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## **The Importance of Viable Alternatives: Economic Voting and Opposition Configuration**

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Universiteit  
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**Master Thesis**

**The Importance of Viable Alternatives**

Economic Voting and Opposition Configuration

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## **Abstract**

The rationale behind economic voting is simple: the citizen votes for the government if the economy is doing all right; otherwise, the vote is against (Lewis-Beck and Stegmaier 2000). However, various studies have found cross-country and across-time variation regarding the intensity of economic voting (e.g., Paldam 1991; Anderson 1995; Duch and Stevenson 2008), leading an increasing number of scholars to discuss and test potential moderators of the economic vote equation (e.g., Anderson 2000; Duch and Stevenson 2008). Nonetheless, only a few authors have regarded the characteristics of the alternative to the underperforming incumbent, the opposition, as potential moderating factors (Anderson 2000; Maeda 2009; Ferrer 2023). Therefore, the goal of this thesis is to understand how the configuration of the parliamentary opposition, regarding its fragmentation and polarization, impacts its viability as an alternative and, consequently, the intensity of economic voting. Using data from 208 elections that took place in 29 European democracies between 1989 and 2021, I found that a more fragmented opposition actually increases the intensity of economic voting. However, I did not reach any statistically significant conclusions regarding the effect of the polarization of the opposition on the intensity of economic voting.

**Key Words:** Economic voting; Political opposition; Fragmentation; Polarization.

## **Introduction**

The rationale behind economic voting is simple: the citizen votes for the government if the economy is doing all right; otherwise, the vote is against (Lewis-Beck and Stegmaier 2000). However, various studies have found cross-country and across-time variation regarding the intensity of economic voting (e.g., Paldam 1991; Anderson 1995; Duch and Stevenson 2008), leading an increasing number of scholars to discuss and test potential moderators of the economic vote equation (e.g., Anderson 2000; Duch and Stevenson 2008). Nonetheless, only a few authors have regarded the characteristics of the alternative to the underperforming incumbent, the opposition, as potential moderating factors (Anderson 2000; Maeda 2009; Ferrer 2023). Therefore, the goal of this thesis is to understand how the configuration of the parliamentary opposition, regarding its fragmentation and polarization, impacts its viability as an alternative and, consequently, the intensity of economic voting.

In recent years, party system dynamics have changed radically in most European democracies. Overall party system fragmentation has been increasing and, in most cases, the parliamentary opposition is also increasingly fragmented (Best 2013). Moreover, the recent rise of populist parties has severely increased polarization in most party systems (Casal Bértoa and Rama 2021a). Radical right-wing parties have taken European politics by storm and radically changed previously established patterns of competition (Enyedi and Casal Bértoa 2022). One could argue that these challenger parties provide the “real” opposition that was missing in the cartel systems described by Katz and Mair (1995). However, most mainstream parties and voters regard the radical right-wing as non-coalitionable due to its radical and populist stances (Harteveld et al. 2022), and, as it grows electorally, mainstream parties have been resorting to more complex coalitions in order to keep it out of power (Andeweg 2013). Thus, most European voters are now faced with increasingly complex party system dynamics, including a more fragmented and polarized political opposition.

Furthermore, some authors have previously argued that a divided opposition will also make it harder for voters to perceive any of its members as a viable alternative to the incumbent party/coalition. Consequently, voters might become less likely to cast an anti-incumbent vote, even when the incumbent underperforms (Anderson 2000; Maeda 2009). The current situation in Portuguese politics illustrates this quite nicely. Currently, the Socialists (PS) are in government with a majority of parliamentary seats. However, a

series of political scandals and the mismanagement of the health, education and public transport sectors has led to various cabinet resignations and strikes, all in PS's first year of government (e.g., CNN Portugal 2023a; Público 2023a). Nonetheless, PS is still leading the polls and many attribute this to the fragmentation and polarization of the Portuguese right-wing (Público 2023b). In the past, the Social Democrats (PSD), in coalition with the Christian Democrats (CDS-PP), were the governing alternative to PS. However, nowadays, CDS-PP is no longer in parliament and two new right-wing parties have emerged: the Liberal Initiative (IL) and *Chega* (Enough!). *Chega* is a far-right populist party and, due to its radical stances, most voters consider it as non-coalitionable. Still, as this does not seem to affect its electoral performance, it seems to be unlikely that a right-wing alternative government could form without including *Chega*. Consequently, many Portuguese voters rather keep voting for the incumbent party, PS, instead of risking voting for PSD, as they fear that *Chega* will become part of the government (Público 2023b). In sum, as the Portuguese opposition becomes increasingly fragmented and polarized, the voters seem to perceive it as less of a viable alternative and, even though PS's government is underperforming, the intensity of anti-incumbent voting seems to decrease.

Therefore, given the above-mentioned scenario, it seems essential to further explore what impact the configuration of the opposition has on the intensity of performance voting. As mentioned above, in this thesis, I opted for an economic voting framework, assuming that voters evaluate the government's performance primarily according to its economic outputs. Thus, my research question is: does the configuration of the opposition impact the intensity of economic voting? and if so, how? Only a few authors have reflected on this topic. Anderson (2000) and Maeda (2009) concluded that a more fragmented opposition does indeed reduce the intensity of economic voting. However, a recent experimental study by Ferrer (2023) found that voters tend to vote ideologically and, consequently, a more fragmented opposition would actually amplify the intensity of economic voting, because it provides voters with more alternatives to the underperforming incumbent. Using data from 208 elections that took place in 29 European democracies between 1989 and 2021, I calculated a multilevel linear regression model that indicates that a more fragmented opposition actually increases the intensity of economic voting. Additionally, I also evaluated if the polarization of the opposition had

a moderating effect on the economic vote equation, but I did not reach any statistically significant conclusions.

In the first section of the thesis, I start by discussing the existing literature on economic voting. I will then discuss some other moderating factors of economic voting not related to the political opposition. Only after, will I introduce the literature on opposition fragmentation and polarization, and my hypotheses regarding their moderating effect in the economic vote equation. Finally, in the last two sections, I will present and discuss the results of my quantitative analysis and some possible paths for future research on the topic.

## **Economic Voting**

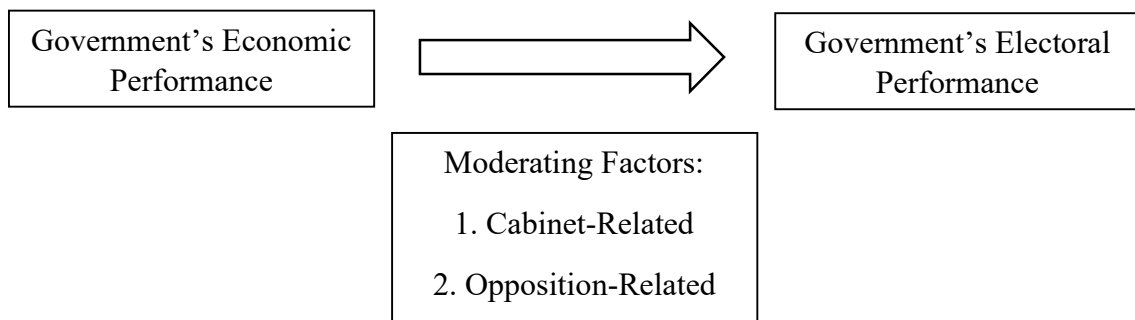
Different factors related to an incumbent's performance can lead to an anti-incumbent vote, but it is also important to consider that, when looking at how the incumbent's performance influences the vote, one can conceptualize voting choice in two ways: retrospectively and prospectively (Stiers 2022). In the latter, the voter chooses according to their prospects about a candidate's future performance. An example of such a vote would be a vote solely motivated by a candidate's electoral promises. In the former, the voter chooses according to their evaluation of the candidate's past performance. In this thesis, I will take a retrospective view on voting, as I am interested in understanding what characteristics of the opposition impact voters' decisions when looking for an alternative to an underperforming incumbent. However, to do so, it is also important to define how voters evaluate the government's performance, what criteria do they use. As mentioned in the introduction, I will opt for a framework of retrospective economic voting, assuming that voters evaluate the government primarily based on its economic performance.

Past literature has shown that voters are indeed more likely to re-elect the incumbent when the economy is improving and more likely to cast an anti-incumbent vote when economic conditions are getting worse (e.g., Lewis-Beck and Stegmaier 2000; Duch and Stevenson 2008). Nonetheless, it is also important to consider that other factors can determine one's vote. Zaller (2004), for example, contended that foreign policy concerns and incumbent fatigue are also important determinants of retrospective voting choice, while Duch and Stevenson (2008) found that the voter's ideology and specific valence issues also

contribute significantly. Still, the same authors also observed that economic considerations contribute equally, if not more, than these factors to one's voting choice.

Thus, a government's economic performance seems to be a quite established determinant of its electoral success. Nonetheless, various authors have found some cross-country and across-time variation regarding this correlation, indicating that some other factors must moderate it (Paldam 1991; Anderson 1995; Duch and Stevenson 2008). As mentioned in the introduction, these moderating factors are the focus of this thesis, especially those related to the opposition's configuration. Apart from opposition-related factors, I will also look into cabinet-related factors to encompass the full dynamic of a party system. *Figure 1* is a good summary of the equation that is the basis of my analysis. However, it is also important to mention that other contextual factors have been suggested as moderators of economic voting (e.g., economic openness, democratic experience) and, even though I will not consider them in my statistical analysis, I will discuss them throughout this paper.

*Figure 1 – Moderators of Economic Voting*



### **Clarity of Responsibility, cabinet-related moderators**

In their seminal work, Powell and Whitten (1993) analyzed how different factors impacted the intensity of economic voting by altering what they called the “clarity of responsibility”. At the time, they identified a group of different government and institutional factors that reduced clarity over the government's responsibility for a bad economic performance. This would then reduce the intensity of anti-incumbent voting, given that, in principle, to hold the government accountable for a bad economic performance, voters would have to consider the government responsible for such performance.



Powell and Whitten (1993) identified five different factors that determined a government's degree of clarity of responsibility. Minority and coalition governments, as well as governments that face an upper chamber controlled by the opposition, are factors of reduced clarity of responsibility, given that the party/parties in government have to make multiple policy concessions to the opposition and/or to their coalition partners. Additionally, the opposition's control of parliamentary committees also undermines clarity of responsibility by increasing the opposition's influence over policymaking. Finally, weak cohesion among the government party/parties also affects clarity of responsibility because, in systems where party cohesion is low, candidates and factions tend to compete somewhat independently of national parties.

Years later, Anderson (2000) found support for Powell and Whitten's findings. Above all, he found evidence that coalition and minority governments are indeed factors of reduced clarity of responsibility, and thus reduce the intensity of economic voting. Additionally, while looking at how patterns of political contention moderate economic voting, Duch and Stevenson (2008) found evidence that incumbent parties suffer more from economic vote than the opposition and that the more concentrated executive power is in specific parties, the more intense anti-incumbent vote will be after a weaker economic performance. In other words, they found that a more fragmented cabinet will likely lead to less intense economic voting. Therefore, the idea that cabinet-related factors moderate economic voting is quite established in the literature (see also Weschle 2012; Park 2023).

Hobolt et al. (2012) also reflected on Powell and Whitten's work and concluded that government-related factors actually impact voters' perception of responsibility more than institutional factors. They found that if voters face a cohesive incumbent (e.g., a single-party government or an ideologically cohesive coalition dominated by one large party), they will be more likely to reward or punish the party/parties in power, regardless of whether institutional power is shared with the opposition in legislative committees or upper chambers. So, even though my main focus is the moderating effect of the configuration of the opposition in economic voting, I will also consider Hobolt's et al. (2012) Government Clarity Index (GCI) in my analysis to control for cabinet-related moderating factors.

However, even if one can clearly attribute responsibility for bad economic outcomes to the government, their propensity to vote for one of the opposition parties will likely

depend on the alternatives available and their credibility as governing parties. Therefore, it is important to consider if the magnitude of economic voting is also related to the configuration of the opposition.

### **Viable Alternatives, opposition-related moderators**

When discussing the opposition's configuration, I will refer to the two factors highlighted by Sartori (1976) in his seminal piece on party systems: fragmentation and polarization. In this thesis, the first factor refers to the number of opposition parties and the second one to the ideological distance between these parties and the ideological intensity of each party. The joint analysis of these two factors is common in the literature on party systems and offers a quite comprehensive view of a system's dynamic.

However, before presenting my hypotheses, it is also important to clarify that I am taking a more pragmatic view on voting choice. When casting an anti-incumbent vote to punish an underwhelming performance from the incumbent, one will likely either make a pragmatic or an expressive decision. In the latter, the voter opts for the opposition party closer to its ideological preferences. In the former, the voter opts for the opposition party regarding its likelihood to replace the incumbent – its viability. From an expressive voting perspective, fragmentation and polarization might actually intensify economic voting, as they provide the voter with various and distinct alternatives to the underperforming incumbent (Ferrer 2023). From a pragmatic perspective, however, fragmentation and polarization will likely reduce the likelihood of any of the opposition parties resembling a viable alternative to the incumbent and thus reduce the likelihood of anti-incumbent economic voting (Maeda 2009). I will opt for the latter in my hypothesis, as most evidence in similar articles to the present thesis supports that fragmentation and polarization reduce the intensity of economic voting (Anderson 2000; Duch and Stevenson 2008; Maeda 2009).

Fragmentation seems to be an important factor to consider when casting an anti-incumbent vote, given that, from a pragmatic point of view, small opposition parties might not represent a viable alternative to the incumbent. Indeed, Duch and Stevenson (2008) found that larger opposition parties and the opposition parties that voters consider likely to govern tend to enjoy most of the benefits of economic voting. However, a recent experimental study on the topic found that voters value ideological proximity higher than

viability when casting an anti-incumbent vote, and that a higher number of opposition parties actually facilitates such a vote (Ferrer 2023). Still, the same study also found that voters do consider the size of an alternative party when casting an anti-incumbent vote.

It makes sense that voters consider the size of an opposition party when casting such a vote. For the underperforming government to be voted out, there has to be some coordination among these voters. If their votes are dispersed along the available opposition parties, then the likelihood of alternation is significantly lower and at best the results will lead to partial alternation. However, the presence of a unified opposition will make a vote transfer more straightforward. The unified opposition serves as a point of convergence, and thus a more viable alternative for anti-incumbent voting. If the opposition camp is fragmented into multiple parties that compete with one another, the discontented voters who look for an alternative to the incumbent may not perceive any of them as a viable alternative. Indeed, Duch and Stevenson (2008, 72) found a higher prevalence of economic voting in countries like the United Kingdom and Spain, which have mostly bipartisan dynamics, than in countries like Belgium and the Netherlands, which have particularly fragmented party systems and where large governing coalitions are frequent. In sum, “a more clearly defined set of viable alternatives to the incumbent government should lead citizens to more readily express content or discontent with the ruling party or parties” (Anderson 2000, 156). Therefore, regarding the moderating effect of the fragmentation of the opposition in the economic voting equation, the hypothesis I will be testing is the following:

*H1: A more fragmented political opposition will reduce the intensity of economic voting.*

As mentioned in the introduction, this hypothesis has already been tested and supported by Anderson (2000) and Maeda (2009). Nonetheless, in this thesis, I will update their results with more recent data and include another important factor regarding the configuration of the opposition: polarization. In his paper, Maeda considered that including a fragmentation factor in his analysis would be enough to test for the effect of ideological distance between parties. However, following the work of Sartori (1976), just looking at the number of parties will not provide us with a complete picture of a party system’s dynamics. We also need to look separately at the ideological distance among parties and their ideological intensity. A higher number of parties does not necessarily mean a higher level of polarization and can possibly be the result of a segmented polity

or the presence of issue-specific parties. Besides, the opposition can be divided into various parties, but they might be closer to each other ideologically than any of them to the incumbent. In this case, one can expect the opposition to form a coalition to replace the incumbent cabinet. This would not be surprising, since the literature on coalition formation has long stated that ideological proximity is on top of the list of considerations of those in coalition negotiations (e.g., Ecker and Meyer 2017). Swedish politics provide a great example of such rationale, with the cabinet being controlled either by the Social Democrats (SAP) or a coalition of right-wing parties (Centre Party, C; People's Party, FP; Christian Democrats, KD; and Moderate Party, M). Therefore, in Sweden, even though the opposition is quite fragmented, because there is a group of ideologically close right-wing parties ready to form a coalition, voters still perceive them as a viable alternative to the SAP government.

More polarized oppositions provide the voters with a wider scale of ideological options but will likely lead to a centrifugal dynamic of political competition, with opposition parties opposing each other more fiercely than opposing the government (Sartori 1976). In other words, in a polarized system, opposition parties will likely be located at opposing extremes of the political spectrum and be more likely to form coalitions with the incumbent than among themselves to oppose it, leading to a dynamic of partial alternation where the bigger centre parties stay in power with ever-changing coalition partners (see also Lundell 2011). In this case, one can expect the main governing centre party to suffer less from economic voting, and its junior coalition partners to experience it more intensely. Indeed, Duch and Stevenson (2008) found that “perennial” governing parties, those who are a part of most governing alternatives, tend to suffer less from economic voting than their coalition partners.

The inclusion of polarization as a factor is also important given the current political climate. Dissatisfaction with mainstream centre parties is increasing in most established democracies, and, as a result, radical challenger parties have become more electorally successful (Casal Bértoa and Rama 2021b; see also Mudde 2019). The growth of these parties, particularly radical right-wing parties, has led to a substantial increase in polarization in almost every European polity (Casal Bértoa and Rama 2021a). Not only that, but, even though radical challengers are gaining significant portions of the vote, mainstream parties still regard them as non-coalitionable due to their more controversial positions (Harteveld et al. 2022). Harteveld et al. (2022) described an increase not only

in ideological polarization but also in affective polarization due to the growth of populist radical parties. They found that populist parties of the far-right are uniquely negatively perceived by mainstream parties and vice-versa. They reached the same conclusions for far-left populists but with less intensity. This struggle seems to be mainly due to two factors: these parties' populist discourse, which emphasizes their distaste for the political elite; and their more radical and nativist proposals. Consequently, as populist parties grow electorally and mainstream parties continue to refuse to form coalitions with them, coalition governments among formerly mainstream opponents are becoming more frequent in order to keep radical parties out of government, and coalition cabinets, in general, are becoming more complex (Andeweg 2013). Therefore, when casting an anti-incumbent vote, one will likely perceive the opposition as less of an attractive alternative if the traditional mainstream party alternative is now either reduced electorally and dependent on radical challengers to form a government majority (e.g., the case of PSD in Portugal, as mentioned in the introduction) or in government with their past opponents (e.g., the coalition governments between the Social Democrats, SPD, and the Christian Democrats, CDU/CSU, in Germany).

One could even argue that these voters are then more likely to perceive the radical challenger as the viable opposition, but if their goal is to cast a vote for a potential government alternative, they will likely opt for a party that is less controversial and more suited to govern. Besides, Harteveld et al. (2022) found the same increase of affective polarization among voters, with mainstream party supporters revealing a particular distaste for far-right populist parties. I will not take into consideration any measure of affective polarization in my empirical analysis, but I believe that given these parties' radical stances, a measure of ideological polarization can mostly reflect the political conflict dynamics described above. Thus, regarding the moderating effect of the opposition's polarization in the economic vote equation, the hypothesis I will be testing is the following:

*H2: A more polarized political opposition will reduce the intensity of economic voting.*

## Data and Methods

To test my hypotheses, I will be mostly using data from the 2022 release of the *ParlGov* data set (Döring et al. 2022), which is a cross-national project that collects data on political parties, elections and cabinets from 37 established democracies. In my analysis, I only included data from 29 countries<sup>1</sup>. I excluded from the data set every non-European case due to data availability for other variables, plus Cyprus and Switzerland. I excluded the latter from the analysis because they are not parliamentary or semi-presidential democracies and, given that I am studying how voters punish the government through parliamentary elections, the governments analysed must be a consequence of the parliamentary elections' results (following Maeda 2009). Additionally, even though France has a quite presidential semi-presidential system, Lewis-Beck's (1997) findings suggest that it can be treated as if it was a parliamentary system in the context of economic voting.

My unit of analysis is a parliamentary election, and my sample includes 208 parliamentary elections that took place from 1989 to 2021, an observation period determined by data availability<sup>2</sup>. Thus, even though most of the literature mentioned above explores economic voting through individual-level logics, I opted for an aggregate-level analysis. The moderating factors of economic voting that I am interested in are all contextual factors, meaning that they are country-level factors. An individual-level analysis could have provided interesting insights, but conducting the analysis at the aggregate-level allows me to include in my sample countries that might have been

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<sup>1</sup> The countries included are Austria, Belgium, Bulgaria, Czechia, Germany (only vote and vote shares from the PR tier), Denmark, Spain, Estonia, Finland, France, United Kingdom, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Lithuania, Luxembourg, Latvia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia and Sweden.

<sup>2</sup> Some national parliamentary elections from the original dataset were excluded from the final product. First, elections in Hungary from 2014 and in Poland from 2019 were removed from the data set as the fairness of these electoral acts was considered questionable by independent observers (V-Dem 2023; Scheppele 2022; Markowski 2020). Additionally, the cases where a non-party cabinet existed before the election were excluded from the analysis (Bulgaria 1994, 2014; Czechia 1998, 2010, 2013; Greece 1990, June 2012; Italy 1994, 1996, 2013; Romania 2016). Furthermore, elections that were held within one year after the previous elections were excluded because those elections typically take place when the previous election did not produce a clear winner and the country needed another election to choose a governing party/parties (Bulgaria July 2021, November 2021; Spain 2016, November 2019; Greece November 1989, May 2012, June 2012, September 2015; Netherlands 2003). Finally, some of the countries included transitioned into democratic regimes during the analysis' time period. For these cases, the analysis initiates with their third democratic election to allow for the calculation of the government's vote change between elections and its previous vote swing. **Appendix A** lists every case included in the analysis for further clarification.

excluded due to individual-level data availability. This way, I was able to work with a more diverse sample of political contexts. Furthermore, other authors have also conducted similar analyses at the aggregate-level (e.g., Powell and Whitten 1993; Maeda 2009; Park 2023).

My dependent variable is the percentage point change in the governing party's/parties' vote share from the previous election<sup>3</sup>. The use of this measure is common when studying electoral accountability and economic voting at the aggregate-level (e.g., Powell and Whitten 1993; Maeda 2009; Park 2023). This variable has a mean value of -7,54%, further proving that governments tend to lose votes in elections.

In terms of independent variables, they can be divided into four different types. The first is the chosen variable to measure the government's economic performance: change in unemployment rates (the literature on the topic frequently uses this indicator: e.g., Powell and Whitten 1993; Whitten and Palmer 1999; Maeda 2009). The data regarding this variable is from the International Monetary Fund's *International Financial Statistics* data set (IMF 2022), and I simply subtracted the unemployment rate of the year prior to the election from the unemployment rate of the year in which the election took place. According to the literature on economic voting, it is expected that the higher the increase in unemployment rates, the more votes the government loses in the election.

The second type of independent variables regards an adapted version of the GCI advanced by Hobolt et al. (2012). To measure government clarity prior to each election, I constructed an index with the three following variables<sup>4</sup>: a dummy variable for single-party governments (0 for coalitions; 1 for single-party); a measure of the government's ideological cohesion using Dalton's (2008) polarization index, but accounting only for the parties in the cabinet (these values were then inverted so that higher values represented

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<sup>3</sup> Mergers and splits of parties complicate the calculation of the changes in parties' vote percentages. When two or more parties merge together or form an electoral alliance, the vote change in the next election was calculated by subtracting the sum of the vote shares of the old parties in the previous election from the new party's current vote (following Maeda 2009). In cases of splits, the vote changes of the parties that have experienced a split since the previous election are evaluated against the vote shares of the pre-split party in the previous election, which are then reduced according to the proportion of MPs who have left the party (following Maeda 2009).

<sup>4</sup> The original index also included a dummy variable regarding cohabitation in semi-presidential systems. However, I am only working with four semi-presidential polities (France, Lithuania, Portugal and Romania) and I only had seven cases of cohabitation. Therefore, I decided to exclude this part of the index to prevent from extremes deviations, as these cases would be 1 point above every other in a 4-point scale.

lower polarization and, therefore, higher government clarity)<sup>5</sup>; and the share of seats of the prime-minister’s party in the total of seats occupied by cabinet parties, included to evaluate the dominance of the main governing party. The index is then calculated by adding the value of each component. This index is a quite useful measure because, not only it comprehends various cabinet-related factors that have been described as moderators of economic voting elsewhere (e.g., Powell and Whitten 1993; Duch and Stevenson 2008), but it also allows for the measuring of clarity of responsibility with one single variable, thus facilitating the evaluation of its moderating effect. *Table 1* presents basic descriptive statistics regarding every component of this index and the index itself.

*Table 1 – Government Clarity Index (GCI)*

	N	Mean	SD	Min.	Max.
<i>Single-party</i>	208	0,28	0,45	0	1
<i>Polarization</i>	208	0,84	0,14	0,45	1,00
<i>PM’s party (%)</i>	208	0,72	0,23	0,24	1,00
<i>GCI</i>	208	1,84	0,75	0,76	3,00

The third type of independent variables regards my hypotheses. I intend to test if the fragmentation and polarization of the opposition impact the intensity of economic voting. To measure the fragmentation of the opposition, I calculated the Effective Number of Opposition Parties (ENOP) prior to each election. This has already been done by Maeda (2009), and I simply used Laakso and Taagepera’s (1979) effective number of parties formula but only considering the seat share of opposition parties<sup>6</sup>. To measure the polarization of the opposition, I will calculate a Polarization of the Opposition Index (POI) using Dalton’s (2008) polarization index formula<sup>7</sup>. *Table 2* presents basic descriptive statistics for both variables.

<sup>5</sup> The original index only considered the proportion of coalition parties that belonged to the same ideological group (left or right) as the dominant party. I opted for Dalton’s (2008) formula instead to obtain a more nuanced measure.

<sup>6</sup> As mentioned above, Anderson (2000) also analysed the moderating factor of fragmentation in economic voting. However, he analysed what he referred to as “clarity of alternatives” simply using the Effective Number of Parties (ENP). As I am interested specifically on the moderating effect of the characteristics of the opposition, I opted for the ENOP.

<sup>7</sup> Non-ideological seats, those occupied by representatives of ethnic minorities or independent MPs, were not included when calculating the POI.



Table 2 – ENOP and POI

	N	Mean	SD	Min.	Max.
<i>ENOP</i>	208	2,80	1,26	1,00	8,05
<i>POI</i>	208	0,38	0,16	0,00	0,70

Finally, beyond the above-mentioned variables, there are a few control variables that are important when using the government’s vote change as a dependent variable. Governments typically come to power on the basis of a short-term shift in voter support, and it is expected that they lose votes in the next elections as some of the voters are alienated by the party’s/parties’ decisions while in power (Mueller 1970; Paldam 1986). To control for this effect, as is usual in the literature, I will include variables regarding the government’s previous electoral result and previous vote swing. Given that these are two lagged variables, they will likely grandly increase the explanatory value of the model. Nonetheless, their inclusion is common practice in the literature, and important to control for the “cost of ruling” effect. Moreover, according to this “cost of ruling” logic, the longer a government stays in office, the more voters it will alienate. Thus, a government that has been in office for a short period might not be held responsible for its performance. In the literature, this is frequently called the “honeymoon effect”, symbolizing how governments tend to enjoy a boost of support right after they are elected (Kumar et al. 2013). To control for this effect, when calculating the model, I will include a variable measuring the cabinet’s tenure in months<sup>8</sup>.

To test my hypotheses, I will calculate a multilevel linear regression model, with the higher-level predictor being the country in which the election took place. This will allow me to further control for cross-country variation. In this model, I will include the interaction effects between the unemployment change variable and the GCI, the ENOP and the POI. This way, I will be able to test my hypotheses regarding the moderating effect of the opposition’s configuration on economic voting, while also controlling for the moderating effect of cabinet-related factors that has been found elsewhere.

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<sup>8</sup> When calculating the cabinet’s tenure, I only considered as different cabinets those constituted by different parties. Therefore, a change regarding the prime-minister or any other ministers was not considered as the beginning of a new cabinet.

## Empirical Analysis

Table 3 – Economic Voting

	B	SE
<b>Fixed Effects</b>		
<i>(Intercept)</i>	5,245 <sup>**</sup>	(3,065)
<i>Unemployment change, %</i>	-1,253 <sup>**</sup>	(0,462)
<i>Previous result, %</i>	-0,260 <sup>***</sup>	(0,065)
<i>Previous swing, %</i>	-0,358 <sup>***</sup>	(0,060)
<i>Cabinet tenure (months)</i>	0,019	(0,039)
<b>Variance Components</b>		
<i>Intercept (SD)</i>		2,540
<i>Residual (SD)</i>		7,941
<i>Deviance</i>		1473,746
<i>N (Countries)</i>		29
<i>N (Elections/Cases)</i>		208

Note: Table entries are multilevel REML estimates with estimated standard errors in parentheses.

<sup>\*\*</sup>p<0,1; \*p<0,05; \*\*p<0,01; \*\*\*p<0,001

Before interpreting the results in *Tables 3 and 4*, it is important to reflect on the multilevel nature of the analysis. The Intraclass Correlation Coefficient (ICC) for both models equals 0,173, meaning that 17,3% of the variance in the dependent variable is related to between-cluster variance. In this case, the clusters correspond to the 29 countries mentioned above. This value also indicates that the inclusion of other country-level predictors could have improved the models' quality. Some literature has contended that country-level factors, like a country's democratic experience (Bochsler and Hänni 2019) and its economic openness (Park 2023), have indeed a moderating effect on economic voting. Regarding this thesis' analysis, I would argue that most of the between-cluster variance reported above is likely linked to the former, given that the group of countries included have quite different democratic experiences. The sample includes first-wave democracies (e.g., United Kingdom), post-war democracies (e.g., Italy), third-wave democracies (e.g., Portugal), and post-communist democracies (e.g., Poland). In terms of economic openness, however, all countries are members of the European Union, except for Norway and the United Kingdom, who are also quite integrated into the world economy. I would thus argue that variance regarding this indicator would be lower.

Besides, Park's (2023) findings regarding this factor were related to relative economic voting, a concept different than the one used in my analysis, that focuses mostly on how voters react to their country underperforming economically when compared to other countries. Some of this intraclass correlation could also be the product of country-specific factors that are difficult to account for in quantitative analyses.

I started by calculating a model without the moderators to test the statistical significance of the economic vote equation. The results are presented in *Table 3* and confirm that when unemployment rates increase, the incumbent cabinet tends to lose more votes. The coefficients for the control variables also follow the hypothesized effects with statistical significance, apart from the cabinet's tenure with a positive effect, opposite to the one predicted in the literature, but without statistical significance.

*Table 4 – Economic Voting and Moderators*

	B	SE
<b><i>Fixed Effects</i></b>		
<i>(Intercept)</i>	12,974*	(5,345)
<i>Unemployment change, %</i>	-1,127	(2,029)
<i>Previous result, %</i>	-0,312***	(0,074)
<i>Previous swing, %</i>	-0,364***	(0,060)
<i>Cabinet tenure (months)</i>	0,003	(0,039)
<i>GCI</i>	-0,014	(0,976)
<i>ENOP</i>	-1,768***	(0,519)
<i>POI</i>	0,438	(3,821)
<i>Unemp x GCI</i>	-0,200	(0,599)
<i>Unemp x ENOP</i>	-0,611	(0,402)
<i>Unemp x POI</i>	4,870 <sup>ˆ</sup>	(2,937)
<b><i>Variance Components</i></b>		
<i>Intercept (SD)</i>		2,150
<i>Residual (SD)</i>		7,788
<i>Deviance</i>		1445,360
<i>N (Countries)</i>		29
<i>N (Elections/Cases)</i>		208

Note: Table entries are multilevel REML estimates with estimated standard errors in parentheses.

<sup>ˆ</sup>p<0,1; \*p<0,05; \*\*p<0,01; \*\*\*p<0,001

*Table 4* presents the results for the full model. However, it does not yet allow me to take any conclusions about the two hypotheses formulated above, for that I will have to plot the interaction effects. Nonetheless, it is interesting that ENOP presents a negative and statistically significant coefficient. According to the model, for each unit increase in ENOP, the government is expected to lose almost an additional 1,8% of the votes. One could then argue that the existence of various opposition parties tends to increase anti-incumbent voting, independently of the government's performance, and that voters do value ideological proximity. In other words, the more opposition parties exist, the more likely the voter is to find an alternative closer to their ideological position.

The other variables related to my hypotheses do not present statistically significant effects but this was to be expected due to the inclusion of interaction effects including these variables. The interaction effects themselves also seem to be non-significant. However, this significance was only calculated for the average values of the independent variables. One has to plot the interaction effect to look at the full range of values because at lower or higher levels the effect might actually be significant. Therefore, to evaluate my hypotheses, I have plotted the two corresponding interaction effects in *Figures 3* and *4*. Additionally, *Figure 2* plots the interaction effect between the change in unemployment rates and the GCI, in order to assess the clarity of responsibility argument. I held the moderating variables to their lowest and highest values in order to assess how they moderate economic voting. The bands in the graphs represent the confidence intervals of 95% for the predictions.

The graph in *Figure 2* partially supports the results of Hobolt's et al. (2012) and Powell and Whitten's (1993) work on clarity of responsibility. When government clarity is high, economic voting tends to be more intense. In other words, when it is easier for the voters to perceive who is to blame for the country's economic situation, they are also more likely to cast an anti-incumbent vote. Nonetheless, it is important to state that this interaction effect is not statistically significant at any values of unemployment rate change, as the confidence intervals' bands continuously overlap.

The graph in *Figure 3*, on the other hand, goes against the expectations of my first hypothesis. In situations of unified opposition, economic voting is less intense than when the opposition is fragmented, with the interaction effect being significant from an unemployment rate change of -1% and above. One could argue that these results prove then again that voters value ideological proximity higher than viability when casting (...)

Figure 2 – Unemployment x Government Clarity Index<sup>9</sup>

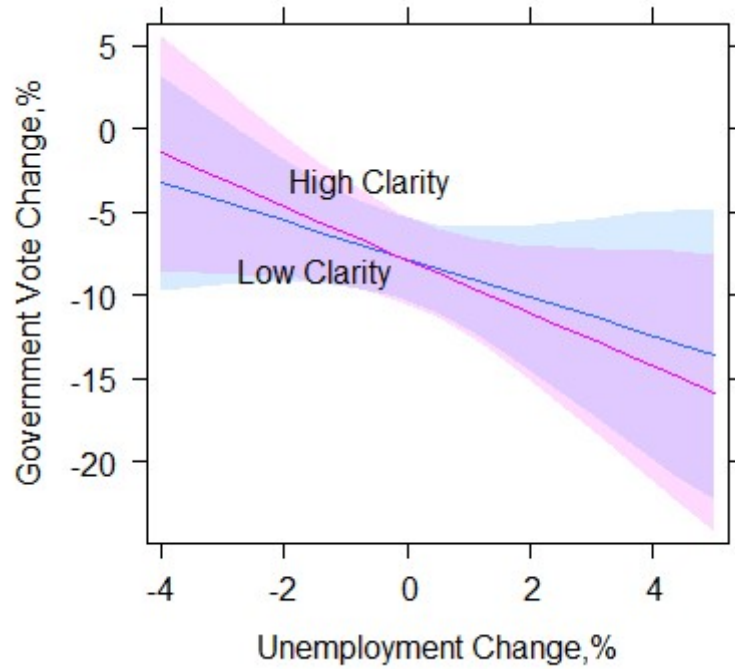
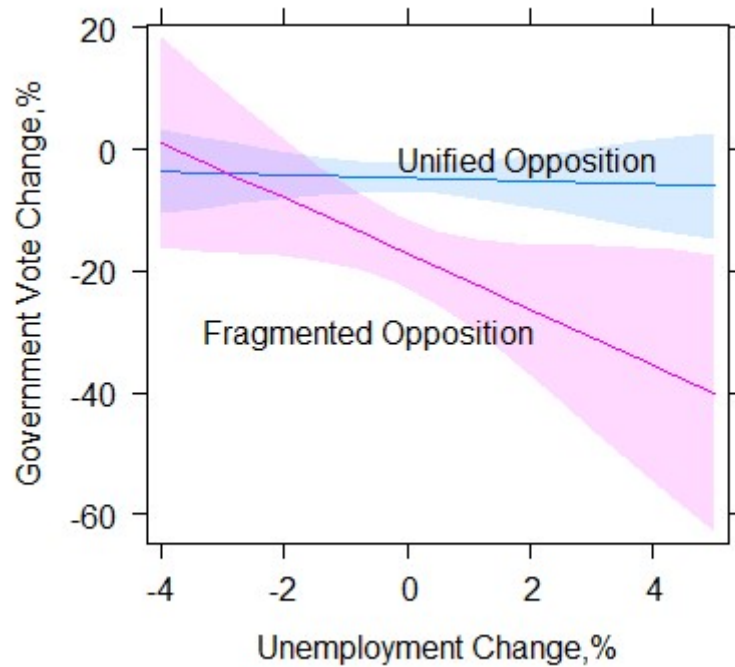


Figure 3 – Unemployment x Effective Number of Opposition Parties<sup>10</sup>

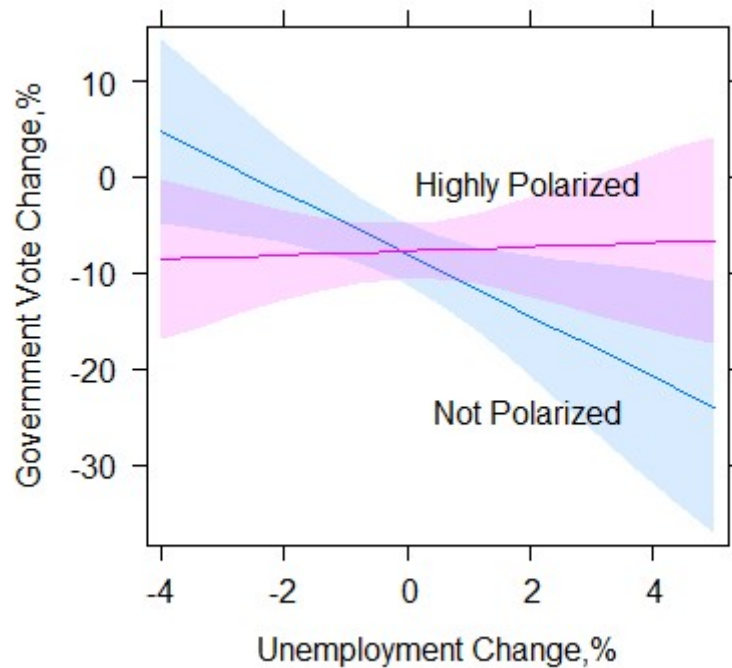


<sup>9</sup> The graph was obtained with the *effects* library in R. “Low Clarity” is equivalent to a GCI score of 0,764. “High Clarity” is equivalent to a GCI score of 3.

<sup>10</sup> The graph was obtained with the *effects* library in R. “Unified Opposition” is equivalent to a ENOP score of 1. “Fragmented Opposition” is equivalent to a ENOP score of 8,049.

(...) an anti-incumbent vote. Consequently, if the opposition has more options to choose from, they are more likely to find an opposition party close to their views to vote on instead of the underperforming incumbent. The results found by Ferrer (2023) are then supported. Regarding Anderson’s (2000) and Maeda’s (2009) work, who found support for hypotheses similar to mine (H1), it is important to note that they only used data from the ninetieth century, so the above-mentioned changing dynamics of European party systems might also be behind the differences between mine and their results. For example, one could argue that, in recent years, voters are increasingly dissatisfied with mainstream parties and are turning to new and/or smaller parties when looking for an alternative to an underperforming incumbent.

Figure 4 – Unemployment x Polarization of the Opposition Index<sup>11</sup>



Finally, the lines in the graph in *Figure 4* are according to my second hypothesis. However, the continuous overlap of the confidence intervals’ bands indicates that the moderating effect of the opposition’s polarization is not significant for any values of unemployment change. Nonetheless, the graph shows that in situations of higher polarization of the opposition, the intensity of anti-incumbent voting is lower. As stated above, if the opposition is polarized, it will be less likely to form a coalition to replace

<sup>11</sup> The graph was obtained with the *effects* library in R. “Not Polarized” is equivalent to a POI score of 0. “Highly Polarized” is equivalent to a POI score of 0,703.

the government, as high POI values tend to represent ideological differences among the opposition that are hard to overcome. In a centrifugal dynamic, the centre party is more likely to stay in power and only change its coalition partners, while enjoying quite stable electoral support. These results might also be a consequence of the increasing presence of radical populist parties in European parliaments, and the subsequent rise of affective polarization. With the traditional opposition losing votes to this type of party, people might find that voting for the mainstream incumbent is the only way to keep the radicals out of power. However, it is important to consider that the model in *Table 4* only includes a measure of ideological polarization, meaning that no specific measure of affective polarization was included. Therefore, the growing political conflict among radical and mainstream parties/voters might not be fully captured in the model.

## **Conclusion**

In this thesis, I set out to study potential opposition-related moderators of economic voting. Following the findings of Anderson (2000) and Maeda (2009) and guided by the seminal work of Sartori (1976), this paper evaluates if the fragmentation of the opposition (ENOP) and its polarization (POI) moderate the impact of a government's economic performance in its electoral results. I hypothesized that the higher the fragmentation of the opposition, the less intense the economic vote, given that the voters would be less likely to perceive any of the opposition parties as a viable alternative. However, according to my results, economic voting is actually more intense when the opposition is more fragmented. The results thus support a more expressive view on economic voting (see also Ferrer 2023). As for the polarization of the opposition, I did find partial support for my hypothesis, which stated that the higher its value, the less intense the economic vote. Voters will likely perceive a polarized opposition as less of a viable alternative, since the opposition parties are less likely to form a coalition to replace the government, given their ideological differences. Nonetheless, it is important to mention that, according to my model, the POI's moderating effect is not statistically significant.

Besides the interpretation of these results, it is also important to reflect on the limitations and specificities of my analysis. First, I am working with a somewhat small number of cases, given that my sample only includes 208 elections (cases), and even though previous research on the topic, at the aggregate-level, worked with smaller samples (e.g, Powell

and Whitten 1993; Whitten and Palmer 1999; Maeda 2009), mine is the first study on the topic, that I could find, that includes post-communist democracies. These regimes are often equated with more unstable and volatile politics, with political parties obtaining winning results in one election, just to then lose most of their support or collapse in the next election (Sikk 2005; Powell and Tucker 2013). Besides, as mentioned above, a country's democratic experience has been found to moderate economic voting (Bochsler and Hänni 2019). Moreover, the calculation of the ICC revealed that 17,3% of the variance in the dependent variable was associated with cross-country variance. Therefore, the inclusion of a variable to control for the specificities of these regimes could have improved the quality of the model. Nonetheless, their inclusion does not limit the analysis, as the variety of contexts further solidifies the veracity of the results. However, this might be one of the reasons why my results differed from those of previous studies. Finally, I also found some problems regarding the assumptions related to linear regression models, which undermine the robustness of my results<sup>12</sup>.

So far, this thesis has reflected on how a government's bad economic performance might lead voters to vote for one of the opposition parties. However, it is also important to consider that when dissatisfied with the economy, a voter might also opt not to vote. Indeed, Weschle (2014) looked at how the government's economic performance was connected to turnout and found that, in low-clarity situations, voters are actually more likely to not vote when the government underperforms, than to vote for an opposition party. Nonetheless, he also found that in high-clarity situations, voters tend to express their dissatisfaction by voting for the opposition. Additionally, he found that the higher the number of parties in a system, the more likely the voter is to cast an anti-incumbent vote, as it is easier for them to find an ideologically-close alternative. When the number of parties is limited, the voter is more likely to react to a bad economic performance by not voting at all. Future research should apply my framework to further understand how the configuration of the opposition might define one's decision to cast an anti-incumbent vote or not vote at all when faced with an underperforming government.

Furthermore, as much of the rationale behind economic voting, and how it might be moderated by the opposition's configuration, relies on individual-level logics, meaning that research focuses on how voters, and not countries, react to different political contexts,

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<sup>12</sup> I further elaborate on these problems in **Appendix B**. The assumptions' tests presented only refer to the model on *Table 4*.



it would be important to apply the framework suggested in this thesis to an individual-level analysis. This has already been done to a certain extent by Anderson (2000). However, it would be important to update his results with more recent data, to account for the recent changes in European politics, and include a measure of the opposition's polarization. Additionally, to further account for this changing scenario, it would also be interesting to include in the model a variable that specifically measures affective polarization. This way one could better assess the impact of the new political conflict dynamics described by Hartevelde et al. (2022).

Finally, I would like to revisit the Portuguese case, which was my primary inspiration for the topic of this thesis but deviates from my final results. As mentioned in the introduction, when I started working on this paper, Portuguese politics were in a bit of a standoff, with an underperforming PS government that remained on top of the polls mostly due to the fragmentation and polarization of the right-wing opposition. Therefore, Portugal fitted perfectly in my hypotheses, with the underperforming government not being punished electorally because of a divided opposition. However, the situation has changed since. In more recent polls, PSD has been scoring equally or higher than PS in terms of popularity (Público 2023c; Público 2023d; Observador 2023a). I would argue that one of the main factors behind this change was the official distancing of PSD from *Chega*. Since *Chega* arrived at the parliament, PSD had not yet officially stated that they would not work with *Chega* to form government. However, in April 2023, Luís Montenegro, PSD's leader, said in an interview that he would never count with *Chega* to form a coalition or to support a PSD minority government (CNN Portugal 2023b), a position that he has reiterated since. Thereafter, polls have reported growing popularity for PSD. This makes sense, given that a governing coalition of PSD and *Chega* only gathered the approval of less than a third of the population (Observador 2023b). Now that this seems to no longer be an option, the subsequent increasing popularity of PSD likely indicates that the growth of the far-right populist party was keeping voters from changing their vote from the government to the opposition, even though most voters evaluated PS's performance in government negatively. In sum, the growth of *Chega* as a potential government party was likely reducing the intensity of performance voting. Nonetheless, it is also important to consider that the voter's evaluation of PS's performance in government has not particularly improved recently (Diário de Notícias 2023), so other factors can be behind the growing popularity of PSD.

## References

- Anderson, Christopher. 1995. *Blaming the Government: Citizens and the Economy in Five European Democracies*. New York: M.E. Sharpe.
- Anderson, Christopher. 2000. "Economic voting and political context: a comparative perspective". *Electoral Studies* 19: 151-170.
- Andeweg, Rudy. 2013. "Parties in Parliament: The Blurring of the Opposition". In *Party Governance and Party Democracy*, ed. Wolfgang Müller and Hanne Marthe Narud. New York: Springer New York.
- Best, Robin. 2013. "How Party System Fragmentation has Altered Political Opposition in Established Democracies". *Government and Opposition* 48(3): 314-342.
- Bochsler, Daniel and Miriam Hänni. 2019. "The three stages of the anti-incumbency vote: Retrospective economic voting in young and established democracies". *European Journal of Political Research* 58: 30-55.
- Casal Bértoa, Fernando and José Rama. 2021a. "Polarization: What Do We Know and What Can We Do About It?". *Frontiers in Political Science* 3: 1-11.
- Casal Bértoa, Fernando and José Rama. 2021b. "The Antiestablishment Challenge". *Journal of Democracy* 32(1): 37-51.
- CNN Portugal, António Guimarães. 2023a. "Nove meses, onze demissões. As contas de um Governo em constante demissão". *CNN Portugal*, January 5. <https://cnnportugal.iol.pt/governo/demissao/nove-meses-onze-demissoes-as-contas-de-um-governo-em-constante-demissao/20230105/63b731590cf2cf9224f2e349>
- CNN Portugal. 2023b. "Coligações com o Chega? Luís Montenegro afasta qualquer aliança". *CNN Portugal*, April 25. <https://cnnportugal.iol.pt/videos/coligacoes-com-o-chega-luis-montenegro-afasta-qualquer-alianca/6447e6210cf2cf9225041ac8>
- Dalton, Russell. 2008. "The Quantity and Quality of Party Systems". *Comparative Political Studies* 41(7): 899-920.
- Diário de Notícias, Rafael Barbosa. 2023. "Costa estanca perda apesar de estar no vermelho, Marcelo cai mas ainda é o melhor". *Diário de Notícias*, April 23.

<https://www.dn.pt/politica/costa-estanca-perda-apesar-de-estar-no-vermelho-marcelo-cai-mas-ainda-e-o-melhor-16227490.html>

Döring, Holger, Constantin Huber and Philip Manow. 2022. "ParlGov 2022 Release". <https://doi.org/10.7910/DVN/UKILBE>

Duch, Raymond and Randolph Stevenson. 2008. "10 - The Pattern of Contention and the Economic Vote". In *The Economic Vote: How Political Institutions Condition Election Results*, ed. Raymond Duch and Randolph Stevenson. New York: Cambridge University Press.

Ecker, Alejandro and Thomas Meyer. 2017. "Coalition Bargaining Duration in Multiparty Democracies". *British Journal of Political Science* 50: 261-280.

Enyedi, Zsolt and Fernando Casal Bértoa. 2022. "The future is not what it used to be: the failure of bipolarisation". *Irish Political Studies* 37(2): 244-265.

Ferrer, Sergi. 2023. "Opposition fragmentation facilitates electoral accountability: Evidence from a survey experience". *Party Politics* 29(1): 112-124.

Harteveld, Eelco, Philipp Mendoza and Matthijs Rooduijn. 2022. "Affective Polarization and the Populist Radical Right: Creating the Hating?". *Government and Opposition* 57: 703-727.

Hobolt, Sara, James Tilley and Susan Banducci. 2013. "Clarity of responsibility: How government cohesion conditions performance voting". *European Journal of Political Research* 52: 164-187.

International Monetary Fund. 2022. "International Financial Statistics 2022, M01". <https://data.imf.org/> (March 10, 2023).

Katz, Richard and Peter Mair. 1995. "Changing Models of Party Organization and Party Democracy: The Emergence of the Cartel Party". *Party Politics* 1(1): 5-28.

Kumar, Sanjay, Shreyas Sardesai and Pranav Gupta. 2013. "The Weakening of Electoral Anti-Incumbency". *Economic and Political Weekly* 48(13): 128-131.

Laakso, Markku and Rein Taagepera. 1979. "Effective Number of Parties: A Measure with Application to West Europe". *Comparative Political Studies* 12(1): 3-27.

- Lewis-Beck, Michael. 1997. "Who's the Chef? Economic Voting under a Dual Executive". *European Journal of Political Research*, 31(3): 315–25.
- Lewis-Beck, Michael & Stegmaier, Mary. 2000. "Economic determinants of electoral outcomes". *Annual Review of Political Science* 3: 183–219.
- Maeda, Ko. 2009. "Divided We Fall: Opposition Fragmentation and the Electoral Fortunes of Governing Parties". *British Journal of Political Science* 40: 419-434.
- Mair, Peter. 1997. *Party System Change: Approaches and Interpretations*. Oxford, Oxford University Press.
- Markowski, Radoslaw. 2020. "Plurality support for democratic decay: the 2019 Polish parliamentary election". *West European Politics* 43(7): 1513-1525.
- Mudde, Cas. 2019. *The Far Right Today*. Cambridge: Polity Press.
- Mueller, John. 1970. "Presidential popularity from Truman to Johnson". *The American Political Science Review* 64(1): 18-34.
- Observador, Beatriz Ferreira. 2023a. "PSD volta a ficar á frente do PS em nova sondagem". *Observador*, June 2. <https://observador.pt/2023/06/02/psd-volta-a-ficar-a-frente-do-ps-em-nova-sondagem/>
- Observador, Edgar Caetano. 2023b. "Maioria dos portugueses não quer aliança pré-eleitoral do PSD com o Chega". *Observador*, June 6. <https://observador.pt/2023/06/06/portugueses-nao-querem-alianca-pre-eleitoral-do-psd-com-o-chega/>
- Paldam, Martin. 1986. "The Distribution of election Results and the Two Explanations of the Cost of Ruling". *European Journal of Political Economy* 2(1): 5-24.
- Paldam, Martin. 1991. "How robust is the vote function? A study of seventeen nations over two decades". In *Economics and politics: The calculus of support*, ed. Helmut Norpoth, Michael Lewis-Beck and Jean-Dominique Lafay. Ann Arbor, MI: University of Michigan Press.
- Park, Brandon. 2023. "How does economic openness affect the relative economic voting?". *European Political Science Review* 1-20.

Powell, G. Bingham and Guy Whitten. 1993. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context". *American Journal of Political Science* 37(2): 391-414.

Powell, G. Bingham. 2000. *Elections as Instruments of Democracy*. New Haven and London: Yale University Press.

Powell, Eleanor and Joshua Tucker. 2013. "Revisiting Electoral Volatility in Post-Communist Countries: New Data, New Results and New Approaches". *British Journal of Political Science* 44: 123-147.

Público, Sónia Trigueirão. 2023a. "Greve na função pública. Há "escolas fechadas" e "hospitais em serviços mínimos"". *Público*, March 17. <https://www.publico.pt/2023/03/17/sociedade/noticia/greve-funcao-publica-escolas-fechadas-hospitais-servicos-minimos-2042778>

Público, Maria Lopes and Henrique Pinto de Mesquita. 2023b. "Dúvidas sobre alternativa de direita motivam desejo de manter Costa até 2026". *Público*, February 23. <https://www.publico.pt/2023/02/23/politica/noticia/duvidas-alternativa-direita-motivam-desejo -manter-costa-ate-2026-2040071>

Público, Maria Lopes. 2023c. "Sondagem. Queda do Ps leva a empate técnico com o PSD e direita ultrapassa a esquerda". *Público*, February 22. <https://www.publico.pt/2023/02/22/politica/noticia/queda-ps-leva-empate-tecnico-psd-direita-ultrapassa-esquerda-2039852>

Público, Marta Oliveira. 2023d. "Sondagem: PSD ultrapassa PS, mas direita continua a precisar do Chega para ter maioria". *Público*, April 24. <https://www.publico.pt/2023/04/24/politica/noticia/sondagem-psd-ultrapassa-ps-direita-continua-precisar-chega-maioria-2047244>

Sartori, Giovanni. 1976. *Parties and Party Systems: A Framework for Analysis*. New York: Cambridge University Press.

Scheppele, Kim. 2022. "How Viktor Orbán Wins". *Journal of Democracy* 33(3): 45-61.

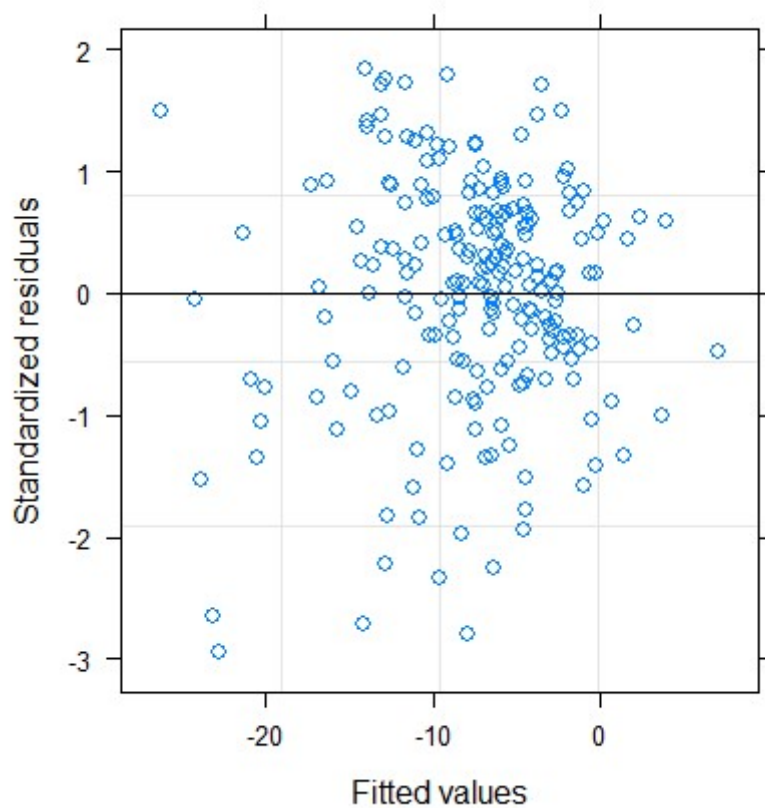
Sikk, Allan. 2005. "How unstable? Volatility and the genuinely new parties in Eastern Europe". *European Journal of Political Research* 44: 391-412.

- Stiers, Dieter. 2022. "Performance voting, retrospective voting, and economic voting. Conceptual clarity and empirical testing". *Social Science Quarterly* 103: 399-408.
- Ravishankar, Nirmala. 2009. "The Cost of Rulling: Anti-Incumbency in Elections". *Economic and Political Weekly* 44(10): 92-98.
- V-Dem. 2023. "Election free and fair". [https://v-dem.net/data\\_analysis/VariableGraph/](https://v-dem.net/data_analysis/VariableGraph/) (March 15, 2023).
- Weschle, Simon. 2014. "Two types of economic voting: How economic conditions jointly affect vote choice and turnout". *Electoral Studies* 34: 39-53.
- Whitten, Guy and Harvey Palmer. 1999. "Cross-national analyses of economic voting". *Electoral Studies* 18: 49-67.
- Zaller, John. 2004. "Floating Voters in US Presidential Elections, 1948–2000". In *The Issue of Belief: Essays in the Intersection of Non attitudes and Attitude Change*, ed. Paul Sniderman and W. Saris. Amsterdam: University of Amsterdam Press.

## Appendix A – Elections Included (Cases)

Country	Period	Nr. of Elections
Austria	1990-2019	10
Belgium	1991-2019	8
Bulgaria	1997-2021	7
Czechia	1998-2021	5
Germany	1994-2021	8
Denmark	1990-2019	9
Spain	1989-2019	9
Estonia	1999-2019	6
Finland	1991-2019	8
France	1993-2012	5
United Kingdom	1992-2019	8
Greece	1989-2019	9
Croatia	2007-2020	5
Hungary	2002-2010	3
Ireland	1989-2020	8
Iceland	1995-2021	9
Italy	1992-2018	5
Lithuania	2000-2020	6
Luxembourg	1989-2018	7
Latvia	1998-2018	7
Malta	1992-2017	7
Netherlands	1989-2017	8
Norway	1989-2021	9
Poland	1997-2015	5
Portugal	1991-2019	9
Romania	1996-2020	6
Slovakia	1998-2020	7
Slovenia	1996-2018	7
Sweden	1991-2018	8
<i>Total</i>	<i>1989-2021</i>	<i>208</i>

## Appendix B – Linear Regression Assumptions



When calculating a linear regression model, one must assume that the variance in prediction error (residuals) is the same for all values of the independent variables. In other words, one must assume homoscedasticity. However, the graph above reflects a situation of heteroscedasticity, which might have led to an over or underestimation of statistical significance. This does not necessarily mean that the estimated slopes of my model are incorrect, but that their statistical significance might be.

### *Shapiro-Wilk Normality Test*

W= 0,972, p-value<0,001; Rejection of the null hypothesis, residuals are not normally distributed.

Additionally, according to the Shapiro-Wilk normality test reported above, the residuals are not normally distributed, which might also mean that statistical significance values were wrongly estimated. The graph below illustrates the residuals' distribution.



Normal Q-Q Plot

