



**TRUEDEM: Trust in European Democracies  
2023-2025  
European Commission Grant No 101095237**

**ELECTORAL VOLATILITY INDEX:  
RELIABILITY ASSESSMENT AND DYNAMICS IN  
EUROPE**

**Deliverable number:** D2.4.

**Due date:** 31/08/2024

**Submission date:** 30/09/2024

**Type:** REPORT

**Dissemination Level:** PU (PUBLIC)

**Work Package:** WP2 – Voting and electoral behaviour: new challenges for inclusiveness and representativity in democratic systems

**Lead Beneficiary:** UNISA-IT

**Contributing Beneficiaries:** All partners

**Authors:** Felice Addeo; Marialaura Ammirato; Angela Delli Paoli; Domenico Fruncillo; Domenico Maddaloni

**Purpose and scope of the deliverable:**

The objectives of D2.4. are (1) to provide a viable definition and an effective measurement of electoral volatility across the European countries, and (2) to identify the role played by political trust, together with other structural and cultural factors in shaping differences in electoral volatility levels.

**Citation:** Addeo, F., Ammirato, M. L., Delli Paoli, A., Fruncillo, D., Maddaloni, D. (2024). Electoral volatility index: reliability assessment and dynamics in Europe. *Working paper no. 2.4*. TRUEDEM: Trust in European Democracies Project ([www.truedem.eu](http://www.truedem.eu)).

## Table of Contents

<b>Introduction .....</b>	<b>3</b>
Project summary .....	3
Annotation of the Deliverable (D2.4) .....	3
<b>1 A literature review on electoral volatility .....</b>	<b>5</b>
1.1 Defining and measuring electoral volatility .....	5
1.2 Sources and causes of electoral volatility .....	7
1.3 Notes on partisan dealignment, sceptical trust and volatility.....	11
1.4 Some conclusive remarks.....	12
<b>2 Measuring electoral volatility across European countries.....</b>	<b>13</b>
2.1 Volatility by country .....	13
2.2 Volatility by group of countries .....	16
2.3 Some conclusive remarks.....	18
2.4 Appendix to chapter 2: Explanatory notes .....	18
<b>3 Electoral volatility and government performance in European countries: a multiple regression analysis .....</b>	<b>22</b>
3.1 The theoretical model.....	22
3.2 Research design.....	24
3.3 Measures .....	25
3.3.1 Dependent variable: Electoral volatility .....	25
3.3.2 Independent variables .....	26
3.3.3 Control variables.....	27
3.4 Descriptive overview .....	28
3.5 Multiple regression analysis.....	32
3.6 Some conclusive remarks.....	35
<b>Conclusions .....</b>	<b>36</b>
<b>References .....</b>	<b>37</b>

## Introduction

### Project summary

TRUEDEM is a 3-year multinational research project funded by the Horizon program of the European Commission with several core objectives. TRUEDEM aims to design and implement a complex research effort to collect comprehensive evidence on the perceptions of trust and judgments of trustworthiness in a range of European states. The project will create a robust and comprehensive knowledge base on long-term dynamics and predictors of trust in political institutions of representative democracy (parties, executives, parliaments, judiciary etc.) in the EU. TRUEDEM will examine the role of new patterns of electoral behaviour, impact of socioeconomic transformations, the erosion of old and emergence of new political cleavages for the inclusiveness, representativity and legitimacy in European democracies, and political trust. TRUEDEM will identify strategies to address the demands and needs of citizens expressed via both electoral and non-electoral forms of political participation as means to enhance active engagement and inclusion and thus booster inclusive and responsive decision-making and governance in Europe. TRUEDEM will distinguish clusters of values that can hinder or foster pro-democratic values and attitudes and thus contribute to the barriers and opportunities to re-invigorating and enhancing representative democratic systems. Finally, TRUEDEM will develop a comprehensive and transparent toolbox of policy interventions including recommendations, toolkits and methodologies for enhancing trust in political institutions, boosting transparency inclusiveness of representative systems. TRUEDEM is coordinated in Austria with partners in Czechia, France, Germany, Greece, Italy, Poland, Romania, Slovakia, Slovenia, Sweden, and Ukraine. The three-year program runs from January 2023 to December 2025.

### Annotation of the Deliverable (D2.4)

This document is a part of *Work Package 2 – Voting and electoral behaviour: new challenges for inclusive-ness and representativity in democratic systems*, led by UNISA-IT (Team leader: Domenico Maddaloni).

Electoral volatility refers to the degree of fluctuation or change in the voting patterns of a population over a specific period. This dimension of electoral behaviour is crucial for understanding the dynamics of party systems, government formation, and voter behaviour, as it influences the stability and predictability of electoral outcomes. Overall, electoral volatility plays a significant role in shaping political landscapes and has far-reaching effects on various aspects of governance and decision-making processes. A widely shared view among political researchers is that low electoral volatility indicates stable interparty competition. In contrast, high electoral volatility suggests weakening traditional party loyalties and a greater likelihood that voters will change their established electoral choices.

In the framework of Work Package 2, the UNISA-IT team's research on electoral volatility focuses on the following issues:

1. To define a viable concept of volatility in the context of a comparative cross-country research on trust and electoral behaviour in Europe.
2. To measure the levels of electoral volatility in European countries in recent times, in which many scholars see a growth of the phenomenon and a consequent de-institutionalisation of the party systems at both national and European levels (Chiaramonte & Emanuele, 2022).
3. To analyse the interplay between political trust, voter turnout, and electoral volatility, which are at the core of both the TRUEDEM project and Work Package 2.

4. To assess some determinants of electoral volatility through a causal model based on Norris's (2022) work on sceptical trust.

It is well known that the concept of electoral volatility can refer to the continuity (or lack thereof) of electoral results of parties, coalitions, or political “families” (i.e., far right, centre-right, centre-left, far left). This gives rise to essential differences in choosing the most useful measure of electoral volatility, although Pedersen's index (1979) is still the most widely used in political research. The first chapter of the report offers a brief discussion of these aspects. The plurality of theoretical and methodological options leads to a plurality of research results (Casal Bertoa et al., 2017), which necessitates a clear definition of the object and purpose of our research. Therefore, we will focus on electoral volatility at the party level and the coalition or political area (or “block”) level. More specifically, our interest is to define a concept of volatility related to the voters’ judgments on the effectiveness of government performance.

We will approach the second task by proposing various measures of electoral volatility based on two different criteria: (1) as we said before, electoral volatility can be calculated at the party level or at the “block” level, where the blocks are defined by the party support (or opposition) to the government resulting from the previous election round; (2) moreover, we can define volatility with reference on both the valid votes and the enrolled voters. In this second case, we will have three blocks, the third formed by null/blank votes and absentees. Our analysis is based on the preliminary work carried out during the TRUEDEM project, specifically the longitudinal cross-country database on turnout (D2.1) presented in September 2023 and updated accordingly to April 2024. We aim to provide a comprehensive overview of the recent patterns of electoral volatility across European countries.

The third objective is to examine the relationships between variations in political trust, turnout, and support for different coalitions or political areas in elections for national parliaments or the European Parliament. The widespread view among scholars is that party systems in European countries are undergoing a phase of de-institutionalisation (Chiaromonte & Emanuele, 2022) due to both generational changes, variations in electoral turnout, and, above all, voter party-switching (Gomez, 2018). Moreover, these changes may be affected by changes in the spread of political trust sentiments – the volatility of which can perhaps be seen as an indicator of the spread of sceptical trust attitudes among citizens (Norris, 2022). In this part of our work, we investigate these relationships through a series of bivariate analyses and attempt to define clusters of countries that behave similarly concerning these variables.

Finally, we define a causal model for explaining electoral volatility differentials. In this model, changes in political trust in the inter-election period play the role of an intervening variable. More specifically, fluctuations in the voters’ perceptions of the trustworthiness of public officials – and, consequently, trust toward government – may relate to feelings of disaffection towards the government's performance, leading to voice behaviour, that is, vote switching. However, such fluctuations may also be caused by widespread distrust of the party system or the whole political life, leading to exit behaviour and a reduction in electoral turnout. In turn, political trust or distrust could be a result of several factors, some of which appear in Norris's (2022) model. We can mention the degree of citizens' exposure to pluralistic media, the level of integrity of electoral processes, and the country's economic performance during the inter-election period. However, other variables may be relevant, notably those related to recent significant changes in European political systems, such as the fragmentation of party systems and political polarisation (Cabada & Charvat, 2023). In this way, we assess both the causal processes leading to the growth of electoral volatility in European countries and the role played by changes in political trust in determining these outcomes.

## 1 A literature review on electoral volatility

Electoral volatility refers to the degree of fluctuation or change in the voting patterns of a population over a specific period. As we shall see, electoral volatility develops from many sources. Still, political researchers believe that, for the most part, it stems from the shift in voter preferences from one coalition or party to another. This dimension of electoral behaviour helps understand the dynamics of party systems, government formation, and political participation, since it affects the stability and predictability of electoral outcomes (see Pasquino & Valbruzzi, 2017, for 2013 Italian Parliamentary elections). In this perspective, a widely shared view among political researchers is that low electoral volatility indicates stable interparty competition, while high electoral volatility suggests a weakening of traditional party loyalties and a greater likelihood that voters will change their established electoral choices (Blanco & Grier, 2013; Emanuele et al., 2016).

The concept of electoral volatility is an essential tool for understanding the increasing unpredictability of electoral outcomes in representative democracies. Unsurprisingly, the number of publications related to electoral volatility has been on a steady rise, as even a simple search on Google Scholar can easily demonstrate. For this reason, we decided to devote our attention to the recent evolution of electoral volatility in Europe. Therefore, this chapter outlines the scope of the investigation to be developed in the following chapters. This short literature review will focus on the most used theoretical definitions of electoral volatility and attempt to offer an operational definition of this concept. From this, we will discuss the possible sources and causes of electoral volatility, with a special reference to its recent growth in European countries. However, these definitions and measures do not exhaust the possibilities open to political scholars in this field of research. In the final section, therefore, we will attempt to redefine the concept of electoral volatility from a sceptical trust perspective, following the argument developed by Norris (2022), which is the theoretical framework of the TRUEDEM project.

### 1.1 Defining and measuring electoral volatility

Electoral volatility refers to differences in aggregate electoral behaviour measured from one election to the next. Therefore, the most general definition of electoral volatility includes changes in turnout and changes in voting for coalitions, parties, or candidates in the electoral round. Moreover, these changes are partly dependent on changes in the composition of the electoral body – voters who died during the inter-election period are replaced by new voters, either young people reaching the legal voting age or new citizens. To a greater extent, however, they are produced by changes in voters' choices – those who voted may decide to abstain, or vice versa; those who voted for a coalition, a party, or a candidate may change their choice (Gomez, 2018). This report will focus on electoral volatility as an expression of changing voter preferences. From this perspective, electoral volatility is of considerable importance in political research, since it is an indicator of the degree of stability or institutionalisation of the party system, and indirectly of the level of legitimacy of the institutions and procedures characteristic of representative democracy. Indeed, we agree with Chiaramonte and Emanuele that, in representative democracies, “the electoral ground comes first with respect to other arenas (parliamentary, governmental or policy-making ones): if electoral competition becomes unpredictable, this unpredictability will likely be reproduced in the other arenas” (2017: 377). Therefore, as already noted by Przeworski (1975), low levels of electoral volatility suggest party system institutionalisation; on the contrary, high levels of electoral volatility imply a decline in established patterns of voting behaviour and interparty competition, which dramatically affects the other dimensions of the political system.

Following this line of reasoning, which privileges relations between parties, it is possible to define electoral volatility in relation to shifts in the votes obtained by each party from one election to the next. This is the idea that seems to give rise to Pedersen's index, still the most widely used measure of electoral volatility (Pedersen, 1979):

$$V = \frac{1}{2} \sum_{i=1}^n |p_{i,t} - p_{i,t+1}|,$$

where  $p_{i,t}$  is the percentage of political party  $i$  at election  $t$  and  $p_{i,t+1}$  for the following election. The winning party's percentage gains must be ascertained in order to compute the index. Because there is an equal (in terms of percentage of votes) loss for every gain, the final index will range from 0 (no parties gained, and therefore no parties lost) to 100 (all the parties from the previous election were reduced to zero votes). Stated differently, the index represents the net percentage of voters who modified their ballots ("net percentage", as there is no net volatility if the only changes are voters from Party A moving to Party B and vice versa). Another way to create the index is to add up all of the gains and all of the losses, then divide the total by two.

Pedersen's seminal paper has earned over 1,500 citations to date. The proposed index still serves as the methodological foundation for any debate on electoral volatility due to its simplicity of calculation and interpretation. Many political researchers have indeed used the Pedersen index as a starting point for their estimates of electoral volatility. For example, Bartolini and Mair (1990) used the electoral volatility index to analyse patterns of electoral persistence and change in Western Europe between 1885 and 1985. Among the main findings of that research was the observation that the electorate in Western European countries followed relatively stable patterns of behaviour, based on factors such as the strength of social identities, the social entrenchment of parties, and the stability of electoral systems. A relative stability of electoral behaviour patterns and related party systems was also found by Tavits (2005) in her research on Eastern European countries in the first post-communist decade. It is interesting to compare these results with those obtained more recently by Chiaramonte and Emanuele (2017; 2022), who consider the evolution of electoral volatility in Western European countries over the past decades. Based on previous attempts to identify various sources of electoral volatility (see, for instance, Powell & Tucker, 2014), they observe that a process of deinstitutionalisation of party systems is taking place because of increasing electoral volatility due to several factors, including the decline of party affiliations, the emergence of new political actors and the rise of social media as a means of political information and participation.

However, this measure of electoral volatility is not without its flaws, which a recent paper by Sarkar and Dash summarises as follows: "[Pedersen index] is found insensitive to the number of parties experiencing vote transfer. Hence, his measure fails to capture the essential features of party system stability that arise due to the change in the number (entry and exit) of political parties" (2023: 126; see also Powell & Tucker, 2014). Attempts to overcome the limitations inherent in Pedersen's index are therefore numerous. For example, Chiaromonte and Emanuele (2022: 32-37) propose to decompose electoral volatility into two components: Volatility by Regeneration, which measures the voting shifts caused by the entry and exit of parties from the political system (RegV), and Volatility by Alteration (AltV), which measures the voting shifts that occur when voters switch their votes from one existing party to another. To these two components is added the volatility that results from parties remaining below a significance threshold defined by the researchers – 1% for Chiaromonte and Emanuele, 2% for Powell and Tucker (2014) (OthV). It follows that total volatility (TV) is the sum of these three dimensions, which can be examined separately and offer valuable insights into analysing the evolution of party systems. Likewise, Sarkar and Dash (2023)

propose a series of additively separable measures of electoral volatility that respond to changes in both the number of parties and their vote shares. Using data from Indian state elections, they show that their proposed measures, which consider volatility resulting from changes in the number of parties and their vote shares, are quantitatively different from Pedersen's volatility estimates. However, they admit that “further research is required for a better understanding of differences in qualitative implications of these measures” (2023: 126). We should also remember that the Pedersen index and its variants produce different results depending on the choices made by the researchers regarding the criteria for measuring the index and classifying the parties (Casal Bertoa et al., 2017). One reason for this is the fact that party systems “are increasingly marked not only by the emergence of new parties but also of splits, splinters and mergers” (2017: 154), which produces a vanishing of the boundaries between these analytical categories.

Political researchers studying electoral volatility from the point of view of its significance for the party system often also use other measures. One of these is the Rae index (or Rae-Taylor index, or party fractionalisation index), which is used to quantify the degree of fractioning of the party system and corresponds mathematically to the Gini index. It takes a value of 0 if all votes (or seats) go to a single party and 1 if there are  $n$  parties with the same percentage of votes (or seats) (Rae, 1971; Taylor & Herman, 1971). On the other hand, the Gallagher index (or disproportionality index) refers to the relationship between the electoral system, electoral behaviour, and the party system. It measures the relationship between votes received and seats gained by a party in each election. The values of this index vary from a minimum of 0, indicating perfect proportionality of the electoral system, to a maximum of 100 (Gallagher, 1991, 1992; Gallagher & Mitchell, 2005). An in-depth analysis of these measures' theoretical and methodological implications goes beyond this chapter's narrow limits. However, it should be remembered that they remain valuable tools for policy researchers in studying the evolution of party systems.

## 1.2 Sources and causes of electoral volatility

Research on electoral volatility has done a lot of work to explain this phenomenon, with particular reference to the differences observed between one country and another and its evolution over time. This has led, first of all, to distinguish different types of electoral volatility. In this perspective, a significant contribution has been proposed by Gomez (2018), who, reviewing the literature on the subject, points out that there are three primary sources of volatility stemming from:

1. Generational replacement of voters;
2. Differences in turnout;
3. The shifting of voters' preferences from one party to another (party switching).

From this, Gomez proposes an estimate of the different components of volatility using data from 73 elections conducted in six Western European countries (Denmark, Great Britain, Germany, the Netherlands, Norway, and Sweden). The author notes that “on average, party-switching produced 75 per cent of the net volatility in the sample of elections analysed, while differential turnout produced 17 per cent and generational replacement 8 per cent” (2018: 190). From the point of view of the TRUEDEM project, these results – albeit based on estimates developed from post-election surveys – assume relevance since, as Gomez does not fail to note, “research employing the Pedersen index can rest assured that volatility largely reflects the net effect of party switching” (2018: 190) and is therefore the aggregate effect of individual changes in voters' assessments of the performance of parties competing for electoral preferences (see the following section).

In this context, it is also essential to consider the relationship between electoral volatility (the aggregate effect of individual changes in electoral preferences) and fluctuations in electoral turnout, which result from individual decisions about whether or not to participate in a specific election. This alternative perfectly fits Hirschman's (1970) theory of individual economic and political behaviour. Confirming one's vote from one election to the next is, in fact, equivalent to showing loyalty to the chosen party, while changing preference frames a voice behaviour and abstaining from voting defines an exit choice. This led to a broad debate on the relationship between voice (electoral volatility) and output (decline in turnout) in electoral behaviour. Several studies have found a connection between voter turnout and electoral volatility. Specifically, higher levels of electoral volatility have been linked to lower voter turnout, suggesting that increased uncertainty in the political landscape may lead to lower civic engagement (Zelle, 1995; Franklin, 2004; Meer et al., 2013; Hooghe, 2014). On the other hand, lower electoral volatility has been associated with higher voter turnout, indicating that stable party systems may encourage greater electoral participation (Zelle, 1995). However, it is difficult to establish a direct causal relationship between voter turnout and electoral volatility. The relationship between these variables may vary depending on a country's specific context and socio-economic, political, and institutional characteristics. However, both electoral volatility and turnout fluctuations seem to have a common origin in the more general process of voter dealignment from the ideological politics of mass parties typical of early modernity (Mair, 2002; Dalton, 2013). Moreover, they seem to have a common consequence, as both contribute to the growing electoral uncertainty and consequent political instability that seems typical of today's democratic regimes (see, for instance, Schmitt-Beck et al., 2022, for the case of Germany). Therefore, the study of electoral volatility cannot fail to take into account changes in voter turnout (Addeo et al., 2024).

Research on the causes of electoral volatility has focused primarily on two dimensions relevant to citizens' political behaviour. The first dimension is the institutional and political one. Therefore, institutional-political theories of electoral volatility focus on such factors as political systems, party organizations, and electoral rules and their role in shaping voter behaviour and party competition. For instance, electoral rules, particularly those favouring proportional representation and thus multi-party competition, can influence voters' propensity to switch parties. However, while – following Downs (1957) – some argue that proportional representation produces more ideological congruence between parties and voters and reduces the individual propensity to switch parties (Golder & Stramski, 2009; Golder & Lloyd, 2013), others emphasize the greater choice options available to voters in systems based on proportional representation. Pedersen (1979: 15) had already noted that “the greater the number of parties [...] the less the average perceived distance between parties, and the higher the probability that the average voter will transfer his vote from one party to another party”. Indeed, recent research also shows that “a higher number of parties significantly increases the probability that a voter switches compared to the probability that s/he remains loyal to her/his party” (Dassonneville, 2015: 170). In turn, these changing outcomes may depend on other variables at play. One of these is the degree of fragmentation of the party system (Bartolini & Mair, 1990; Tavits, 2008), which is related not only to electoral rules but also to both the historical legacy of the country's political cleavages and recent social and cultural changes “from modernisation to post-modernisation” (Inglehart, 1997). Following Lipset and Rokkan (1967), many political scholars consider the former variables a stabilizing factor in electoral behaviour. The latter, instead, can positively affect electoral volatility by generating new demands, which new parties strive to meet.



Another variable at play in the political and institutional sphere is the degree of polarisation of the political arena, which has recently become increasingly important and seems to mark a return to the ideological politics of early modernity. This change has generated a debate on the effects of polarisation on the stability of party systems and the quality of democracy in Europe (Casal-Bertoa & Rama, 2021; Cabada & Charvat, 2023). Indeed, a whole stream of research has based its analysis of electoral volatility on the distinction between vote shifts between mainstream parties (within-system volatility) and vote shifts from this area to the area manned by challenger parties (extra-system volatility) (Mainwaring et al., 2016). Many studies (e.g., Dalton, 2008) have shown that political polarisation greatly influences electoral behaviour, but this may not necessarily also affect aggregate levels of electoral volatility. Indeed, at the aggregate level, party polarisation weakens electoral volatility (Dassonneville, 2015: 175-196). Using electoral studies data, however, Dassonneville shows that these research findings change when moving from the aggregate level to the level of individual decisions. In this circumstance, variables such as political efficacy and satisfaction with democracy come into play. It is also true, however, that once fully established, new political parties (variously referred to as challenger parties, populist parties, etc.) gain relatively stable electoral support, attracting “a core group of loyal voters who are just as loyal as established party voters” (Cabada & Charvat, 2023: 29; see also Voogd & Dassonneville, 2020).

Another set of variables related to the institutional political domain concerns the issues of the integrity of electoral processes and political corruption. Both the choice to abstain and the choice to switch parties could be driven by considerations related to these topics. Indeed, research on turnout has considered the above-mentioned variables as factors affecting participation (Birch, 2010; Addeo et al., 2024). On the contrary, research on electoral volatility has not much considered these aspects of the institutional political environment as possible causes of changes in citizens' electoral preferences. Some scholars agree that widespread perceptions of corruption and electoral malpractice are associated with, or can contribute to, electoral instability (see, for instance, Della Porta, 2004). Voters may become disillusioned with the political establishment and seek alternative options, leading to shifts in party support and electoral outcomes (Bacchus & Boulding, 2021). According to others, electoral malpractices may directly or indirectly intimidate both parties and voters and thus reduce electoral volatility (Donno & Roussias, 2012). Therefore, evidence on these topics may be seen as mixed.

The issue of media pluralism is sometimes connected to that of electoral integrity, as the decline in media pluralism is often seen as an essential indicator of the democratic backsliding that seems to be taking place in many countries with democratic regimes, including those in the European Union (Cianetti & Hanley, 2021). It is generally believed that media coverage, including sensationalism or biased reporting, can shape public opinion and impact electoral outcomes. In this perspective, can the concentration of private media ownership, both traditional and new, and the subjugation of public media to the will of the government and mainstream parties (Fernandez Lombao et al., 2024) influence electoral volatility? Although the authors cited above do not fully agree on the paradigm of democratic backsliding, at least concerning Eastern Europe, we can say that media pluralism may indeed affect electoral volatility insofar as it relates to perceptions of electoral integrity and voters' judgments of the government and the parties supporting it (Fumarola, 2020). On the other hand, the type of media and the information they provide can also influence electoral volatility. Different media platforms may cater to diverse audiences with varying political leanings, potentially resulting in fragmented voter preferences and increased volatility (Meer et al., 2013). For the analysis we intend to develop here, it is also important to note that the issues of corruption, electoral integrity, and media pluralism can also be considered dimensions of the performance of

political institutions in general and of the government (and the parties supporting it) in particular. This performance may influence citizens' evaluations and subsequent voting decisions.

The last set of variables related to the political and institutional context refers to the concepts of political knowledge, political effectiveness, political sophistication, or, finally, interest in politics. Here, research results show an inverse relationship between this set of variables and volatility: the greater the interest in politics and the greater the political efficacy, the lower the electoral volatility (Dassonneville, 2012). However, it should be remembered that interest in politics and perceptions of political efficacy are unevenly distributed in a country's population. Just like the distribution of political offices, this appears dependent on the structure of social inequalities and their variations over time. "Socio-demographic groups that are disadvantaged in terms of objective measures of political representation, thus, appear to be keenly aware of this, as reflected in their relatively low efficacy levels" (Oser et al., 2023). Anyway, the relationship between political sophistication and propensity to vote switching may not be linear, as suggested by various research (Dassonneville 2015: 137-156).

The second dimension at stake when talking about the leading causes of electoral volatility is the government's performance in terms of the impact of its policies on the everyday economic and social life of a country's population. Fiscal and monetary policies can affect the business cycle in a market economy, affecting inflation dynamics or the unemployment rate. The bouquet of economic and social policies defined and implemented by the incumbents can also impact inequality or poverty indices. In turn, this can influence electoral behaviour and voting decisions. If it is accepted that voters choose the party (or coalition) that best represents their interests (Downs, 1957), voters should be more likely to confirm their preferences in periods of growth and change them when in a crisis. In other words, electoral volatility may increase when voters perceive an increasing gap between their expectations (of employment, income, welfare) and the reality they experience daily. Thus, economic voting theory maintains that "although voters do not look exclusively at economic issues, they generally weigh those more heavily than any others" (Lewis-Beck & Stegmaier 2000: 183). The continuing relevance of these findings is evidenced by recent research on a number of European countries, including Greece (Nezi, 2012).

However, political researchers are also aware that "the order of the election — is it national or local? — can condition the economic effect [on voters' choice]" (Lewis-Beck & Paldam, 2000: 120). In this regard, it should be noted that voters primarily attribute responsibility for economic and social policy actions to national governments (Talving, 2017). In contrast, they usually attribute little consideration to national governments sharing these responsibilities with supranational institutions (in particular, the European Union) or international institutions (e.g., the International Monetary Fund). These findings confirm the role of elections for national parliaments as first-order elections. Another issue at stake when considering the economic voting perspective is that "voters do look at the economy, but they may emphasize different indicators at different times" (Lewis-Beck & Paldam, 2000: 120). In this perspective, it may be helpful to measure the effect of economic dynamics on electoral behaviour by first relying on a general economic indicator such as the GDP growth rate over the inter-election period or the electoral year (Dassonneville, 2015: 37-56).

### 1.3 Notes on partisan dealignment, sceptical trust and volatility

In research on electoral volatility in established democratic regimes, the issue of political trust emerged as a result of the crisis of collective subjectivities in early modernity (Giddens, 1990, 1991). As is well known, this crisis resulted in the decline of mass parties based on well-defined ideologies and intense feelings of identification and belonging. This process of partisan dealignment has developed into many dimensions of political participation, such as party membership (van Biezen et al., 2012; Hooghe & Kern, 2015) and electoral turnout (Franklin, 2004; Hooghe, 2014). Unsurprisingly, this also resulted in increased electoral volatility compared to the Trente Glorieuses.

In section 1.1. we mentioned that many scholars view these phenomena negatively as indicators of increasing instability in the party system and, to a certain extent, also in democratic regimes. However, a different explanation is possible. From a post-materialist perspective, some scholars have argued that the decline of ideological affiliations can result in new reflexive modes of political participation – for example, in developing new social movements and non-governmental organisations (Norris, 1999; Dalton & Welzel, 2015). Therefore, political disaffection can also be associated with new, different types of civic engagement and democratic participation.

In this context, the sceptical confidence perspective developed by Norris (2022) may allow an analysis of electoral volatility that puts this phenomenon in a positive light. The most established view in this regard is that the growth of electoral volatility in European countries indicates a process of deinstitutionalisation of party systems (see, for instance, Emanuele, 2019; Chiaramonte & Emanuele, 2022) and, ultimately, a crisis of democratic regimes. On the other hand, Norris points out that the increasing electoral volatility can also be seen as an indicator of the spread of a sceptical attitude (“trust but verify!”) towards politics. According to Norris (2022: 26-51), trust (more specifically, political trust) should not be judged solely by whether it is increasing or decreasing but rather by the quality of sceptical judgements that accurately reflect the performance of the actors (in this case, the political institutions, particularly the government and the parties behind it). In turn, these sceptical judgements, whether positive or negative, are based on both judgements of trustworthiness, i.e. assessments of competence, integrity, impartiality and the strength of institutional accountability barriers. Norris warns that voters can make errors of judgement, resulting from the unequal distribution of educational and cognitive skills and the information environment, e.g., media pluralism. This can generate the spread of attitudes of cynical distrust or, conversely, credulous trust in political actors. However, according to Norris, different political regimes are associated with varying blends of scepticism, cynicism, and credulity. Open societies, characterised by media diversity and transparency, tend to nurture a culture of scepticism and critical thinking, while closed regimes, with limited information flows, often experience higher levels of conformity-based trust and limited scepticism (2022: 3-25).

It should be noted, however, that historical and cultural legacies may affect the mutual relationship between different attitudes toward political actors, also reflecting on electoral behaviour and, thus, volatility. “If social trust in friends and neighbours, confidence in political institutions, and trust in agencies of global governance reflect an enduring set of values, beliefs, attitudes, and norms acquired from agencies of cultural transmission in each society, as sociologists suggest, then we would expect to observe slowly evolving trends in trust over successive decades, which occur in response to generational shifts and demographic turnover, as well as seeing persistent contrasts among societies and global regions due to historical and cultural legacies, like enduring contrasts between Northern and Southern Europe” (2022: 98). In this regard, it should be helpful to

remember that our earlier analysis (Addeo et al. 2024) highlighted the role of differences in levels of generalised trust in also causing differences in turnout levels for national parliamentary elections in European countries over the last 30 years. Not surprisingly, therefore, some authors have already noted that “structurally low trust undermines the formation of stable party preferences and thereby stimulates volatility” (Voogd et al. 2019: 669). However, Voogd and collaborators recognise that a large part of today's electoral volatility is also driven by medium- or short-term fluctuations in feelings of trust towards political actors in relation to their performance.

Therefore, we can conclude that an approach based on the concept of sceptical trust may contribute to a better understanding of volatility, especially in the case of first-order elections such as the national parliamentary ones. Firstly, electoral volatility may indicate the degree of voter satisfaction with the policies implemented in the inter-electoral period. “The potential variability of electoral outcomes is what gives elections — and democracy — meaning. The public can steer the ship of state by casting their votes for a different party to set a new course” (Dalton, 2013: 103). Secondly, electoral volatility can be interpreted as the voters' response to politicians' actions. A change in the vote share of the ruling coalition or party could thus be considered an indicator of the degree of public satisfaction with the policies pursued by the latter. “By switching parties, voters can either reward or punish the incumbent, ensuring that incumbents who performed well stay in office while those who did not are thrown out. This evaluation could relate to the policies pursued by the incumbent, or to their behaviour in office in general” (Dassonneville, 2015: 3), e.g., in terms of respect for the law and democratic procedures or decency in carrying out one's duties.

#### **1.4 Some conclusive remarks**

To conclude, the brief literature review we conducted in this chapter helps us define our field of investigation and research questions. The electoral variability we intend to study relates to parties supporting government coalitions in elections to national parliaments in European countries. We assume that political trust based on the judgements of trustworthiness of incumbents is the primary intervening variable in explaining this type of electoral volatility. In turn, this should be influenced by the variables related to the areas we discussed above. Therefore, we can assess the role played by

1. the government performance, insofar as it regards both (a) the socio-economic conditions (b) the state of democracy,
2. the countries' inner political arena,
3. the countries' inequalities in terms of educational or cognitive skills, and
4. long-term factors, such as generalized trust,

in affecting electoral volatility across European countries. Before that, however, we will take a comprehensive look at recent trends in electoral volatility in the countries covered by our research.

## 2 Measuring electoral volatility across European countries

Electoral volatility, a key indicator of aggregate electoral change between one election and the next, is most commonly calculated using the Pedersen index (1979) (see above, Chapter 1)<sup>1</sup>. This index, the semi-sum of the differences between the vote percentages obtained by each party at a given election and those obtained by the same party at the previous election, is a crucial tool in understanding electoral dynamics. It refers to the entire party system, not to the positions or performance of an individual party, and is based on the aggregate election result, i.e., on the overall data observed with reference to territorial units rather than on the individual behaviour of voters.

The summation of volatilities is divided into two parts to avoid considering the vote shifting twice (as both a loss and as a gain). Indeed, some parties' cumulative net gains correspond to other parties' cumulative net losses. The division by two simplifies the calculation of the index, which assumes, therefore, a range of variation from 0 to 100. In this way, it is possible to analyse the results by placing them between two extreme situations. The value zero is quantified when there is no voting movement. Conversely, the value 100 corresponds to the opposite situation in which all kinds of movement occur due to the disappearance of all the old parties and the presence of new political forces. This interpretation of the index values is based on the assumption that volatility represents cumulative individual voting changes. According to this logic, while expressing the aggregate volatility, the index value can be considered as the minimum share of voters who have switched their votes.

It's important to note two observations about the Pedersen index. First, the aggregate net electoral change resulting from the index represents only the smallest share of voters who have changed their voting choice because these may be more numerous. Secondly, even in the absence of switching in individual electoral preferences, the calculation of the Pedersen index might indicate a certain measure of aggregate volatility, which may stem from the turnover of the electoral body, i.e., from the fact that new voters have expressed different voting options than voters who have died or moved elsewhere. These limitations are crucial to understanding the complete picture of electoral volatility.

### 2.1 Volatility by country

We calculated the volatility index for each European country included in our database (Fruncillo et al., 2023) by considering the percentage of votes attributed to each list out of the total votes for parties in the last two national parliamentary elections<sup>2</sup>. We have limited our analysis to the last two elections because, according to many scholars, electoral volatility in European countries has increased significantly in recent years. This new feature of the European countries' political system is associated with several other changes. "First, voters have become much more prone to shifting their party preference between elections. (...) Second, new parties, which mobilize new issues and conflicts and even challenge the fundamentals of liberal democracy, have emerged (...). Third, as a result of these massive changes, political elites have encountered increasing difficulties in

---

<sup>1</sup> Indeed, the index had already been used by Przeworski (1975), who, however, had used a different label, the de-institutionalisation index.

<sup>2</sup> As for Luxembourg, we have recalculated the votes to parties, considering that since there is multiple voting, the total number of valid votes is different from the total number of votes to parties. In the calculation, we have considered the actual votes corresponding to the ballots counted net of null votes and white ballots. As for Spain, we considered elections held in November 2019 and 2023. Elections had been held in April 2019, but then a new election was held in November. In Greece, the first elections were held in 2019. The second are those celebrated in June 2023, even though there had actually been a consultation in May 2023 that had run out after only a month.

forming governments. (...) Finally, innovative coalition governments with unprecedented party alliances have been experimented with in most countries” (Chiaramonte & Emanuele, 2022, 1-3).

The value of the index could be distorted or altered by the presence of different acronyms in the election rounds that, however, do not correspond to an actual change in the structure of the electoral offer: it could happen that the same party presented lists with different names or that it contributed to electoral alliances with other parties in one of the two competitions. This would result in a higher index value even without an actual change in voting choices. Therefore, both the electoral offer and election results were harmonised by assimilating different acronyms or aggregating them by considering their electoral alliances in each round<sup>3</sup>.

According to our calculations, the average EV calculated for each country is 21.78 (Table 1). Malta, Switzerland, Sweden, the United Kingdom, and Luxembourg are the countries with the lowest value, below 10. Lithuania, Slovakia, and Slovenia are the countries where the Pedersen index of electoral volatility is highest, above 40. In these countries, the problematic consolidation of the party system or the difficulty in establishing continuity and filiations between lists, parties, and alliances in the electoral competitions weighs heavily.

However, relatively high indices can also be found in countries such as Italy and the Netherlands, where the institutionalised national party system crisis occurred in a few election rounds. Finally, the index may not be adequate to compare volatility in political systems where the number of parties and lists differs widely.

These two drawbacks – the difficult evaluation of the continuity of different party acronyms and the influence of the unstable number of parties and lists present at the elections on the index value – make the comparison between indices calculated in different countries not entirely appropriate. These drawbacks may be overcome by aggregating parties into groups according to a given criterion. In these cases, to eliminate and contain the subjectivity of the choice, it is crucial to define the reasons and underlying assumptions that motivate it. The choice of theoretical scheme in a given study is of utmost importance. In some cases, parties have been aggregated according to their position within the so-called spiritual families - liberals, conservatives, socialists - or on the left-right axis.

Our analysis aggregated the parties based on their participation in the governing majority immediately after the first election<sup>4</sup>. This approach is significant as it allows us to link the variation in support for the winning parties to the trust they continue to enjoy and their reliability resulting from the consistency between their promises and subsequent activities as a government and political actor. This method offers the advantage of measuring volatility with reference to the same number of blocks in all countries, making the comparison of index values less risky. While the index values are lower due to the lack of consideration for variations within the same block, the average index value calculated for all countries is 10.34. The countries with the lowest values are Sweden, Malta, Spain, Greece, and the United Kingdom, while Ukraine is on the opposite side.

This method of calculating volatility may be particularly compelling as it enables us to draw comparisons between diverse countries. It also empowers us to identify substantial disparities between countries with established party coalitions and those where voting patterns are more fluid, such as in Italy.

---

<sup>3</sup> This assimilation process involved merging alliances, coalitions, and competing parties in the two elections under partly different acronyms. We describe these operations in detail for each country in the appendix, section 1.

<sup>4</sup> For the calculation of block volatility, the parties were grouped according to their participation in the governing coalition formed after the first elections. Our choices are described in detail in the Appendix, note 2.



**Table 2.1. - Electoral volatility (a) in the last national parliamentary elections by country**

Country	EV on the total votes to parties (PEV) (b)		EV on the total number of registered voters (EEV) (c)	
	Total Volatility (d)	Block Volatility (e) (f)	Total Volatility (d)	Block Volatility (g)
AUSTRIA	21,34	3,81	18,63	5,44
BELGIUM	21,40	10,27	18,78	9,14
BULGARIA (h)	14,09	3,58	5,56	1,55
CROATIA	12,65	4,03	17,87	14,75
CYPRUS	20,11	2,92	13,4	2,04
CZECH REP	15,88	6,68	11,82	7,16
DENMARK	27,76	4,46	23,51	4,14
ESTONIA	16,55	12,76	10,50	8,09
FINLAND	13,16	6,03	9,04	4,20
FRANCE	22,46	6,57	11,20	3,43
GERMANY	13,97	6,95	10,83	5,49
GREECE	19,36	0,71	12,66	3,44
HUNGARY	14,06	4,85	9,74	3,40
IRELAND	18,39	6,82	13,09	5,38
ITALY	35,49	25,18	28,84	19,13
LATVIA	50,16	20,86	30,59	14,08
LITHUANIA	25,64	9,84	13,58	5,45
LUXEMBOURG (i)	9,09	3,47	7,89	4,04
MALTA	2,37	0,07	9,57	7,73
NETHERLANDS	35,16	22,89	27,95	18,21
POLAND	20,91	8,21	19,51	12,81
PORTUGAL	16,35	13,24	13,05	11,74
ROMANIA	23,76	18,11	12,38	9,30
SLOVAKIA	44,79	27,83	31,42	20,25
SLOVENIA	43,47	30,09	35,51	30,00
SPAIN	17,53	0,28	14,36	4,12
SWEDEN	6,49	0,04	6,94	3,09
UNITED KINGDOM	8,25	1,28	6,36	1,90
NORWAY	10,20	8,43	8,60	6,99
SWITZERLAND	5,54	3,15	3,33	2,40
UKRAINE	68,68	47,13	35,34	24,47
TOTAL AVERAGE	21,78	10,34	15,87	8,82
EU AVERAGE incl. UK	21,09	9,35	15,88	8,55
EU AVERAGE excl. UK	21,57	9,65	16,23	8,80
NON-EU AVERAGE excl. UK	28,14	19,57	15,76	11,29
NON-EU AVERAGE incl. UK	23,17	15,00	13,41	8,94

Source: Our own elaborations on TRUEDEM longitudinal cross-country turnout database ([www.truedem.eu](http://www.truedem.eu)).

Notes:

- a) Volatility is calculated through Pedersen's formula  $\sum_{i=1}^n |p_i(t) - p_i(t-1)|/2$ ; where  $I=1...n$  parties;  $p_i(t)$  is the percentage of votes from the  $i$ -th party (or block) at election  $t$ ;  $p_i(t-1)$  is the percentage of votes to the  $i$ -th party (or block) at the previous election;
- b) EVP was calculated using the percentages of votes obtained by each party or bloc out of the total votes to parties (Parties) (Votes to party or bloc/total votes to parties)
- c) EVE was calculated using the percentage of votes obtained by each party or bloc out of the total number of registered voters (Enrolled) (votes to party or bloc/total registered voters)
- d) EVP-T is equal to the semi-sum of the absolute changes in the percentage of votes obtained by each list in the two elections considered;
- e) EVP-B is equal to the semi-sum of the absolute value changes in the percentage of votes obtained by the parties included in each of the two blocks.
- f) Regarding EVP, we defined two blocs according to the parties' participation in the governing coalition after the first round of elections.
- g) Regarding EVE, we defined three blocks: two are based on the parties' participation in the governing coalition after the first round of elections (see the previous note); the third one is based on the sum of abstentions and voters who left a null or blank ballot or chose the option 'I support no one'.
- h) For Bulgaria, with reference to the calculation VT (E) and VB (E), the ballot papers in which the option "I do not support anyone" was selected were assimilated to blank or null ballots and are therefore counted in the total number of abstainers.
- i) In Luxembourg there is multiple voting, so the total votes cast for parties is higher than the votes cast. In our calculation, we have taken into account the votes cast, which correspond to the ballot papers actually counted net of null votes and blank ballots.

Moreover, the volatility calculation by single party and party blocs can be replicated by adopting a different method. Volatility concerns not only the aggregate effect of individual votes shifting from one party to another but also transitions between valid votes and invalid votes or abstentions. For this purpose, the vote shares for parties can be calculated using the total number of enrolled voters. In this case, we can see that Switzerland, Bulgaria, the UK, Sweden, and Luxembourg are the countries where volatility is lowest. On the contrary, Slovenia, Ukraine, Slovakia, Lithuania, and Italy are the countries where volatility is highest. When electoral volatility is calculated considering the invalid votes or absentees, Ukraine is not the country with the highest volatility. In general, the position occupied by a given country in this ranking can be affected by the evolution of abstentionism in that country.

The electoral volatility index calculated with reference to the parties' blocs provides valuable insights into the political landscapes of different countries. By adding the block of invalid votes plus abstainers to the blocks defined by parties' support or opposition to the government, we obtain a lower index value for all countries. The rankings, however, are only partially different. Bulgaria, the United Kingdom, Cyprus, Switzerland, and Sweden have the lowest values, while Slovenia, Ukraine, Slovakia, Italy, and the Netherlands have the highest index values.

While this method of calculating volatility aligns well with the theoretical underpinnings of the index, it does face a significant challenge. The inhomogeneity of the denominator, i.e., the fact that different criteria in different countries identify registered voters, is a potential concern. As a result, the index values calculated for different countries may be distorted and may not be suitable for cross-country comparisons.

## 2.2 Volatility by group of countries

We calculated average EV indices for groups of countries to appreciate better the influence of institutional and political contexts on volatility levels. The first aggregation criterion was European Union membership. We defined two groups: the first includes only the 27 countries now members of the EU, and the second consists of the United Kingdom. Conversely, we aggregated under the label "non-EU countries" all other European countries for which we had data.

The average EV index is always lower for EU countries, even when the UK is excluded from the EU countries. There is only one exception about the total volatility measured based on the percentage of party votes out of the total voters. Here, the average for the EU countries is 15.88 compared to 15.76 for the non-EU countries. It is a difference of only one-tenth, but it reverses the sign of the results in the other columns. Indeed, the gap becomes wider when the UK is not included among the EU countries. In this case, the average volatility index for the 27 EU countries is 16.23, while that for the other countries (including the UK) is 13.41. when the calculation is based on the ratio of party votes to voters but with reference to party blocs defined by their participation in government, the average volatility index is lower for the EU countries.

Another criterion for aggregating countries is the time of accession to the European Union. Based on this, we divided European countries into other groups, as shown in Table 2.2. Countries that joined the EU before 2000 show the lowest volatility regardless of the calculation method applied and whether reference is made to individual parties or blocks. The highest volatility is found among the founding countries. However, if the volatility is calculated with reference to particular parties and considering valid votes, the highest average can be found between the countries that joined the European Union after 2000.



**Table 2.2. - Electoral volatility (a) in the last national parliamentary elections (country group average – grouping criterion: time of accession to the EU)**

Country group	EV on the total votes to parties (PEV) (b)		EV on the total number of registered voters (EEV) (c)	
	Total Volatility (d)	Block Volatility (e) (f)	Total Volatility (d)	Block Volatility (g)
Founding Members (h)	22,93	12,56	17,58	9,91
Joined Before 2000 including UK (i)	16,51	4,07	13,07	4,83
Joined Before 2000 without UK (j)	17,55	4,42	13,91	5,19
Joined After 2000 (k)	23,42	11,53	17,03	10,51
EU including UK	21,09	9,35	15,88	8,55
EU without UK	21,57	9,65	16,23	8,80
Non-EU without UK	28,14	19,57	15,76	11,29
Non-EU including UK	23,17	15,00	13,41	8,94

Source: Our own elaborations on TRUEDEM longitudinal cross-country turnout database ([www.truedem.eu](http://www.truedem.eu)).

Notes: for calculations, please refer to the notes in Table 2.1. from (a) to (g).

- h) Founding Members include France, Germany, Belgium, Luxembourg; Italy, Netherlands;
- i) Joined Before 2000 includes Austria, Denmark, Ireland, United Kingdom, Greece, Portugal, Spain, Finland, Sweden;
- j) Joined Before 2000 without UK includes Austria, Denmark, Ireland, Greece, Portugal, Spain, Finland, Sweden;
- k) Joined After 2000 includes Cyprus, Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Bulgaria, Romania.

In addition, we calculated the average EV indices according to the geopolitical location of the European countries (Table 2.3). If we look at the total volatility calculated concerning the total valid votes, the lowest average is found among the Western countries and the highest among Northern countries. Regarding block volatility, Eastern countries show the highest volatility, and Northern countries exhibit the lowest volatility levels. Conversely, if the calculations are based on the total number of voters, the Southern European countries show the highest volatility, while the Northern European countries have the lowest volatility.

**Table 2.3. - Electoral volatility (a) in the last national parliamentary elections (country group average – grouping criterion: geopolitical location)**

Country group	EV on the total votes to parties (PEV) (b)		EV on the total number of registered voters (EEV) (c)	
	Total Volatility (d)	Block Volatility (e) (f)	Total Volatility (d)	Block Volatility (g)
Western Europe (h)	20,57	8,99	15,88	7,63
Southern Europe (i)	20,92	9,57	18,16	11,62
Northern Europe including UK (j)	20,80	7,76	14,20	5,79
Northern Europe without UK (k)	22,59	8,69	15,32	6,35
Eastern Europe (l)	22,25	11,54	15,07	9,08
EU including UK	21,09	9,35	15,88	8,55
EU without UK	21,57	9,65	16,23	8,80
Non-EU without UK	28,14	19,57	15,76	11,29
Non-EU including UK	23,17	15,00	13,41	8,94

Source: Our own elaborations on TRUEDEM longitudinal cross-country turnout database ([www.truedem.eu](http://www.truedem.eu)).

Notes: for calculations, please refer to the notes in Table 1 from (a) to (g).

- h) Western Europe includes Austria, Belgium, France, Germany, Luxembourg, Netherlands;
- i) Southern Europe includes Croatia, Cyprus, Greece, Italy, Malta, Portugal, Slovenia, Spain;
- j) Northern Europe including UK includes Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Sweden, United Kingdom.
- k) Northern Europe without UK, includes Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Sweden, United Kingdom.
- l) Eastern Europe includes Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia.

### 2.3 Some conclusive remarks

The block volatility is calculated using the ratio of party votes to total valid votes (EEV-B). This metric is particularly useful for cross-national comparisons of recent electoral behaviour. It provides political researchers with a viable, homogeneous criterion to analyse different electoral flows in relation to changes in the degree of political trust voters have in the government or the opposition (Norris, 2022; see above, chapter 1). Considering the total number of registered voters is also crucial to assess the overall impact of both types of voter switching – between voting behaviour and abstentionism, and from one party choice to another. However, it's important to note that different European countries use different criteria to enrol voters, which can affect the EV index and introduce biases even in this case.

With this in mind, we can also say that our first results define quite a complex picture of the electoral volatility across the 31 European countries we consider in our analysis. Regardless of the calculation method, EV values related to the last national Parliamentary elections are quite different from one European country to another. The countries that show the highest levels of volatility (in terms of PEV-B: Slovenia, Slovakia, Italy, the Netherlands, and Ukraine) are from various geopolitical areas. Moreover, they are in different situations regarding EU accession timing or membership. The same can be said as regards the countries showing the lowest levels of volatility (in terms of PEV-B: Greece, Malta, Spain, Sweden). Prima facie, these variables are not very useful for explaining differences in electoral volatility. What appears to be confirmed by our analysis, however, is that in almost all European countries, “the balance of power between parties is changing and that, because of this, party systems are no longer stable” (Chiaromonte & Emanuele, 2022, 231). It remains to be seen whether this phenomenon is a symptom of a crisis in European representative democracies or of a growing autonomy and awareness of voters.

### 2.4 Appendix to chapter 2: Explanatory notes

**To obtain a more reliable total volatility index calculation, we homogenised, as far as possible, the electoral offer observed in the two election rounds. In other words, we assimilated alliances, coalitions, and parties that had presented themselves in the two elections under partly different acronyms. We describe these operations in detail for each country.**

**Belgium:** we assimilated the PTB-PVDA-Go! list that ran in 2014 elections to the PVDA-PTB party that ran in the 2019 elections.

**Bulgaria:** the Bulgarian Rise and PP Vazhod Bulgarian parties are assimilated as they are the same party with a different name.

**Croatia:** the coalition Mozemo! Politicja Platforma, Zagreb-Je Nas, NI, RF, Orah, Za Grad that ran in the 2020 elections is assimilated with the RF and Mozemo parties that ran separately in the 2024 elections. We merged the parties that ran individually or in different alliances in the 12 territorial constituencies (10 national, 1 for voters abroad and 1 for minorities) into their respective coalitions. More specifically, the Hdz alliance includes the Hdz, Hdz-Hsls, and Hdz-Hds parties; the Restart coalition consists of the Sdp-Hss-Hsu-Ids-Glas parties; the Zivi-Zid alliance incorporates the Živi Zid, Ph, Hss - Sr, Sip, Hssčkš, Zsz, Nlsp + Živi Zid, Sip, Ph, Hss - Sr+ Nlsp, Am, Živi Zid, Ph, Sip parties; the Reformists coalition includes the Reformists, Hss Braće Radić, Umirovljenici +Željko Lacković - Nezavisne Liste, Reformists, Hss Braće Radić, Nsh, Hds+ Narodna Stranka -Reformists parties; the Ip Pamento Fokus party that stood in the 2020 elections is assimilated with the Fokus Republica party that stood in the 2024 elections as it is the same party with a different name.

**Czech Rep.:** we assimilated parties that changed their names between elections. Specifically, these are the Občané 2011-Spravedl-Pro Lidi party, which stood at the subsequent elections under the name Alliance Národních Sil, and the Blok Proti Islam-Obran Domova party, which ran at the 2021 elections under the name Volny Blok. In addition, we added up the votes obtained in the 2017 elections by the Ods, Kdu-Csl and Top 09 parties, which stood individually in the 2017 elections and together in the Spolu - Ods, Kdu-Čsl, Top 09 coalition in 2021.

**Switzerland:** we assimilated the PPD and PDB parties as they merged into the Centre party in the 2021 elections.

**Spain:** we have summed the votes obtained in 2019 by the Unidas Podemos, En Comun, and Ecp-Gunayem el Canvi parties that form the Sumar coalition. We have assimilated the Erc and Erp parties that stood together in the 2023 elections. The Navarra Suma coalition that ran in the 2019 elections (composed of Union Del Pueblo Navarro, Cs and the Navarra branch of the Partido Popular), is assimilated into the Union Del Pueblo Navarro party that stood alone in the 2023 elections. The Partido Contra El Maltrato Animal that stood in the 2019 elections is assimilated to the Partido Animalista Con El Medio Ambiente that ran in the 2013 elections because it is the same party that changed its name.

**France:** we have assimilated the La France Insoumise and Parti Socialiste parties that had stood separately in the 2017 elections to the Nouvelle Union Populaire écologique et sociale coalition that was formed in the 2022 elections and that in addition to La France Insoumise and Parti Socialiste includes other parties that share an ecological and social programme such as Europe Écologie Les Verts, Génération.s, Génération écologie, Les Nouveaux Démocrate, Révolution écologique pour le vivant, Picardie Debout, Parti Communiste Français. A further assimilation concerns the En Marche and Modem parties, which in the 2017 elections presented themselves separately, while in the following elections they present themselves in the Ensemble coalition that includes the parties Renaissance/En Marche; Modem; Horizon, En Commun, Agir; Territoires De Progres; Parti Radical. Finally, we have likened the Rassemblement National that stood at the last elections to the Front National (FN) party appearing in the 2018 elections as it is the same party changing its name.

**Greece:** we have assimilated the Enosi Kentron party that stood in the 2019 elections with the Spartiates party that ran alone in the following elections.

**Hungary:** we have summed up the votes obtained in the 2018 elections by the Jobbik, Mszp-Parbsezd, Lmp, Dk, and Momentum parties as they formed the Dk-Jobbik-Momentum-Mszp-Lmp-Parbsezd coalition in the subsequent elections.

**Italy:** the Noi con l'Italia- Udc party, which had ran alone in the 2018 elections joined the Noi Moderati/Lupi-Toti-Brugnaro Udc alliance. The Partito Democratico, which ran alone in the 2018 elections is assimilated into the Partito Democratico - Italia Democratica e Progressista coalition which stood in the 2022 elections. The Potere al Popolo party was assimilated into the Unione Popolare with De Magistris party that ran in the 2022 elections with many Potere al Popolo members. The Popolo della Famiglia party that was present at the 2018 elections was assimilated into the Alternativa per l'Italia- No Green Pass party that stood in the 2022 elections. The Liberi e Uguali party that ran in the 2018 elections subsequently merged into the Alleanza Verdi e Sinistra.

**Lithuania:** the Antikorupcinė N. Puteikio Ir K. Krivicko Koalicija (Lietuvos Centro Partija, Lietuvos Pensininkų Partija) coalition that ran in the 2016 elections was brought back to the Kartų Solidarumo Sajunga - Santalka Lietuvai and Nacionalinis Susivienijimas parties, which are presenting themselves individually in the 2020 elections.

**The Netherlands:** we assimilated the parties Groenlinks and Partij Van de Arbeid as they stood separately in the 2021 elections and in alliance in the 2023 elections.

**Romania:** the votes for the individual independent candidates for both the first and second elections were added up considering them as a single party because they accounted for approximately 1% of the valid votes. The Alianța Liberalilor și Democraților party that stood alone in the 2016 elections was allied with the Pro Romania Partidul party in the 2020 elections.

**Slovenia:** The SMC party that stood alone in 2018 elections (as well as in 2014 elections) was in 2022 called Concretely and it formed an electoral coalition called Let's Connect Slovenia with four other parties (Greens, Slovenian Peoples' Party, New Peoples' Party and New Social Democrats)

**In order to measure block volatility, the parties were grouped according to their participation in the governing majority formed immediately after the first elections. We considered in the government coalition:**

**Austria:** Övp; Fpö. In 2019, two years after the start of the legislative period, the Fpö party exited the government majority. Being part of the initial government majority, we considered it among the government parties.

**Belgium:** N-VA, CD&V; Open VLD; MR. In 2018, during the legislature that began in 2014, the N-va party exited the majority. Participating in the initial government majority, we considered it among the governing parties.

**Bulgaria:** Bsp for Bulgaria; Gerb Sds; Coalition We Continue The Change - Democratic Bulgaria; Movement For Rights And Freedoms - Dps; Bulgarian Rise.

**Cyprus:** Democratic Alarm.

**Czech Rep:** Komunistická str.Čech in Moravy; Ano 2011. The party Komunistická str.Čech in Moravy in 2019, during the legislature that began in 2017, exited the government majority. Being part of the initial governing majority, we have considered it among the governing parties. The Ceska party, on the other hand, joined the majority in 2018. Therefore, as it was not present in the initial majority, we did not include it among the governing parties.

**Switzerland:** Udc; PS; Plr(Prd); Centre. The form of government in Switzerland is such that the four parties with the most seats in parliament participate in the federal government.

**Germany:** Cdu; Spd; Csu.

**Denmark:** Neue Liberale; Radikale Venstre; SF - Socialistisk Folkeparti; Enhedslisten - De Rød-Grønne.

**Estonia:** Eesti Konservatiivne Rahvaerakond; Eesti Keskerakond; Isamaa. In the course of the legislature, the government collapses following the resignation of the prime minister in 2022, and the parties move into opposition. For our purposes we consider them to be government parties.

**Spain:** Partido Socialista Obrero Espanol; Sumar; Mas Pais; Euzko;

**Finland:** Suomen Sosialidemokraattinen Polue; Suomen Keskusta; Vihreä Liitto; Vasemmistoliitto; Suomen Ruotsalainen Kansanpuolue.

**France:** Ensemble! (Majorité Présidentielle).

**Great Britain:** Conservative.

**Greece:** Nea Dimokratia.

**Croatia:** Hdz; Hns.

**Hungary:** Fidesz-Kdnp.

**Ireland:** Fianna Fail; Fine Gael.

**Italy:** Lega; Movimento 5 Stelle. Then another government was formed with the support of M5s and Pd, and finally yet another coalition that included all parties except Sinistra Italiana and Fratelli d'Italia. We consider the first government formation to be in line with the choices made for other countries.

**Lithuania:** Lietuvos Valstiečių Ir Žaliųjų Sąjunga; Lietuvos Socialdemokratų Partija. In 2017, during the legislature that began in 2016, the Lietuvos Socialdemokratų Partija party exited the government majority. Being part of the initial government majority, we considered it among the government parties.

**Latvia:** Jaunā Vienotība; Nacionālā Apvienība 'Visu Latvijai!'-'Tēvzemei Un Brīvībai/Lnnc'; Attīstībai/Par!; Jaunā Konservatīvā Partija; Politiskā Partija 'Kpv Lv'. **Luxembourg:** Lsap, Dp, Dei Greng.

**Malta:** Labour Party.

**Holland:** Vvd; D66; Cda; ChristenUnie.

**Norway:** Høyre; Venstre; Kristelig Folkeparti; Fremskrittspartiet.

**Poland:** Komitet Wyborczy Prawo i Sprawiedliwość.

**Portugal:** PS.

**Romania:** Partidul Social Democrat; Alianța Liberalilor și Democraților. During the legislature that began in 2016, the Alianța Liberalilor și Democraților party and the Partidul Social Democrat party exited the government majority in 2019 and 2020. However, as they were present in the first government formation, we considered them to be government parties.

**Slovenia:** After the elections 2018 governmental coalition was formed by List of Marjan Šarec (LMS), Social Democrats (SD), Party of Modern Centre (SMC), Party of Alenka Bratušek (SAB) and Democratic Party of Pensioners of Slovenia (DeSUS), while the Left (Levica) was a support party. In January 2020 the PM Šarec (LMS) resigned and in March new governmental coalition was formed. It was led by Slovenian Democratic Party (SDS), while three other parties were its member as well: SMC, New Slovenia (NSi) and Democratic Party of Pensioners of Slovenia (DeSUS). After the elections 2022 the governmental coalition has three parties: Freedom Movement (GS), Social Democrats (SD) and the Left (Levica).

**Sweden:** Arbetarepartiet - Socialdemokraterna; Centerpartiet; Miljöpartiet De Gröna; Liberalerna (Tidigare Folkpartiet).

**Slovakia:** Sloboda a Solidarita; Sme Rodina; Obyčajní Ľudia a Nezávislé Osobnosti (OĽaNO), Nova, Kresťanská Únia (KÚ), Zmena Zdola. In 2022, during the legislature that began in 2020, the Sloboda a Solidarita party exited the majority, but since we considered the initial formation, we included it among the governing parties.

**Ukraine:** Petro Poroshenko Bloc; People's Front; Radical Party of Oleh Ljashko; Self Reliance; Batkivshchyna. During the legislature that began in 2014, both the Radical Party of Oleh Ljashko in 2015 and the Self Reliance and Batkivshchyna parties in 2016 left the government majority. Being part of the initial government formation, we considered them to be government parties.

### **3 Electoral volatility and government performance in European countries: a multiple regression analysis**

Following the work done in the previous chapters, we can now explore volatility in European countries, focusing on institutional, societal, and cultural causes of switching vote intentions at an aggregate level.

#### **3.1 The theoretical model**

Electoral volatility is closely tied to shifting party preferences from one election to the next. It is expected to be on the rise as the alignment between parties and voters weakens (Dalton & Wattenberg, 2002). We look at electoral volatility as an indicator of government (in)stability.

Political trust is one of the factors that could be considered responsible for switching vote preferences. We can recognize two major traditions in the debate on the nature of political trust. The first tradition views trust as a cultural factor, a stable and unresponsive attitude that is a necessary outcome of the socialisation process and not object-specific or related to political performance (Voogd et al., 2019).

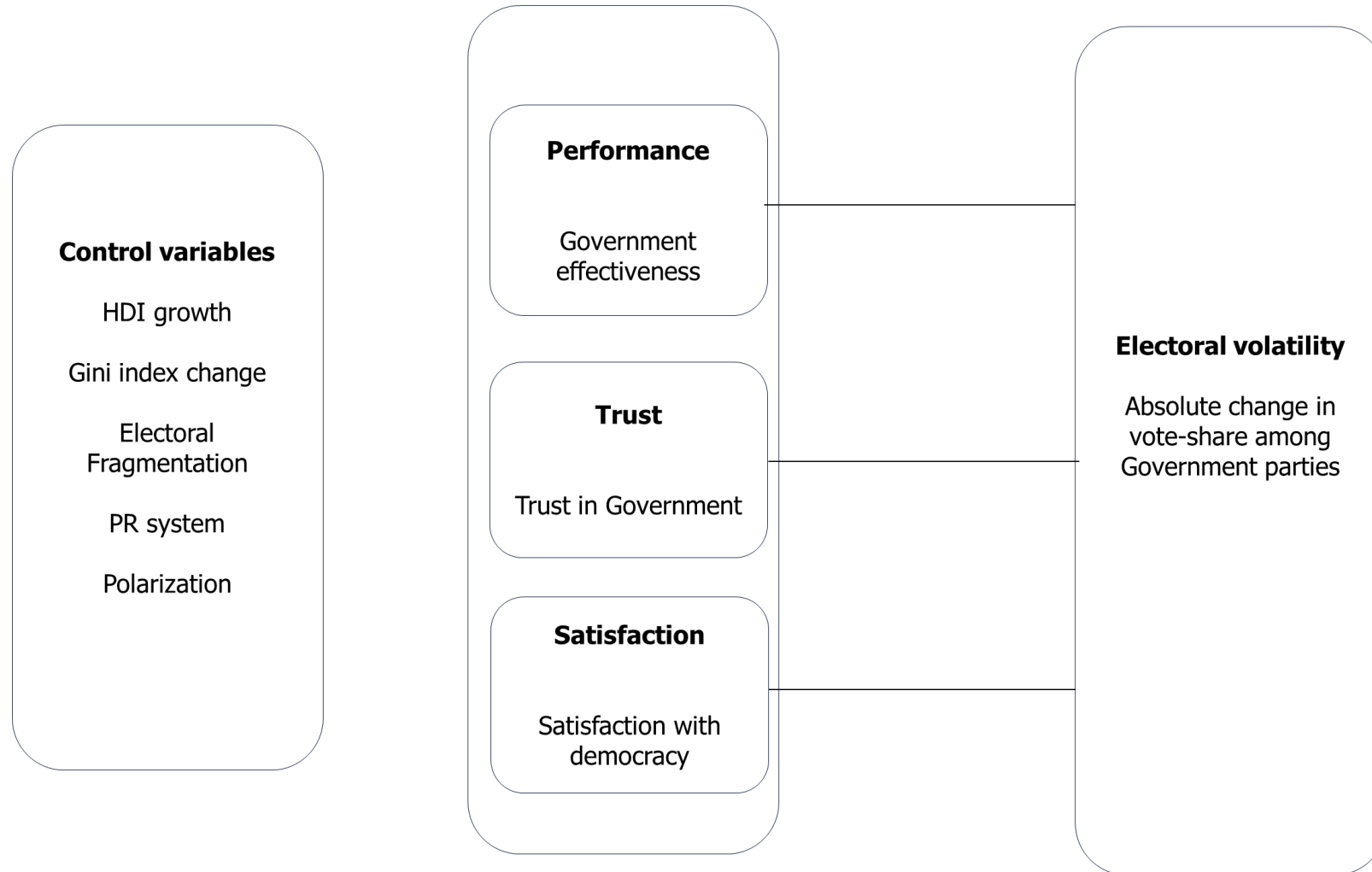
The second one sees political trust as an evaluative factor, that is, as the consequence of a rational evaluation of political actor (Hardin, 1999). Within this perspective political trust is strictly related to political affection or disaffection, as demonstrated by studies that found a strong association between low satisfaction with democracy and political trust (Soderlund, 2008).

Political trust can be considered object-specific and related to evaluating the performance of the object under evaluation. In other words, it is regarded as the output of an assessment of the specific trustee by the truster. Both trust in parliament and government are core components of political trust (Zmerli & Newton, 2017). However, from this latter perspective, it is worthwhile to distinguish trust in government and elections from trust in parliament. The reason beyond this distinction is that the government is more visible, and the government, with its leaders, is primarily responsible for policy output. Thus, these types of trust are much more than trust in parliament because they are subject to the evaluative judgment of citizens. In this tradition, trust in government results from individual assessments of government performance (Weber et al., 2017).

Within this perspective, party switching and volatility can be seen both as a way to voice dissatisfaction with the government's performance and as a way to voice disaffection and distrust. We posit that a casual mechanism may relate trust in government to electoral volatility in national elections: trust in government is supposed to fluctuate according to changes in the political environment during a government period. Citizens evaluate government performance by adapting their party preferences accordingly (Erikson et al., 2001). In other words, lousy government performances do not meet voters' expectations and drive rising distrust in government, and this would make them more likely to abandon the coalition they previously voted for, resulting in higher volatility (Hetherington, 1999). Hence, the following research hypothesis:

H1: when government performance and trust in government decrease, government volatility increases.

**Figure 3.1 – The theoretical model**



### 3.2 Research design

In this section, we discuss our attempt to evaluate the theoretical model empirically using a multivariate analysis approach. The specific research issue is to explore the potential factors influencing electoral volatility, starting from the idea that government effectiveness could play a key role in explaining it when controlling other electoral, economic, and social factors.

A multiple regression analysis with the enter method (von Eye & Schuster, 1998; Frost, 2020) was applied to a national election sub-dataset extracted from the TRUEDEM datasets (mainly produced within WP1 and WP2: Tufis et al., 2023; Fruncillo et al., 2023). The extracted dataset contains data about 28 EU Countries (the United Kingdom is retained in the analysis) plus 3 more countries: Norway, Switzerland and Ukraine. The time frame chosen to collect and analyse the data is the last election held in each nation, so the reference year may change from country to country. In addition, some variables will be operationally defined to consider the change in the data they measured in the period between the last two elections.

**Table 3.1 - Countries and elections included in the analysis**

<i>Country</i>	<i>Electoral Timeframe</i>
Austria	2017-2019
Belgium	2014-2019
Bulgaria	2019-2023
Croatia	2020-2024
Cyprus	2016-2021
Czechia	2017-2021
Denmark	2019-2022
Estonia	2019-2023
Finland	2019-2023
France	2017-2022
Germany	2017-2021
Greece	2019-2023
Hungary	2018-2022
Ireland	2016-2020
Italy	2018-2022
Latvia	2018-2022
Lithuania	2016-2020
Luxembourg	2018-2023
Malta	2017-2022
Netherlands	2021-2023
Norway	2017-2021
Poland	2019-2023
Portugal	2022-2024
Romania	2016-2020
Slovak Republic	2020-2023
Slovenia	2018-2022
Spain	2019-2023
Sweden	2018-2022
Switzerland	2019-2023
Ukraine	2014-2019
United Kingdom	2017-2019



According to the theoretical model discussed before (see Figure 1), multiple regression analysis involves three sequences that aim to explain the variance of the same variables. The variables have been entered in the analysis following this sequence:

1. Step 1 – model A: multiple regression analysis starts with independent variables about the “government quality”, that is, the government effectiveness (as conceived by the World Bank in its Worldwide Governance Indicators research<sup>5</sup>), the trust in government (retrieved from TRUEDEM political trust dataset: Tufis et al., 2023) and the satisfaction in the democracy and the trust in government (defined as extent to which citizens are satisfied with democracy in their own country<sup>6</sup>);
2. Step 2 – Model B: The second step of the model is to test for some control variables related to the socio-economic dimension, that is, development (Human Development Index) and inequalities (Gini index);
3. Step 3—Model C: The last step adds some control variables related to the political system. These are institutional factors supposed to affect volatility: polarisation, electoral fragmentation, and the presence of a proportional system.

The next section will discuss the operational definition of all the variables used in this multiple-regression analysis. Statistical data analysis has been conducted using SPSS 23.0 IBM software.

### 3.3 Measures

Having defined the theoretical model, we can now describe the operational definition of each variable used in the multivariate analysis.

#### 3.3.1 Dependent variable: Electoral volatility

Electoral volatility is usually defined as the net change within the electoral party system resulting from individual vote transfers. It is measured according to the following formula:  $TEV = \sum |V_{i,t} - V_{i,t-1}| / 2$ , in which  $V_{i,t}$  is the vote share for a party  $i^{th}$  at a given election ( $t$ ) and  $V_{i,t-1}$  is the vote share of the same party  $i^{th}$  at the previous elections ( $t-1$ ) (Pedersen, 1979; Casal Bértoa, 2013: 416-418).

While we recognize that volatility is typically calculated at the level of individual parties, our study is distinct in its focus on party systems. This emphasis on systemic measures aligns with the established research stream on institutionalization (Birch, 2003; Casas-Zamora, 2005; Mainwaring & Zoco, 2007; Przeworski, 1975; Roberts & Wibbels, 1999).

Thus, systemic volatility represents the aggregate change in the coalition of parties’ vote-shares between the last two elections (within-coalition volatility). From this perspective, significant fluctuations in volatility could indicate a weak attachment to the party system.

As said before, only two political formations were considered: Government (the sum of electoral results of parties supporting the Government) and Opposition (the sum of electoral results of parties that do not support the Government). Thus, the volatility measured with the Pedersen index is

$\frac{1}{2} \sum_k |pk(t) - pk(t-1)|$   $K=1 \dots k$  parties (coalitions in our case), where:

$pk(t)$  percentage of votes to party  $K$  at election  $t$

<sup>5</sup> <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

<sup>6</sup> <https://ourworldindata.org/grapher/citizen-satisfaction-with-democracy?tab=table>

$pk(t-1)$  percentage of votes to party K at the previous election.

On this basis, we will consider two types of electoral volatility to be used as a dependent variable in two different models. The first type of inter-block electoral volatility (PEV, see Table 2.1) is the benchmark for our study and corresponds to what was outlined in section 2.1. Namely, this inter-bloc volatility was calculated after the first election, with the parties grouped according to their involvement in the ruling majority of each country. This procedure allows us to establish a connection between the fluctuating support for the winning parties and the confidence and dependability that stem from their consistent track record of keeping their promises and acting as political and governmental actors. By assessing volatility using the same number of blocks across all nations, this technique has the benefit of reducing the risk associated with comparing index results.

The second type of inter-block electoral volatility (EEV, see Table 2.1) was also computed using the party blocs as a reference. In this instance, we expanded the blocks based on the parties' support or opposition to the government, including the block of illegitimate votes plus abstainers. Although this volatility calculation approach is consistent with the index's theoretical foundation, it has challenges. A specific concern is the problem of the denominator's heterogeneity, which refers to the fact that various criteria are used to identify registered voters in European countries. Because of this, the index values computed for multiple nations may be distorted and unsuitable for cross-national comparisons. However, we will still use this form of electoral volatility in a second multiple regression model to test possible variations in volatility when considering null votes and abstentions. This third block can be seen as an expression of distrust towards not only the existing government but also political institutions as a whole.

### **3.3.2 Independent variables**

We identified three independent variables.

#### **Trust in government**

Trust in government is drawn from the “Long-term trends of political trust dynamics (1980-2023)” Dataset, produced in the context of TRUEDEM project WP1 (Tufis et al., 2023). It is based on European countries' respective barometers and harmonized<sup>7</sup>.

#### **Government performance**

We use the government effectiveness index, a composite index that measures the quality of bureaucracy, infrastructure, primary education, and policy formulation and implementation (Kaufmann & Kraay, 2023), to measure government performance.

#### **Satisfaction with democracy**

When investigating the impact of political disaffection on volatility, a phenomenon often linked to electoral volatility (Soderlund, 2008; Dalton & Weldon, 2005), we turn to the measure of satisfaction with democracy. This measure, which estimates the average extent of agreement to the item “On the whole, how satisfied or dissatisfied are you with the way democracy works in [own

---

<sup>7</sup> Based on suggestions from the TRUEDEM research network, we tried to calculate an indicator of citizens' perceived trustworthiness towards the government using the technique proposed by van der Meer and van Erkel (2024). Unfortunately, the results obtained using this indicator about the above dependent variable did not meet our expectations.

country]?”, is drawn from Claassen’s work (2022). It provides a clear and direct way to gauge citizens’ satisfaction with the democratic process in their country.

### 3.3.3 Control variables

We controlled for a range of both institutional and economic variables. This is because institutions may act to restrict or enhance the prospects of opposition parties at election time. The type of electoral system – with reference to the majoritarian or proportional nature of electoral systems – may affect electoral stability (although the theoretical argument that proportional representation should enhance volatility is not always empirically supported): more proportional systems have been found to be more volatile due to their openness to the entry of new parties which give more options to switch (Bartolini & Mair, 1990). The electoral formula can be expected to affect voter volatility also according to incentive-based explanations: while, in majoritarian systems, supporters of minor and fringe parties may be disincentivised to switch votes believing that their vote will make no difference (wasted vote argument), in PR-system – particularly with low thresholds and large district magnitudes – minor parties may enter parliament with only a modest share of votes, and this may also enhance vote switching (Norris, 2004). Thus, we hypothesize that PR systems should increase the opportunity for emerging parties with dispersed support to enter parliament with a modest share of votes, which may represent an incentive for citizens supporting them to vote for them.

Our research has also found that the party system significantly affects volatility. We discovered that a more fractionalised party system might lead to higher levels of electoral volatility (Bartolini & Mair, 1990; Bischoff, 2013; Mainwaring & Zoco, 2007; Powell & Tucker, 2014). The reasons for this are varied: more options for both politicians who can easily create new parties and voters who can easily switch their preferences, more possibility of success for new parties, and less divisions among parties.

Although there is a range of measures for political fragmentation here, we opted for definitions of fragmentation that go beyond a simple count of the number of parties, weighting it by the number of consents actually received.

Specifically, we opted for electoral and political fragmentation as calculated by Laakso and Taagepera (1979). The electoral fragmentation index represents the number of electoral parties: 1 divided by the Sum of the squared percentage of votes of all parties in an election

$$N = \frac{1}{\sum_{n=1}^i p_i^2}$$

Where  $p^i$  is the fractional share of votes of the  $i$ -th party.

We also added the degree of polarization in the electoral context, which was assumed to strongly affect switching. Polarisation, which means the ideological distance between the parties, should be inversely related to volatility: the more diverse the options, the fewer reasons to switch.

Polarisation is measured through the percentage of votes obtained by “anti-political-establishment” parties. These are those parties that perceive themselves as challengers of the established parties, emphasize a divide between the political establishment and the people, and introduce challenging policy and political system issues (Sartori, 2005).

Our research delves into the influence of modernization and economic conditions on vote switching. To comprehensively understand these factors, we consider both the short-term HDI growth rate and the Gini index, two crucial measures in the field of economics.

We opted to consider both the economic dimension and the educational and social ones. Thus, we use the UNDP Human Development Index, a composite index combining longevity (life expectancy at birth), education (years of schooling for adults aged 25 years and more and expected years of education for children of school entering age), and standard of living (gross national income per capita).

Inequality is considered in terms of income disparities. Although it can be operationalised in different ways, the most comprehensive one is the Gini index. The Gini index varies between 0 and 1, with 0 representing an equalitarian society where all members have the same income and 1 representing a strongly unequal society where all incomes are concentrated on a single individual while all others have none. We collected the data for this variable from the OECD database.

We follow Soderlund's (2008) thesis that the development level and economic short-term considerations may affect the likelihood of voting for other political parties. Economic downturn or the increase of inequalities may lead voters to abandon their preferred party because they decide to follow the alternatives proposed by emerging parties or as a punishment for the incumbents when they are considered responsible for worsening economic conditions (Tavits, 2005; Mainwaring & Zoco, 2007; Roberts & Wibbels, 1999).

**Table 3.2. - Summary of variables**

Variable	Direction
Trust in government	-
Government performance	-
Satisfaction with democracy	-
Gini index	+
HDI growth rate	-
PR	+
Electoral fragmentation	+
Polarisation	+

### 3.4 Descriptive overview

Ukraine, Slovenia, Slovakia, and Italy have higher inter-block volatility (see Chapter 2 above). Overall, eastern and southern Europe show the highest levels of inter-block volatility.

It is not surprising that Italy, which is experiencing the emergence of a more complex party system where the government has an unclear mandate and the pattern of cooperation and competition between parties is unstructured, may be found in this list. However, it should be noted that other European countries—such as France, Iceland, and Ireland—are experiencing the same process of party de-institutionalization (Chiamonte & Emanuele, 2022) and show lower levels of inter-block volatility in the last two elections.

The countries which show a higher level of inter-block volatility share an idiosyncratic political context: Slovenia, with its proportional system and a persistent party system fragmentation which makes coalitions challenging to form and even more difficult to maintain, Slovakia with a trend in

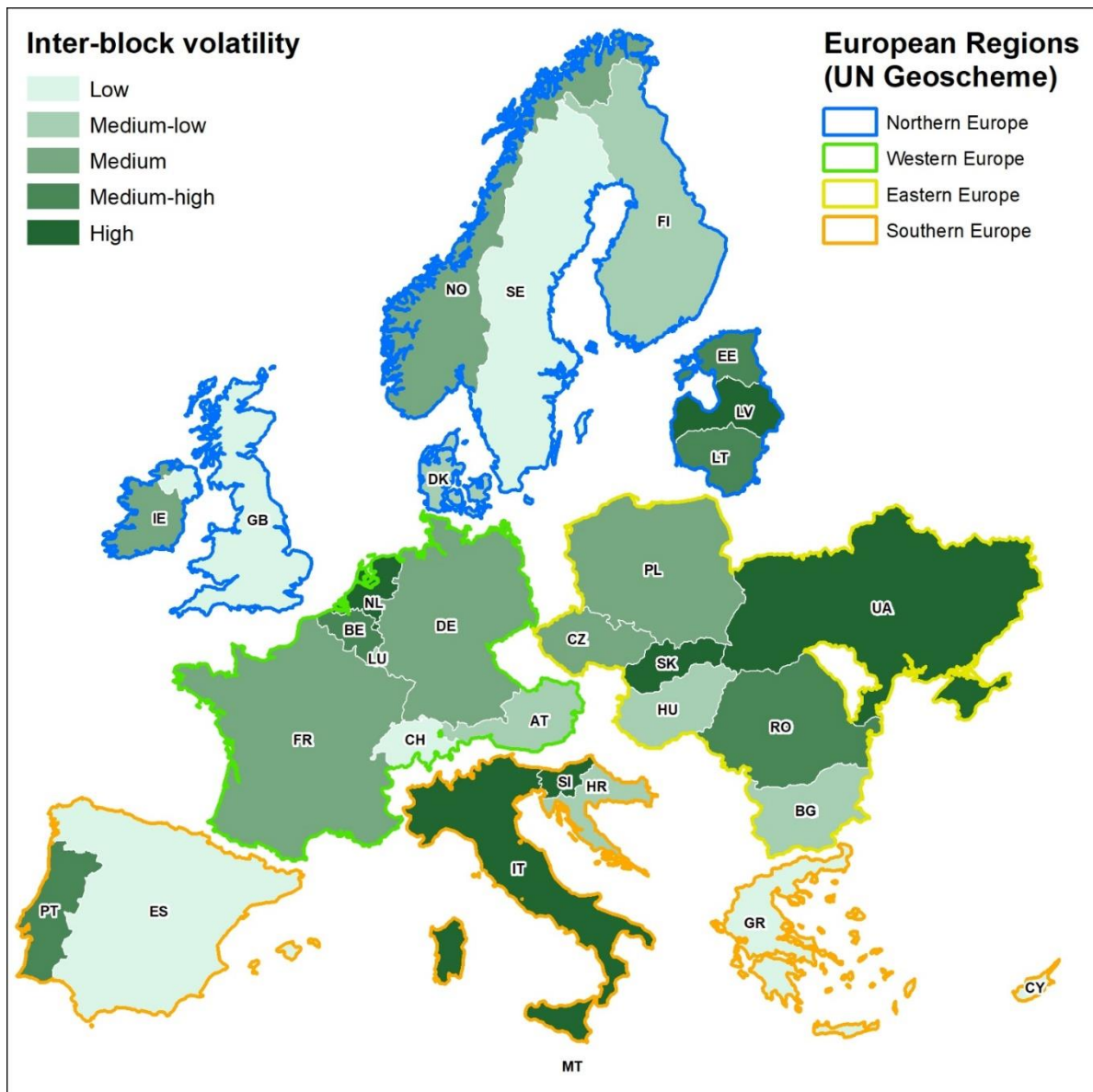
a massive outflow of voters in governing parties in favour of new parties, Ukraine with its complex history of post-communist transitional politics.

Eastern and Southern Europe show the highest level of inter-block volatility and the lowest levels of government effectiveness. Notably, higher levels of government effectiveness are correlated with lower levels of volatility. This correlation is particularly strong in Switzerland, Luxemburg, Norway, and Denmark, where trust in the national government is also high.

Distrust does not necessarily influence the stability of the government, as in the cases of Czechia, Bulgaria, Croatia, and the UK. One possible explanation could be that citizens' attitudes do not always result from a personal negative attitude toward the government but may derive from prejudice or a cultural component, a social norm from which it is difficult to deviate.

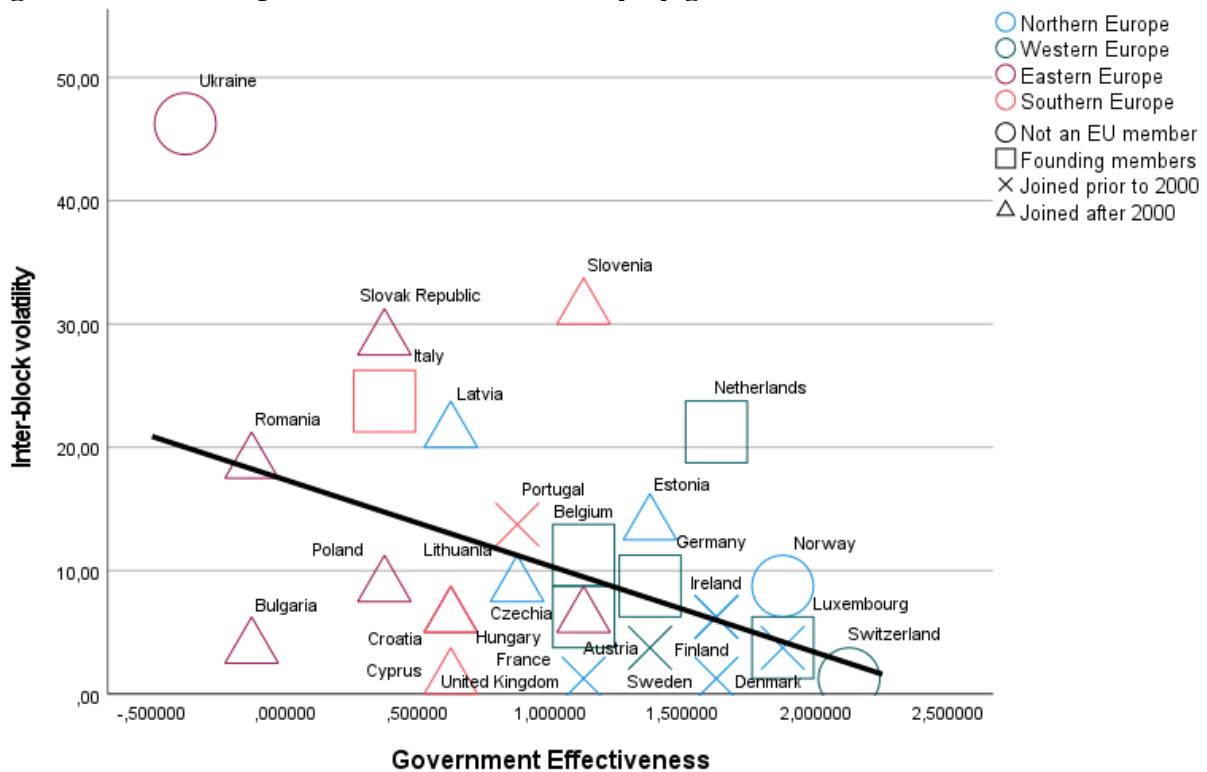
Inter-block volatility seems to be weakly related to feelings of political disaffection, which does not confirm the thesis of a trend of growing political disaffection leading to government instability.

**Figure 3.2 – Geo map of inter-block volatility**

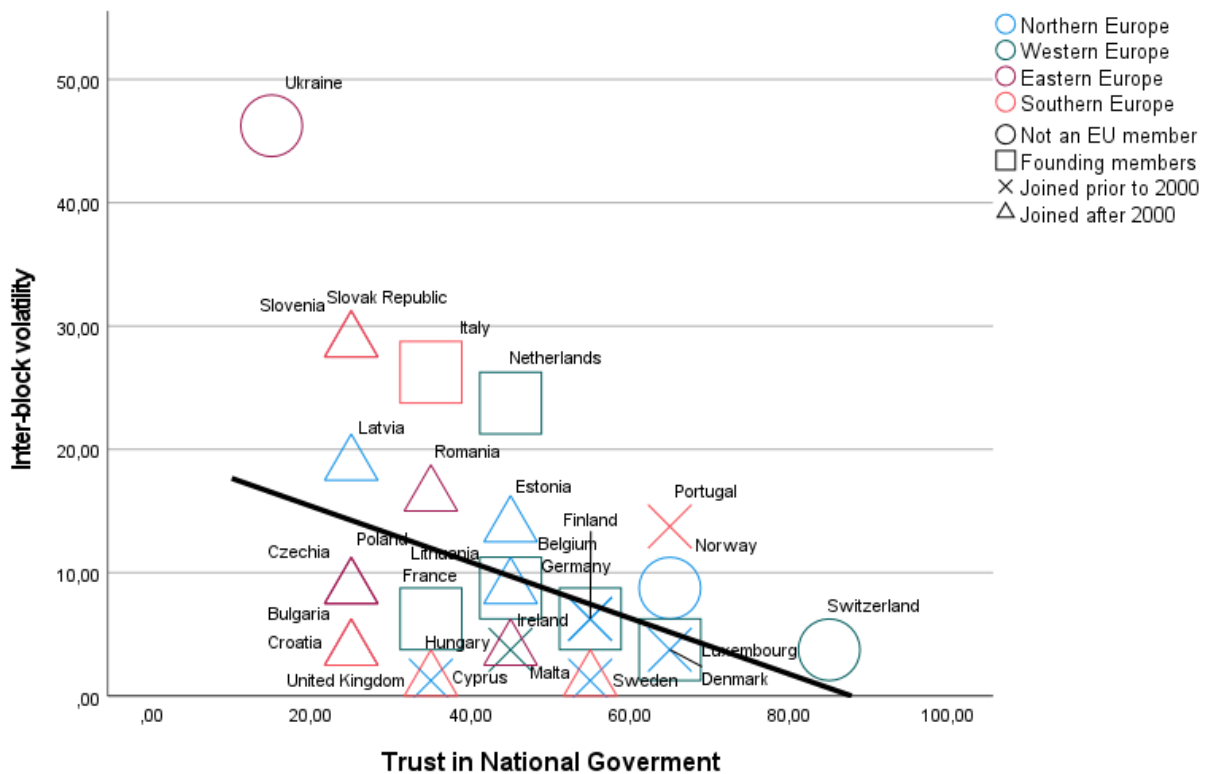




**Figure 3.3. – Scatterplot of inter-block volatility by government effectiveness**

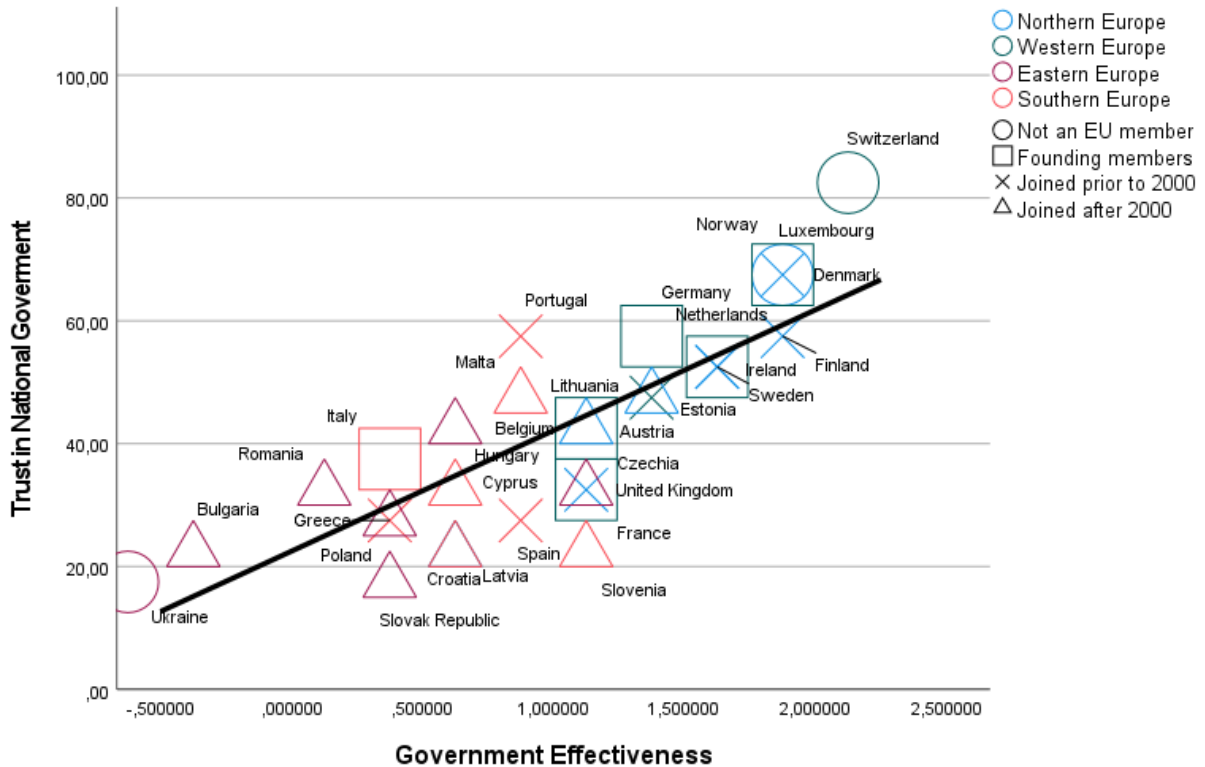


**Figure 3.4. – Scatterplot of inter-block volatility by trust in national government**

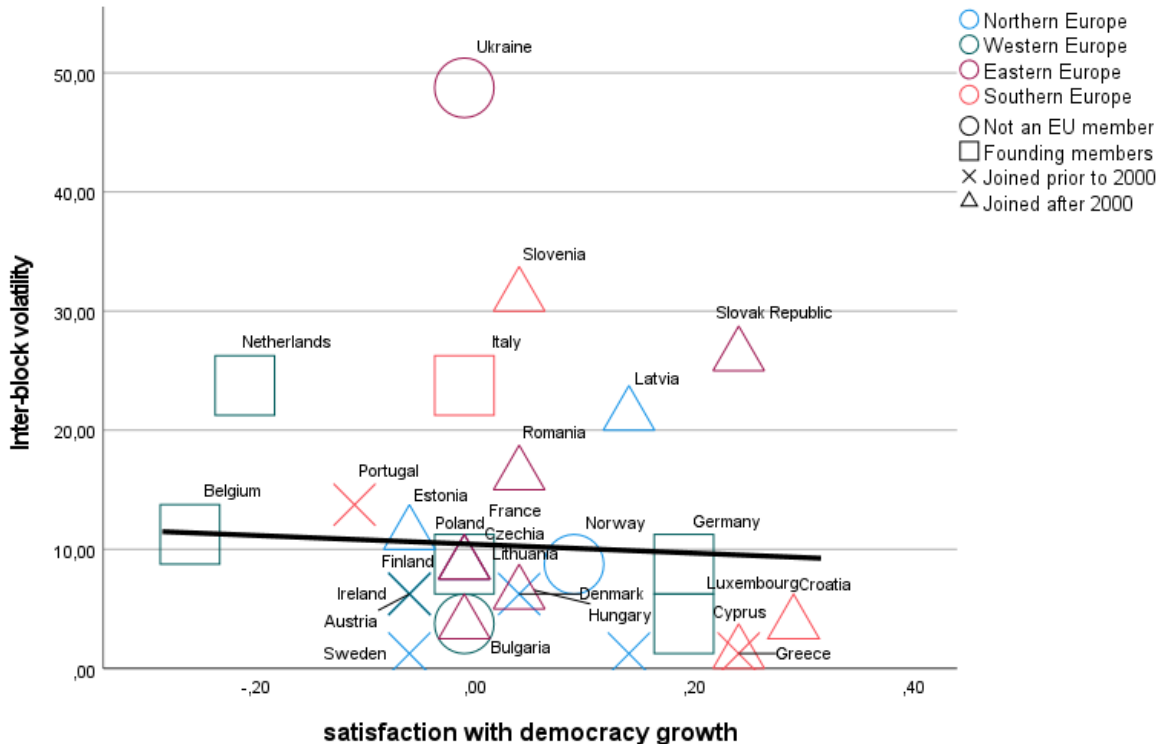




**Figure 3.5. – Scatterplot of trust in national government by government effectiveness**



**Figure 3.6. – Scatterplot of inter-block volatility by satisfaction with democracy growth**



### 3.5 Multiple regression analysis

Our exercise is based on a multivariate analysis based on OLS regression analysis on national elections. As mentioned in section 3.3.1, two multiple regressions will be run, the first addressing the research objective, i.e., to test the conceptual framework of our proposal; the second aims to evaluate a different interpretation of volatility, using an index that also considers electoral abstention. The statistical procedure is the same in both the regression analyses: model A first entered government performance, dissatisfaction with democracy, and trust in government alone. Model B adds socio-economic indicators (HDI growth and Gini index). Model C adds institutional factors supposed to affect volatility (electoral fragmentation, polarization, and proportional system). As said at the beginning of this paragraph, the time frame considered is the last election for the volatility and the variation that occurred in the data for each variable during the time between the two elections.

Tables 3.3 and 3.4 summarise the univariate statistics and the three multiple regression models, respectively, by providing information about the model summary and the statistical coefficients (standardized beta and significance).

**Table 3.3. – Univariate statistics of the variables used in the Multiple Regression Analysis (National elections dataset)**

<i>Descriptive Statistics</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std. Dev.</i>
Inter-block Volatility (PEV, total: valid votes)	0,04	47,13	10,34	10,84
Inter-block Volatility (EEV, total: registered voters)	1,55	30,00	8,81	7,20
Trust in National Government	12,80	76,20	37,38	15,84
Satisfaction with Democracy variation	-0,26	0,28	0,02	0,13
HDI growth	-0,35	0,53	0,27	0,16
Gini coefficient [OECD]	0,22	0,38	0,29	0,04
Electoral fragmentation index [TRUEDEM]	1,92	10,94	6,13	2,17
Proportional System	0	1	0,77	0,43
Polarization	1,20	60,90	23,23	11,99

#### **First Multiple Regression Analysis: Inter-block Volatility (PEV) as dependent variable**

*All the tested models are statistically significant*, and the several values of the adjusted R square indicate a relevant goodness of fit of the models: from ,111 (step 1) to ,442 (step 3), the last value means that approximately 44,2% of the inter-block volatility (PEV) variance is explained by the variables used in this analysis.

More specifically, at step 1, the Government effectiveness and the Satisfaction with Democracy have a negative effect ( $\beta = -,407$  and  $\beta = -,153$  respectively) on inter-block volatility (PEV), while Trust in National Government has no relevant effect ( $\beta = -,066$ ). All the variables have no statistical significance at this stage.



At step 2, the introduction of the socioeconomic variables, the growth of HDI and Gini in the time frame, shows significant negative effect on the inter-block volatility (PEV). However, while the negative relationship ( $\beta = -,333$ ) with the HDI is predictable (the lower the HDI growth the higher is the volatility), an interesting result at this stage of the model is that the GINI shows a negative and statistically significant effect ( $\beta = -,287$ ).

The last run of the multiple regression analysis (step 3) shows the relevance of the Electoral fragmentation as it has a statistically significant and positive effect ( $\beta = ,456$ ) on the inter-block volatility (PEV): the higher the fragmentation, the higher the volatility. Moreover, this final model highlights that the other institutional factors, polarization and the presence of a proportional system, have no statistically significant effect on inter-block volatility (PEV). However, it seems that while the proportional system has a negative relationship, the effect of polarization is almost null. Moreover, the Trust in National Government changes the sign of its effect, while remaining near to zero.

**Table 3.4. – Results of Multiple Regression Analysis on the National Elections with “enter” method: model summary and final model (Step 1-3). Dependent Variable: PEV**

<i>Model</i>	<i>Variable</i>	<i>Std. Beta</i>	<i>Sig.</i>
1 Adjusted R Square = ,111	(Constant)		,000
	Trust in National Government	-,066	,796
	Government Effectiveness	-,407	,121
	Satisfaction with Democracy variation	-,153	,397
2 Adjusted R Square = ,302	(Constant)		,002
	Trust in National Government	-,088	,702
	Government Effectiveness	-,303	,221
	Satisfaction with Democracy variation	-,150	,352
	HDI growth	-,333	,060
3 Adjusted R Square = ,442	Gini coefficient [OECD]	-,287	,082
	(Constant)		,007
	Trust in National Government	,048	,820
	Government Effectiveness	-,453	,053
	Satisfaction with Democracy variation	-,100	,498
	HDI growth	-,300	,088
	Gini coefficient [OECD]	-,375	,025
	Electoral fragmentation index [TRUEDEM]	,456	,009
Proportional System	-,231	,187	
Polarisation	-,051	,749	

### Second Multiple Regression Analysis: Inter-block Volatility (EEV) as dependent variable

The second multiple regression, carried out using inter-block Volatility (EEV) as the dependent variable.

First of all, all the tested models are statistically significant, in this case, the adjusted R square values are slightly higher than those of the previous regression analysis: from ,143 (step 1) to 0,454 (step 3). This means that this model's predictive power is higher (45,4%).

**Table 3.5. – Results of Multiple Regression Analysis on the National Elections with “enter” method: model summary and final model (Step 1-3). Dependent Variable: EEV**

<i>Model</i>	<i>Variable</i>	<i>Std. Beta</i>	<i>Sig.</i>
1 Adjusted R Square = ,143	(Constant)		,000
	Trust in National Government	-,104	,694
	Government Effectiveness	-,306	,254
	Satisfaction with Democracy variation	-,100	,592
2 Adjusted R Square = ,358	(Constant)		,000
	Trust in National Government	-,067	,781
	Government Effectiveness	-,404	,123
	Satisfaction with Democracy variation	-,126	,454
	HDI growth	,040	,822
3 Adjusted R Square = ,454	Gini coefficient [OECD]	-,476	,008
	(Constant)		,002
	Trust in National Government	,029	,908
	Government Effectiveness	-,514	,057
	Satisfaction with Democracy variation	-,091	,595
	HDI growth	,060	,761
	Gini coefficient [OECD]	-,540	,007
	Electoral fragmentation index [TRUEDEM]	,347	,071
Proportional System	-,159	,427	
Polarisation	-,054	,769	

As in the previous analysis, at step 1, government effectiveness and satisfaction with democracy have a negative effect ( $\beta = -0,306$  and  $\beta = -0,100$ ). One interesting difference with the previous run, is that the Trust in National Government has a negative effect too ( $\beta = -0,104$ ). All the variables have no statistical significance at this stage.

The regression analysis results at step 2 show a significant difference: while the Gini index still shows a negative and statistically significant effect ( $\beta = -.476$ ), the HDI has no appreciable or statistically significant effect on interlocking volatility (EEV).

Step 3 of the multiple regression analysis shows similar results compared to the previous exercise: electoral fragmentation has a statistically significant and positive effect ( $\beta = .347$ ) on the inter-block volatility (EEV), while the other institutional factors, polarisation, and proportional system, have no statistically significant effect on the dependent variable. As in the previous model, Trust in the National Government varies the sign of its effect, while remaining close to zero

### 3.6 Some conclusive remarks

The effectiveness of government affects inter-block volatility more than trust in government. Successful policy delivery seems to strengthen the attachments of voters to incumbent parties, thus lowering volatility. We expect that this, by extension, would increase the level of trust in government, but this is not the case. This may be due to a time effect: low output and performance influence trust in the long term. This may also be due to the lack of consideration of trends that allow for the distinction between specific and diffuse trust. A long-term trend of distrust in government (because, for example, of continued low performance) may turn into disaffection toward all political institutions irrespective of their performance.

The findings suggest that, although there may be heterogeneous motivations for volatility, performance evaluations guide party switching more than political disaffection and detachment, as demonstrated by the non-significance of the relationship between satisfaction with democracy and volatility. This may derive from the fact that political disaffection drives more toward abstention than volatility: Political disaffection increases the probability of abstaining from voting more than of switching party coalitions. However, this would require further investigations that allow to compare abstainers, stable and unstable voters.

If all of this is true, and performance evaluations and accountability drive volatility more than disaffection, then volatility may not necessarily be considered a bad functioning of democracy. In some cases, it can also foster democracy, in agreement with Norris' model of sceptical trust (Norris, 2022).

Contrary to expectations, there seems to be less volatility in proportional systems for the institutional variables. However, PR systems do not significantly affect volatility. A reason for this may lie in the process of evaluating government performance and dealignment and weak attachment toward parties, which makes proportionality a negligible factor.

As hypothesized, electoral fragmentation is a significant predictor of within-coalition volatility. In contrast, polarisation is not: the number of alternatives for voting probably strengthens the link between dissatisfaction with the government and the propensity to switch parties. With few options in front of low government performance, loyalty to the government may remain. Instead, with more options, dissatisfaction may be voiced by switching to another party. This may indicate that when the number of options is high, dissatisfaction with government performance hardly results in abstention but more easily leads to volatility.

However, the reversed direction of the relationship between the number of parties and volatility may also be considered. Higher fragmentation, expressed in a higher number of options, can also be the effect of unstable electorates, particularly in old democracies.

Also, a high human development, which implies a successful economic performance (as testified by HDI growth in the period between one election and the subsequent), plays a significant role in decreasing inter-block volatility. It can be interpreted as another indicator of good government performance: government parties successfully deliver their promises and must be rewarded. It is also interesting to find out that acute social inequalities (captured by a high Gini index level) contribute to reducing inter-block volatility. This may be due to the effect of social inequalities, which may support social and political radicalization in voting behaviour.

The findings may suggest that, when there are many parties to choose between (high electoral fragmentation), levels of volatility are more affected by trustworthiness than trust.

## Conclusions

Our study on electoral volatility in Europe has limitations. To name but a few, a different definition of volatility could lead to different results (Casal-Bertoa et al., 2017). For example, a definition of volatility extended to consider the shift of voters from the voting area to the abstention area has generated quite a different insight on electoral behaviour (see above, Chapter 3). The same can be said for the panel of elections considered in the study. Moreover, when including the no-vote area in the definition of electoral volatility, the research findings may be influenced by changes in voter turnout resulting from changes in electoral rules, for example, with reference to the vote of residents abroad. These changes are not related to voters' judgments about the reliability of the government or the political system as a whole.

With all this in mind, we believe that the path taken is the one most in keeping with the spirit of the TRUEDEM research project. In particular, the exercise described in Chapter 3 shows that electoral volatility in European countries is negatively affected by Government effectiveness (which we have seen to be the best possible proxy for political trust in this study) and the extent of domestic economic inequality as measured by the Gini index. In contrast, it is positively associated with the electoral fragmentation index we calculated using the TRUEDEM database.

We think that our analysis could lead to future developments in research on electoral participation. Our work shows a trend towards volatility associated with a tendency towards greater imputation of responsibility towards political institutions. Therefore, it would be interesting to investigate the long-term impact of trust, perceptions of trustworthiness, and electoral volatility in European countries. This perspective would allow us to assess more thoroughly the effect of the increasing volatility of electoral behaviour on the stability, efficiency and quality of democratic regimes (Chiaramonte & Emanuele, 2022).

While our study provides valuable insights, we must acknowledge that it focuses on net change rather than the direction of change, which is the subject of other lines of research in TRUEDEM (in particular, WP5 on political polarisation). Therefore, these results should be seen as a starting point, to be complemented by further analyses of ongoing changes in political participation.

## References

- Addeo, F., Ammirato, L., Delli Paoli, A., Fruncillo, D., & Maddaloni, D. (2024). *Voter turnout: Overtime and regional trends in Europe*. Working paper no. 2.3. TRUEDEM: Trust in European Democracies Project ([www.truedem.eu](http://www.truedem.eu)).
- Bacchus, E. B. & Boulding, C. (2021). Corruption perceptions: confidence in elections and evaluations of clientelism. *Governance* 35(2), 609-632. <https://doi.org/10.1111/gove.12598>
- Bartolini, S. & Mair, P. (1990). *Identity, competition, and electoral availability. The stabilisation of European electorates 1885-1985*. Cambridge University Press.
- Birch, S. (2003). *Electoral Systems and Party System Stability in Post-Communist Europe*. Palgrave MacMillan.
- Birch, S. (2010). Perceptions of electoral fairness and voter turnout. *Comparative Political Studies* 43(12), 1601-1622. <https://doi.org/10.1177/0010414010374021>
- Blanco, L. & Grier, R. (2013). Explaining the rise of the left in Latin America. *Latin American Research Review*, 48(1), 68-90. <https://doi.org/10.1353/lar.2013.0011>
- Cabada, L. & Charvat, J. (2023). *Methodological framework paper on identities and polarisation*. Working paper no.5.1. TRUEDEM: Trust in European Democracies Project ([www.truedem.eu](http://www.truedem.eu)).
- Casal Bertoa F., Deegan-Krause K. & Haughton, T. (2017). The volatility of volatility: Measuring change in party vote shares. *Electoral Studies* 50, 142-156. <https://doi.org/10.1016/j.electstud.2017.09.007>.
- Casal Bertoa, F. & Rama, J. (2021). Polarization: What Do We Know and What Can We Do About It?. *Frontiers in Political Science* 3:687695. <https://doi.org/10.3389/fpos.2021.687695>
- Casas-Zamora, K. (2005). *Paying for Democracy: Political Finance and State Funding for Parties*. ECPR Press.
- Chiaromonte, A. & Emanuele, V. (2017). Party system volatility, regeneration, and de-institutionalization in Western Europe (1945–2015). *Party politics* 23(4), 376-388. <https://doi.org/10.1177/1354068815601330>
- Chiaromonte, A. & Emanuele, V. (2022). *The Deinstitutionalization of Western European Party Systems*. Palgrave MacMillan.
- Cianetti, L. & Hanley, S. (2021). The end of the backsliding paradigm. *Journal of Democracy* 32(1), 66-80). <https://doi.org/10.1353/jod.2021.0001>.
- Dalton, R. J. (2008). The Quantity and the Quality of Party Systems. Party System Polarization, Its Measurement, and Its Consequences. *Comparative Political Studies* 41 (7), 899-920. <https://doi.org/10.1177/0010414008315860>
- Dalton, R. J. (2013). *The Apartisan American: Dealignment and Changing Electoral Politics*. CQ Press.
- Dalton, R. J. & Wattenberg M. P. (2002). *Parties without Partisans. Political Change in Advanced Industrial Democracies*. Oxford University Press.
- Dalton, R. J. & Welzel C. (eds.) (2015). *The Civic Culture Transformed: From Allegiant to Assertive Citizens*. Cambridge University Press.
- Dassonneville, R. (2012). Electoral volatility, political sophistication, trust and efficacy: A study on changes in voter preferences during the Belgian regional elections of 2009. *Acta Politica* 47(1), 18-41. <https://doi.org/10.1057/ap.2011.19>.
- Dassonneville, R. (2015). *Stability and Change in Voting Behaviour. Macro and Micro Determinants of Electoral Volatility*. Proefschrift aangeboden tot het verkrijgen van de graad van Doctor in de Sociale Wetenschappen, no. 273. Leuven: Katholieke Universiteit Leuven, Centrum voor Politicologie.
- Della Porta, D. (2004). Political parties and corruption: Ten hypotheses on five vicious circles. *Crime, Law & Social Change* 42, 35–60.

- Donno, D., & Roussias, N. (2012). Does Cheating Pay? The Effect of Electoral Misconduct on Party Systems. *Comparative Political Studies* 45(5), 575-605. <https://doi.org/10.1177/0010414011427130>
- Downs, A. (1957). *An Economic Theory of Democracy*. Harper and Row.
- Emanuele, V. (2019). *Cleavages, Institutions and Competition: Understanding vote nationalization in Western Europe (1965-2015)*. Rowman & Littlefield.
- Emanuele, V., Maggini, N., & Marino, B. (2016). Gaining votes in Europe against Europe? How national contexts shaped the results of Eurosceptic parties in the 2014 European parliament elections. *Journal of Contemporary European Research*, 12(3). <https://doi.org/10.30950/jcer.v12i3.732>
- Fernandez Lombao T., Blasco-Blasco O. & Campos Freire F. (2024). Politicisation Persists and Is Increasing in European Public Service Media in the Digital Society. *Media and Communication* 12:7759. <https://doi.org/10.17645/mac.7759>
- Franklin, M. (2004). *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies since 1945*. Cambridge University Press.
- Fruncillo, D., Addeo, F., Ammirato, M. L., Delli Paoli, A. & Maddaloni, D. (2023). *Longitudinal cross-country database on voter turn-out in European countries (1990-2023)*. Working paper no 2.1. TRUEDEM: Trust in European Democracies Project ([www.truedem.eu](http://www.truedem.eu)).
- Fumarola, A. (2020). The Contexts of Electoral Accountability: Electoral Integrity Performance Voting in 23 Democracies. *Government and Opposition* 55(1), 41-63. <https://doi.org/10.1017/gov.2018.13>
- Gallagher, M. (1991). Proportionality, Disproportionality and Electoral Systems. *Electoral Studies* 10, 33-51. [https://doi.org/10.1016/0261-3794\(91\)90004-c](https://doi.org/10.1016/0261-3794(91)90004-c)
- Gallagher, M. (1992). Comparing Proportional Representation Electoral Systems: Quotas, Thresholds, Paradoxes and Majorities. *British Journal of Political Science* 22(4), 469-496. <https://doi.org/10.1017/s000712340000649>
- Gallagher, M. & Mitchell, P. (eds.) (2005). *The Politics of Electoral Systems*. Oxford University Press.
- Giddens, A. (1990). *The Consequences of Modernity*. Polity Press.
- Giddens, A. (1991). *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Polity Press.
- Golder, M. & Lloyd, G. (2013). Re-evaluating the relationship between electoral rules and ideological congruence. *European Journal of Political Research* 53(1), 200-212. <https://doi.org/10.1111/1475-6765.12031>
- Golder, M. & Stramski, J. (2009). Ideological congruence and electoral institutions. *American Journal of Political Science* 54(1), 90-106. <https://doi.org/10.1111/j.1540-5907.2009.00420.x>
- Gomez, R. (2018). 'People are running, but where are they heading?' Disentangling the sources of electoral volatility. *Comparative European Politics* 16(2), 171-197. <https://doi.org/10.1057/cep.2015.22>
- Hardin, R. (1999). Do we want to trust in government? In Warren, M. E. (ed.), *Democracy and trust*. Cambridge University Press (22-41).
- Hetherington, M. J. (1999). The effect of political trust on the presidential vote, 1968-96. *American Political Science Review* 93, 311-326. <https://doi.org/10.2307/2585398>
- Hirschman, A. O. (1970). *Exit, Voice, and Loyalty. Responses to Decline in Firms, Organizations and States*. Harvard University Press.
- Hooghe, M. (2014). Citizenship and Participation. In LeDuc, L., Niemi, R. G. & Norris P. (eds.), *Comparing Democracies 4: Elections and Voting in a Changing World*. Sage (58-75).
- Hooghe, M. & Kern, A. (2015). Party Membership and Closeness and the Development of Trust in Political Institutions: An Analysis of the European Social Survey, 2002-2010. *Party Politics*, 21(6), 944-956. <https://doi.org/10.1177/1354068813509519>
- Inglehart, R. (1997). *Modernization and Postmodernization. Cultural, Economic and Political Change in 43 Societies*. Princeton University Press.

- Kaufmann, D. & Kraay, A. (2023). *Worldwide Governance Indicators, 2023 Update*. The World Bank. ([www.govindicators.org](http://www.govindicators.org))
- Laakso, M. & Taagepera, R. (1979). Effective Number of Parties: A Measure with Application to Western Europe. *Comparative Political Studies* 12, 3–27. <https://doi.org/10.1177/001041407901200101>
- Lewis-Beck, M. & Paldam, M. (2000). Economic Voting: An Introduction. *Electoral Studies* 19, 113–121. [http://dx.doi.org/10.1016/S0261-3794\(99\)00042-6](http://dx.doi.org/10.1016/S0261-3794(99)00042-6)
- Lewis-Beck, M. & Stegmaier M. A. (2000). Economic Determinants of Electoral Outcomes. *Annual Review of Political Science* 3, 183–219. <https://doi.org/10.1146/annurev.polisci.3.1.183>
- Lipset, S. M. & Rokkan, S. (eds.) (1967). *Party Systems and Voter Alignment*. Free Press.
- Mainwaring, S., Gervasoni, C., & España-Nájera, A. (2016). Extra- and within-system electoral volatility. *Party Politics* 23(6), 623–635. <https://doi.org/10.1177/1354068815625229>
- Mainwaring, S. & Zoco, E. (2007). Political Sequences and the Stabilization of Interparty Competition: Electoral Volatility in Old and New Democracies. *Party Politics* 13, 155–178. <https://doi.org/10.1177/1354068807073852>
- Mair, P. (2002). In the Aggregate: Mass Electoral Behaviour in Western Europe, 1950–2000. In Keman, H. (ed.), *Comparative Democratic Politics*. Sage (122–140).
- Meer, T., Elsas, E., Lubbe, R., & Brug, W. (2013). Are volatile voters erratic, whimsical or seriously picky? a panel study of 58 waves into the nature of electoral volatility (the Netherlands 2006–2010). *Party Politics* 21(1), 100–114. <https://doi.org/10.1177/1354068812472570>
- Nezi, R. (2012). Economic voting under the economic crisis: Evidence from Greece. *Electoral Studies* 31, 498–505. <https://doi.org/10.1016/j.electstud.2012.02.007>.
- Norris, P. (ed.) (1999). *Critical Citizens: Global Support for Democratic Government*. Oxford University Press.
- Norris, P. (2004). *Electoral Engineering: Voting Rules and Political Behavior*. Cambridge University Press.
- Norris, P. (2022). *In Praise of Skepticism: Trust but Verify*. Oxford University Press.
- Oser, J., Feitos, F. & Dassonneville, R. (2023). Who Feels They Can Understand and Have an Impact on Political Processes? Socio-demographic Correlates of Political Efficacy in 46 Countries, 1996–2016. *International Journal of Public Opinion Research* 35, 1–11. <https://doi.org/10.1093/ijpor/edad013>
- Pasquino, G. and Valbruzzi, M. (2017). The Italian democratic party, its nature and its secretary. *Revista española de ciencia política*, (44), 275–299. <https://doi.org/10.21308/recp.44.11>
- Pedersen, M. N. (1979). The dynamics of European party systems: Changing patterns of electoral volatility. *European Journal of Political Research* 7(1), 1–26. <https://doi.org/10.1111/j.1475-6765.1979.tb01267.x>
- Powell, E. N. & Tucker, J. A. (2014). Revisiting Electoral Volatility in Post-Communist Countries: New Data, New Results and New Approaches. *British Journal of Political Science* 44(1), 123–147. <https://doi.org/10.1017/S0007123412000531>
- Przeworski, A. (1975). Institutionalization of voting patterns, or is mobilization a source of decay? *American Political Science Review*, 69(1), 49–67. <https://doi.org/10.2307/1957884>.
- Rae, D. (1971). *The Political Consequences of Electoral Laws*. Yale University Press.
- Roberts, K. M. & Wibbels, E. (1999). Party Systems and Electoral Volatility in Latin America: A Test of Economic, Institutional, and Structural Explanations. *American Political Science Review* 93, 575–90. <https://doi.org/10.2307/2585575>
- Sarkar, S. & Dash, B. B. (2023). On the measurement of electoral volatility. *Mathematical Social Sciences* 126, 119–128. <https://doi.org/10.1016/j.mathsocsci.2023.10.005>
- Sartori, G. (2005). *Parties and Party Systems. A Framework for Analysis*. ECPR Press.

- Schmitt-Beck, R., Roßteutscher, S., Schoen, H., Weßels, B. & Wolf, C. (2022). A New Era of Electoral Instability, In Schmitt-Beck, R., Roßteutscher, S., Schoen, H., Weßels, B. & Wolf, C. (eds.) *The Changing German Voter*. Oxford University Press (3-24).
- Söderlund, P. (2008). Retrospective Voting and Electoral Volatility. A Nordic Perspective. *Scandinavian Political Studies* 31 (2), 217-240. <https://doi.org/10.1111/j.1467-9477.2008.00203.x>
- Talving, L. (2017). The electoral consequences of austerity: economic policy voting in Europe in times of crisis. *West European Politics*, 40(3), 560–583. <https://doi.org/10.1080/01402382.2016.1271600>
- Tavits, M. (2005). The Development of Stable Party Support: Electoral Dynamics in Post-Communist Europe. *American Journal of Political Science* 49(2), 283-298. <https://doi.org/10.1111/j.0092-5853.2005.00123.x>
- Tavits, M. (2008). On the Linkage between Electoral Volatility and Party System Instability in Central and Eastern Europe. *European Journal of Political Research* 47(5), 537-555. <https://doi.org/10.1111/j.1475-6765.2008.00782.x>
- Taylor, M. & Herman, V. (1971). Party systems and government stability. *American Political Science Review* 65, 28-37. <https://doi.org/10.2307/1955041>.
- Tufiş, C., Ghica, L., Radu, B. (2023). *Long-Term Trends of Political Trust Dynamics (1980-2023): Dataset and Codebook*. Working paper no.1.3. TRUEDEM: Trust in European Democracies Project ([www.truedem.eu](http://www.truedem.eu)).
- van Biezen, I., P. Mair, & T. Poguntke (2012). Going, Going, . . . Gone? The Decline of Party Membership in Contemporary Europe. *European Journal of Political Research* 51 (1), 24-56. <https://doi.org/10.1111/j.1475-6765.2011.01995.x>
- van der Meer, T. W. G & van Erkel, P. F. A (2024). Moving beyond the political trust crisis debate: Residual analyses to understand trends in political trust. *European Journal of Political Research* 63(3), 1240-1257. <https://doi.org/10.1111/1475-6765.12645>
- Voogd, R., van der Meer, T. & van der Brug, W. (2019). Political Trust as a Determinant of Volatile Vote Intentions: Separating Within- From Between-Person Effects. *International Journal of Public Opinion Research* 31(4), 669-693. <https://doi.org/10.1093/ijpor/edy029>
- Voogd, R. & Dassonneville, R. (2020). Are the Supporters of Populist Parties Loyal Voters? Dissatisfaction and Stable Voting for Populist Parties. *Government and Opposition* 55(3), 349–370. <https://doi.org/10.1017/gov.2018.24>.
- Weber, P., Steinmetz, H., & Kabst, R. (2017). Trust in politicians and satisfaction with government: A reciprocal causation approach for European countries. *Journal of Civil Society* 13, 392–405. <https://doi.org/10.1080/17448689.2017.1385160>
- Zelle, C. (1995). Social dealignment versus political frustration: contrasting explanations of the floating vote in Germany. *European Journal of Political Research* 27(3), 319-345. <https://doi.org/10.1111/j.1475-6765.1995.tb00473.x>
- Zmerli, S., & Newton, K. (2017). The objects of political trust: Scales and hierarchies. In Zmerli, S. & van der Meer T. (eds.), *The handbook on political trust*. Edward Elgar Publishing (104-124).