the expected positive signs, though only the former is also statistically significant, whilst both the reference maximum levels in the previous decade have negative significant coefficients. For similar present economic situations, the 'rosier' the past, the worse the punishment for the national incumbent parties that have not been able to preserve the wealth previously achieved in the local context. These temporal dynamics are similar to those found with similar models in cross-country frameworks by Aytaç (2018) and Arel-Bundock, Blais, & Dassonneville (2021).

All these benchmark models perform systematically better than the conventional retrospective approach in terms of Akaike information criteria (AIC), and most of them also in terms of Bayesian information criteria (BIC). The third model, with the double regional and national reference system,

seems to fit the behaviour of the electorate better than others, also substantially reducing the non-modelled variance of the random part at each level.

### **Discussion and conclusion**

Before going back to the original question – if deconstructing the local economic and political geography of a decade of crises sheds light on an irreducible variety of experiences or proves a common South-European belonging – I first want to summarize the empirical and theoretical contribution of this study.

First, I have briefly described the economic and political dynamics at the subnational level in Greece, Italy, Portugal and Spain for the 2010-2019 decade. A description with such a level of granularity furnishes a much better and more variegated understanding of the actual strains of the period, complementing the traditional comparative analysis at the country level (Morlino & Raniolo 2017; Morlino & Sottilotta 2020; Parker & Tsarouhas 2018). This perspective helps illuminate the large local variation in economic and political performances that is usually hidden below average values.

I then exploited the aforementioned variation to test both one conventional and several benchmarking hypotheses of economic voting, postulating that the typical reward-punishment mechanism should apply also at the subnational level. On the one hand, the local economic situation should be better known by the electorate, should better reflect the distress experienced by voters, and should thus trigger the electoral behaviour connected with the assessment of the incumbents' capacities. On the other hand, it is the same variety of situations that are local yet belong to common regional and national dynamics that suggests that a proportional electoral reaction to local economic circumstances should not be taken for granted. The horizons and reference points of the voters may differ, actually blurring and not highlighting what is usually compensated in the conventional approach.

When directly comparing the local economic situation with the local performance of the incumbents, after controlling for the complex multilevel structure of the setting and for a series of potentially confounding factors, the employment rate seems able to trigger similar electoral reactions in multiple elections and in different countries. This finding has several implications.

To begin with, it is yet more proof of the solidity and robustness of the economic vote theory, even when declined at the subnational level and in extraordinary times. Recalling the incredibly varied trajectories depicted in the first part of the article, it is remarkable that a linear association can possibly emerge from that apparent chaos. In spite of the many other local and international challenges of the period, the simplicity and straightforwardness of the economic vote hypothesis is able to represent the common denominator of any geographical and longitudinal heterogeneity or specificity. If cumulating multi-country and multi-election observations confirmed that common retrospective pattern, it is because the pooled unit have something in common. Merging those multiple experiences enabled that pattern to surface and represent some sort of indirect proof of the shared belonging to which I referred at the beginning of the article: South-Europeanness emerges exactly when a subset of country- or time-specific observations are not enough to produce the regular pattern being sought.<sup>9</sup>

Does the test of the diverse benchmarking hypotheses confirm, moderate or contradict this contention? On the one hand, the rejection of any explicit relative economic voting, save the temporal comparison with one's own golden period, certainly does not dispute that regional political affinity. To simplify, the behaviour of relative economic voters is driven by resentment about the achievement of others, which is the opposite of a shared mindset; and the dismissal of that hypothesis leaves intact the potential for joint South-European attitudes. In this respect, longitudinal relative voting only signals reminiscence of a better past, without contrasting the voter's own situation to that of the others.

<sup>&</sup>lt;sup>9</sup> To provide an example, running the model only on the 25 NUTS3 territorial units of Portugal for the 2019 election does not reveal anything systematic. The employment rate was everywhere higher than in the period of the preceding election, and the incumbent socialist party won in each and every unit. However, if one adds also the other elections held in the same year in Greece and Spain, the new data complement the previous ones with cases characterized by lower employment and incumbents' losses, helping the usual pattern to emerge and confirming the need for a local perspective.

At the same time, the evidence produced by the previous regressions helps to better identify the kind of economic performance that is electorally rewarded or punished. There is not just one economic quantity or level that acts as cognitive shortcut for activating retrospective assessments. The regional successes and failures of the labour market outperform both the local and national employment rates, whereas it is the national GDP growth that acts as a touchstone for the management capacities of incumbents. South-European voters seem to share those diversified reference systems, which on the one hand again signals a common basic framework, but on the other finetunes those commonalities by putting higher-level economic situations at the forefront and thus also higher-level regional and national identities.

This is a different kind of sharing. Parallel to the idea of absolute and relative economic voting, there exists an idea of absolute and relative sharing. This concerns not exactly being in the same boat, but in similar boats: being Greeks, Italians, Spaniards and Lusitanians, or being Catalan, Lombard, from Algarve or Attika, while being at the same time South-European.

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## Online Appendix

# Absolute and benchmarked economic voting. A decade of elections in Southern Europe

Dataset and code available in Harvard Dataverse at: xx.yy

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### 1 Codebook

### **Electoral results**

<u>Incumbent</u>: pct votes for the incumbent government parties in the lower chamber (lagincumbent for previous election)

- Greece: Ministry of Interior <u>https://www.ypes.gr/en/elections/national-elections/elections-results</u> <u>https://ekloges.ypes.gr/current/v/home/</u>
- Italy: Ministry of the interior Archivio storico https://elezionistorico.interno.gov.it/
- Portugal: Ministry of the interior SGMAI <u>https://www.eleicoes.mai.gov.pt/#</u> <u>https://www.sg.mai.gov.pt/AdministracaoEleitoral/EleicoesReferendos/A</u> ssembleiaRepublica/Paginas/default.aspx?FirstOpen=1
- Spain: Ministry of the interior Infoelectoral <u>http://www.infoelectoral.mir.es/infoelectoral/min/</u>

<u>Deltaturnout</u>: Change in Turnout compared to previous election. Turnout, lagturnout and thus deltaturnout used the same electoral sources above

The four countries used PR in all the elections, with the partial exception of Italy that in 2018 adopted a mixed system, and for which I looked at its proportional results. In Spain NUTS3 territories correspond to provinces that are also districts for the legislative elections whose results are generally available at that level. One exception is the Balearic and Canary Islands, whose multiple NUTS3 units do not match with the provinces to which they are administratively and electorally divided. In these cases, we attributed to all the territories belonging to the same province the results of the latter. Since 2019, in Navarra, the new 'Navarra Summa' alliance included also the local Ciudadanos branch. In order to have a more consistent comparison, we estimated the PP's component of that alliance from the relative share of votes obtained in that province in the previous election.

In Italy, provinces correspond to NUTS3 units, but are not electoral districts. However, the archives of the Ministry of the Interior make it possible to retrieve or reconstruct the results at the provincial level from municipal data (in 2018). I did not include the Val d'Aosta region because it elects only one MP with a plurality system. I also re-estimated the results of Sardinia, on the basis of the pre-2016 NUTS3 aggregation.

In Greece, NUTS3 territories have no direct correspondence with specific administrative units or electoral districts, although for many of them it is possible to match the results. In order to match the remaining occurrences, sometimes I matched multiple NUTS3 territories with the same district results, while sometimes a single NUTS3 territory corresponds to multiple districts (e.g. the two Piraeus districts, the two Thessaloniki ones, Arta and Preveza, Karditsa and Trikala, Argolis and Arcadia, and Laconia and Messenia). In this event, I aggregated the raw electoral results in the new units, and computed the appropriate percentages at that level. In Portugal as well, there is no direct correspondence between NUTS3 territories and electoral districts. Given the availability of electoral data at the municipal level (concelhos), all the NUTS3 results and percentages were expressly totalled and computed starting from this disaggregated level.

Coalition: coalition government: Parlgov, https://www.parlgov.org/

Early: Early election: Parlgov, <u>https://www.parlgov.org/</u>

<u>Magnitude</u>: District magnitude: Constituency-Level Elections Archive (CLEA) <u>https://electiondataarchive.org/</u> and multiple sources, matching the territory to the largest district value when appropriate.

Enep: Effective number of electoral parties: Parlgov, <u>https://www.parlgov.org/</u> and own calculation

<u>Disp</u>: Gallagher disproportionality: Parlgov, <u>https://www.parlgov.org/</u> and own calculation

#### Economic performance

<u>Employment rate</u>: quarterly weighted average for the year before the election, computed on the population above 15 years (NUTS3 – 2016 classification); Eurostat <u>https://ec.europa.eu/eurostat/web/rural-development/data</u> <u>Growth</u>: quarterly weighted average, same source

### Other socio-demographic variables

<u>Older65</u>: Percentage of population equal or above 65 years, Eurostat <u>Logpop</u>: Logarithm of the population, Eurostat <u>Urbn Type</u>: 3-mode Urban vs rural categories, Eurostat <u>Border</u>: Dummy for territory along land borders, or NUTS3 regions that have at least 50% of their population in areas of 25 km width along a land border, Eurostat <u>Metropolitan</u>: Dummy for urban agglomerations where at least 50 % of the population lives inside a functional urban area that is composed of at least 250 000 inhabitants, Eurostat

### 2 Elections, cabinets and incumbents

	Election	Cabinet in charge	Incumbent	Lag incumbent
Greece	06.05.2012	Papademos	Pasok	Pasok (2009)
		[Pasok-ND-Laos]		
	17.06.2012	Pikramenos [Caretaker]	Pasok	Pasok (2009)
	25.01.2015	Samaras [ND-Pasok]	ND-Pasok	ND-Pasok (2012-J)
	20.09.2015	Tsipras [Syriza-Anel]	ND-Pasok	ND-Pasok (2012-J)
	07.07.2019	Tsipras [Syriza]	Syriza	Syriza (2015)
Italy	24.02.2013	Monti [Caretaker]	PD-Udc	PD-Udc (2008)
	04.03.2018	Gentiloni	PD-Udc	PD-Udc (2013)
		[PD-Udc-NCD]		
Spain	20.11.2011	Zapatero [PSOE]	PSOE	PSOE (2008)
	20.12.2015	Rajoy [PP]	PP	PP (2011)
	26.06.2016	Rajoy [PP]	PP	PP (2011)
	28.04.2019	Sanchez [PSOE]	PP	PP (2016)
	10.11.2019	Sanchez [PSOE] PP		PP (2016)
Portugal	05.06.2011	Socrates [PS]	PS	PS (2009)
	04.10.2015	Passos Coelho	Portugal	PSD-CDS/PP
		[PSD-CDS/PP]	ahead	(2011)
	06.10.2019	Costa [PS]	PS	PS (2015)

Table A.1 The fifteen elections included in the sample

*Note:* In September 2015 in Greece, Dimar joined Pasok in the "Democratic alliance". In Italy, Monti's cabinet had initially a 'grand coalition' support, but the other parties left the cabinet or did not participate in the next election; a similar situation happened during the successive legislature. In Spain, we considered PP incumbent also in the second 2019 election, since between April and November Sanchez acted only as caretaker.

Table A.2 details the dates of the 15 elections held in the four South-European countries in the decade 2010-2019. It includes the name of the prime minister at the time of the new election, together with its supporting coalition, and clarifies the parties that were considered as incumbents and the references for the previous election. As a rule, we considered incumbents only those parties that fully ruled for an entire year before an election; in so doing we disregarded short caretaker

governments, and parties who joined the cabinet shortly before an election (e.g. ND and LAOS before the May 2012 election in Greece), or left it in the initial phases of a legislatures (e.g. Dimar in Greece in the 2012-15 legislature, PdL in Italy in the 2013-18 legislature). Furthermore, I could not consider parties that did not participate in the new ballot (e.g. Anel in 2019 in Greece, NCD and RI in 2018 in Italy), and thus had to disregard also them in computing the lag support of the government.

## 3 Descriptives

Table A.Z Average electoral variables at the subhational leve	Table A.2 Average el	lectoral variables	s at the sub	national leve
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Greece	Mean	Std. dev.	Min	Max
Employment rate	46.24	8.67	29.77	79.36
Growth	-3.43	5.03	-14.40	5.73
Change in incumbent support	-17.01	12.30	-49.05	-0.01
Change in turnout	-3.76	5.14	-14.69	8.01
Italy	Mean	Std. dev.	Min	Max
Employment rate	45.86	7.67	30.58	70.58
Growth	0.53	2.53	-7.67	5.80
Change in incumbent support	-9.99	4.33	-20.41	2.64
Change in turnout	-3.71	2.80	-14.98	2.09
Portugal	Mean	Std. dev.	Min	Max
Employment rate	51.39	4.87	40.94	61.72
Growth	3.19	2.68	-1.66	18.62
Change in incumbent support	-5.20	7.99	-20.31	12.49
Change in turnout	-2.20	1.75	-5.77	2.97
Spain	Mean	Std. dev.	Min	Max
Employment rate	45.65	6.01	34.69	62.96
Growth	2.60	2.30	-5.98	10.10
Change in incumbent support	-15.10	5.82	-35.69	-0.15
Change in turnout	-0.77	4.16	-14.25	13.78

## 4 Multilevel structure and complete models

	Coeff./estimate	Std. err.
Constant	28.35***	2.15
Random part (var)		
Country	0.00	0.00
R.NUTS3	20.99	2.49
R.Election	67.16	25.21
Residual	19.58	1.20
AIC	5376.60	
BIC	5400.31	
LR test vs OLS chi2(3) = 9	39.61 Prob	> chi2 = 0.00

Table A.3 Empty multilevel model for incumbent support

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	(1)	(2)	(3)	(4)
Lag incumbent	0.63***	0.62***	0.63***	0.62***
	(0.02)	(0.02)	(0.02)	(0.02)
Employment rate	-0.02	0.04**	-0.01	0.13***
	(0.03)	(0.02)	(0.03)	(0.04)
Regional employment	0.13***		0.12***	
	(0.04)		(0.04)	
National employment		0.57	0.51	
		(0.40)	(0.40)	
Vax employment				-0.10***
				(0.04)
Growth	0.04	0.00	0.04	0.02
	(0.07)	(0.05)	(0.07)	(0.05)
Regional growth	-0.05		-0.09	
	(0.10)		(0.10)	
National growth		1.47***	1.53***	
		(0.29)	(0.30)	
Max growth				-0.09*
				(0.05)
Coalition	3.09	3.40	3.34	2.85
	(3.62)	(2.06)	(2.06)	(3.57)
Change in turnout	-0.22***	-0.22***	-0.23***	-0.21***
	(0.05)	(0.05)	(0.05)	(0.05)
Early election	-2.65	0.66	0.64	-2.47
	(3.47)	(1.89)	(1.89)	(3.42)
Magnitude	0.03*	0.04**	0.03	0.04**
	(0.02)	(0.02)	(0.02)	(0.02)
Enep	-3.18**	-1.54**	-1.54**	-3.19**
	(1.29)	(0.74)	(0.74)	(1.27)
Disproportionality	-0.46	0.64*	0.64*	-0.44
	(0.53)	(0.35)	(0.35)	(0.52)
Urban type				
intermediate	1.33***	1.34***	1.31***	1.31***
	(0.49)	(0.50)	(0.49)	(0.49)
rural	2.10***	2.17***	2.11***	1.93***
	(0.58)	(0.59)	(0.58)	(0.57)
Border	0.88**	0.99**	0.86**	0.95**
	(0.40)	(0.40)	(0.40)	(0.39)
Metropolitan	0.92*	0.92*	0.91*	0.67
	(0.50)	(0.50)	(0.50)	(0.50)
Constant	13.94*	-29.97	-30.47	19.60***
	(7.49	(20.97	(20.92	(7.32

Table A.4 Complete models of Table 3 in the article

Random part (var)				
Country	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
R.NUTS3	2.95	3.08	2.94	2.69
	(0.50)	(0.52)	(0.50)	(0.49)
<b>R.Election</b>	33.57	8.49	8.46	32.66
	(12.57)	(3.19)	(3.18)	(12.13)
Residual	8.18	8.25	8.18	8.32
	(0.47)	(0.48)	(0.47)	(0.48)
AIC	4388.30	4379.16	4371.67	4388.76
BIC	4482.65	4473.52	4475.46	4483.12

Standard errors in parentheses: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1