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The Legacy of Left-Wing Authoritarian Regimes on Parties' Dispersion on the Left-right  
Scale: A Study of Post-Communist Democracies in the European Union

MA thesis

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## **Authorship Declaration**

I have prepared this thesis independently. All the views of other authors, as well as data from literary sources and elsewhere, have been cited..

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*Yuliia Kopytsiak, 19.05.2025*

## **Abstract**

The collapse of left-wing authoritarian regimes in Central and Eastern Europe initiated a transformative journey toward democratization and European integration. However, the legacy of these regimes continues to shape party competition decades later. While previous studies have explored structural and institutional consequences, the long-term impact on the dispersion of parties along the left–right scale remains understudied. Using ParlGov Releases (2010–2024) and focusing exclusively on EU member states, this thesis analyzes party system polarization (Dalton Polarization) and the ideological center of gravity (Country Ideology), and introduces a novel variable – Right-Wing Concentration (RWC) – to capture the simultaneous rightward shift and ideological narrowing. The study shows that in post-communist democracies, the far left is marginalized without a compensating far-right ascent, resulting in more right-leaning and less polarized party systems compared to consolidated democracies. This pattern intensifies over time within the studied period. By comparing countries with and without left-authoritarian legacies, the study demonstrates that historical background outperforms conventional structural variables in explaining ideological party configurations. These findings underscore the enduring imprint of authoritarian legacies and highlight the need for future research on party polarization in the EU to account for historical determinants alongside institutional, structural, and political factors.

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## INTRODUCTION

In an era marked by rising polarization, democratic backsliding, and the growing prominence of far-right parties, investigating the ideological configuration of party systems across EU member states is not only academically relevant – it is a political necessity. Understanding the factors that shape how parties are distributed along the left–right axis is crucial for assessing the patterns and trends of democratic competition. While numerous studies have explored structural, institutional, and political drivers of party system polarization (Dalton, 2008; Dalton, 2021; Rovny & Edwards, 2012; Saarts, 2011), this thesis shifts the focus to a historical determinant too often sidelined: authoritarian regime legacy.

The end of the Cold War, which triggered the fall of communist regimes in Central and Eastern Europe (hereafter CEE), initiated a transformative journey toward democratization and European integration for the countries of the region. Since the collapse of the Soviet Union, the Eastern Bloc and Yugoslavia, countries in transition have undergone significant political and ideological transformations. They moved from centrally planned economies and authoritarian one-party rule to free-market capitalism, liberal democracy, and multiparty systems. Yet, these transitions did not erase the political past. The legacy of left-wing authoritarian regimes continues to influence the ideological structure of political competition across the region.

While considerable research has examined the structural and institutional consequences of authoritarian legacies, less attention has been paid to their relatively long-term impact on the parties' positioning on the left-right scale. Parties' ideological placements are fundamental in understanding political competition, voter alignment, and policy-making in countries, especially in new democracies preceded by an authoritarian regime. Thus, it's important to bridge this gap by exploring the relationship between the legacy of left-wing authoritarian regimes and the party system polarization with the ideological average of party systems on the left-right scale within the European Union (hereafter EU). In particular, this study investigates whether democracies transitioned from left-authoritarian regimes exhibit systematically different patterns of ideological dispersion of the parties compared to consolidated democracies without such legacies.

This thesis builds on theories and previous research related to ideological party polarization and authoritarian regime legacies. Existing literature offers valuable insights. For instance,

scholars highlight that new democracies, including post-communist countries, often exhibit weaker ideological divides and less ideological anchoring due to structural legacies, societal transformations, and incomplete democratization processes (Kitschelt, 1995; Linz & Stepan, 1996; Freire, 2006; Freire, 2008). Freire & Kivistik (2018) show that support for the previous authoritarian regime is positively correlated with support for its ideology and vice versa. Also, they highlight that communist legacies contribute to right-leaning political systems, making left ideologies less appealing to parties and voters. Similarly, Dinas & Northmore-Ball (2020) demonstrate an “anti-dictator bias” in post-authoritarian democracies but note challenges in proving the mechanism in democracies with left-authoritarian legacies, citing Soviet indoctrination as an explanatory factor.

This thesis addresses three key gaps in previous research. First, the sample of countries in previous studies has either been too small or too large. The works of Freire & Kivistik (2016) and Freire & Kivistik (2018), which are closest to our study, mostly focus on small-N qualitative comparisons of legacies of previous regimes, by comparing three democracies preceded by right-authoritarian regimes (Portugal, Spain, Greece) and three democracies preceded by left-authoritarian regimes (Latvia, Estonia, Lithuania). Other scholars have done large-N quantitative analysis with countries preceded by authoritarian regimes, even if some of them transitioned to democracy, some of them are classified as hybrid regimes, and some of them remain authoritarian ones by the time of the studies (Dinas & Northmore-Ball, 2020). In turn, this thesis introduces comparative precision by focusing exclusively on EU member states, a group of countries that, while diverse in historical experiences, share many common institutional, legal, and economic frameworks. This allows the study to isolate the effects of authoritarian legacy from many other structural variables. Also, the analysis within the EU enables comparison of party systems of post-communist democracies with a control group of other EU countries (consolidated democracies), offering a systematic analysis of the regime's impact on party systems.

Second, most prior research focuses on short-term post-transition effects. The number of studies that investigated how authoritarian background affects party systems and ideological structuring were conducted in the 1990s or early 2000s or in more recent years, but used data from the 1990s and 2000s (Kitschelt, 1992; Kitschelt, 1995; Kitschelt et al., 1999; Freire, 2008; Freire & Kivistik, 2013; Freire & Kivistik, 2016; Freire & Kivistik, 2018; Dinas & Northmore-Ball, 2020). In contrast, conducted in 2024-2025, this thesis brings contemporary empirical

evidence (2010–2024) into a conversation still largely informed by older data or theoretical expectations. By doing so, it updates and refines previous claims, such as those by Dinas & Northmore-Ball (2020), who could not empirically confirm the so-called “anti-dictator bias” in post-left-authoritarian regimes. They showed that due to Soviet indoctrination, older cohorts tend to support more left-leaning positions, while younger cohorts support right-leaning positions. In particular, based on these findings, a study with more recent data should confirm their hypothesis about the marginalization of the left in democracies preceded by a left-authoritarian regime, as the electorate is changing over time.

Third, while scholars have widely explored mass attitudes and regime support in post-communist countries, there is a lack of research that systematically examines the structure of party systems in democracies after authoritarian rule. This thesis investigates the effects of a left-authoritarian regime on party polarization and the ideological center of party systems. Also, while many studies rely on self-evaluations in mass-level survey data or party placements based on voter perception (Freire & Kivistik, 2013; Freire & Kivistik, 2016; Freire & Kivistik, 2018; Dinas & Northmore-Ball, 2020), this thesis uses party-level data based on expert surveys, which provide more stable and ideologically robust values of parties’ positioning.

By addressing these gaps, this study contributes to a deeper understanding of how party systems are structured ideologically in new EU democracies and how historical legacies shape contemporary patterns of competition and representation. Thus, the objective of this thesis is to assess how the legacy of left-wing authoritarian regimes continues to influence the dispersion of political parties along the left–right ideological scale in post-communist EU democracies. The study uses party polarization, weighted average of party positions, and introduces a new concept to examine whether, and how, these systems differ from consolidated democracies in their ideological configuration.

To achieve the research objective, the following **research question** was posed: How does the dispersion of parties on the left–right ideological scale in democracies transitioned from left-authoritarian regimes in the late 80s or early 90s differ from consolidated democracies within the EU? To answer this question, the study examines the weighted ideological center of gravity of a party system (Country Ideology) and party system polarization (Dalton Polarization). For a deeper understanding of the pattern, it is also important to investigate the trend over time, so the following research sub-questions were formulated:

1. **Country Ideology:** How does the ideological center of gravity of the party system on the left-right scale in democracies transitioned from left-authoritarian regimes differ from consolidated democracies within the EU?
2. **Dalton Polarization:** How does the party system polarization on the left-right scale in democracies transitioned from left-authoritarian regimes differ from consolidated democracies within the EU?
3. **The trend over time:** How does the ideological center of gravity of the party system and party system polarization change over time (2010–2024) in democracies transitioned from left-authoritarian regimes, compared to consolidated democracies within the EU?

Based on the previous studies and their finding, I argue that the dispersion of parties on the left-right scale of new democracies preceded by a left-wing authoritarian regime will differ from that of consolidated democracies, as manifested by a simultaneously more right-leaning Country ideology and a lower level of Dalton Polarization. To capture the simultaneous effect on these two concepts, I introduce and operationalize the Right-Wing Concentration concept. This study provides a novel analytical tool to capture the interaction between the two main variables. This enables a more holistic understanding of how parties are arranged ideologically and how that distribution is conditioned by the past.

The argument of this study is also motivated by the following logic. If communist rule delegitimized the far left, then far left parties will be absent or weak. However, it would not necessarily strengthen far-right parties, as post-communist countries are also new democracies that usually display weaker ideological anchoring (Freire, 2006, p. 163), which reduces the need for a clear ideological distinction between parties. Therefore, I hypothesize that the empirical results will show a rightward shift of the ideological center and more concentrated party polarization in democracies with left-authoritarian legacy than in consolidated democracies with no such legacy. I also expect that this pattern will intensify over time during the first few decades after transition (the timeframe of the research) due to the decline of the electoral segment, which was sufficiently influenced by Soviet indoctrination and exhibits Soviet nostalgia (Dinas & Northmore-Ball, 2020).

To test theoretical expectations, this thesis is empirically grounded on the ParlGov Releases (2010–2024). The datasets cover all political parties that received over 1% of the vote in parliamentary elections across EU member states or gained at least one seat in the parliament.

As the prime focus is not on ideological offer (all parties), but on a parliamentary party system (only parties that gained seats in parliament), I firstly investigate the differences between the two based on 2024 data, and then focus only on parliamentary party systems for longitudinal analysis. ParlGov was selected as the data source because it is widely used, reliable, and provides the necessary values for the calculation of the dependent variables: left-right values of parties' positions in all EU countries based on expert surveys, along with the vote share for all parliamentary elections. Country ideology and Dalton polarization are operationalized as Ideology Index and Polarization Index, respectively, and are calculated based on the left-right values of parties and weighted by the vote share in the most recent parliamentary national elections.

I apply the quantitative comparative analysis within the EU, dividing all the countries into two groups by present or absent Left-Authoritarian Legacy, which is my independent variable. The EU member states that were part of the Soviet Union, the Eastern Bloc, or Yugoslavia are considered to have such a legacy, also referred to as post-communist countries and new democracies<sup>1</sup>. Other EU member states are considered consolidated democracies that are also referred to as well-established, long-standing, or old democracies. Consolidated democracies are used as a control group to investigate the impact of left-authoritarian legacy on the ideological configuration of party systems of the former group of countries. Thus, the scope of EU member states allows the study to contrast democracies that emerged from left-wing authoritarian regimes with consolidated democracies with no such legacy. The choice to focus solely on EU countries increases internal validity by controlling for structural and institutional variables such as democratic consolidation, EU integration, and a number of political, legislative, and economic similarities.

Firstly, I investigate the robustness of the novel concept, Right-Wing Concentration, and its operationalization. Then I compare the ideological range of parties in the group of countries. Further, I conduct the group means analysis, as the independent variable is dichotomous, this approach clearly shows the differences in variables between the groups of countries. I reinforce the results with correlation analysis, plot interpretation, and a deeper discussion on Right-Wing

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<sup>1</sup> As one could argue that this group of countries transitioned from the previous regime over 30 years ago and may no longer be referred to as “new democracies”, I have to mention that this distinguishment is based on the large number of previous studies that use this terminology and the most recent ones emphasize that 30-40 years of liberal democracy is a relatively small period in the context of the state building (Freire & Kivistik, 2013). Also, I use this term in the context of comparison to other EU member states that have mostly much longer periods of democratic regimes. Moreover, this term will be used to emphasize the side effects of the recent democratic transition that influenced the pattern investigated in this paper.

Concentration. I follow with a longitudinal analysis based on all available ParlGov Releases (2010-2015), which is 10 datasets over 15 years. I finalize the analysis by comparing the explanatory power of the historical determinants investigated in this paper and more conventional factors of party polarization, such as the number of parties and the electoral system.

The thesis proceeds as follows. The following chapter lays the theoretical groundwork. It conceptualizes the notion of left-authoritarian regimes, presents a literature review on party polarization and the left-right ideological scale, further discusses findings from previous research on how previous regime legacies shape party systems, and presents conceptualization and operationalization of the three dependent variables – Country Ideology, Dalton Polarization, and Right-Wing Concentration. The next chapter provides a comprehensive overview of the research design and methodology. It defines the scope of the study and the operationalization of the left-authoritarian legacy, justifies the use of ParlGov as a data source, and explains how key indices are measured. It is followed by the presentation and discussion of the results of the empirical analysis. The thesis ends with a conclusion and discussion presenting a summary of the main findings, theoretical implications, and suggestions for future research.

## **1. THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

This chapter provides the conceptual and theoretical foundation for the analysis conducted in this thesis. It explores the key terms, frameworks, and scholarly debates necessary to understand how the legacy of left-wing authoritarian regimes may influence the dispersion of political parties on the left–right scale in contemporary European democracies. The sub-chapter is structured into four sub-chapters. The first starts with defining the core concept, left-wing authoritarian regime, clarifying how it is understood in this research. Next turns to the left-right ideological scale, unpacking its multidimensional nature and its relevance for measuring party positions across time and space. It follows with an overview of theory on how left-authoritarian legacies may influence party systems, outlining both the contributions and gaps of prior studies. Finally, the last sub-chapter introduces and operationalizes the three key dependent variables – Country Ideology, Dalton Polarization, and Right-Wing Concentration (RWC) – that will serve as the main analytical tools in the empirical part of the thesis.

### **1.1. Conceptualization and Prior Studies on Left-Authoritarian Legacy**

Authoritarian legacies continue to shape political systems long after the regimes themselves have fallen. In the context of CEE, one of the most salient historical legacies is that of left-wing authoritarianism, commonly associated with the communist or post-totalitarian regimes that dominated the region from the end of World War II until the collapse of the Soviet Union and Yugoslavia. The political, economic, and ideological characteristics of these regimes left significant marks on political culture, party systems, and ideological alignment, which this paper refers to as the “left-authoritarian legacy”.

The term “left-wing authoritarian regime” refers specifically to regimes grounded in Marxist-Leninist ideology and centralized control over political life, where single-party rule (most notably under Communist Parties) excluded pluralism, repressed opposition, and reshaped socio-political structures according to leftist economic and social ideals. As Dinas & Northmore-Ball (2020, p. 1961) note, even Lenin himself explicitly referred to communism as a “left-wing” ideology, and the regime’s discourse consistently employed left-right language (e.g., “bourgeois right” and “reactionary right”) to distinguish itself from liberal democracies and rightist regimes (Robinson, 1995).

However, the categorization of Soviet-style regimes as “left-wing” is not without controversy. As Freire & Kivistik (2016, p. 293) note, some scholars question the analytical clarity of

applying the left-right divide to totalitarian regimes at all. They mention that Stalinism, for instance, is sometimes characterized as exhibiting right-wing authoritarian traits. Nevertheless, these authors argue that the ideological underpinnings of Soviet communism were indeed leftist, especially in the spheres of wealth redistribution, state-provided social services, and egalitarian policy goals. Thus, despite the authoritarian nature of the system, the regime's ideological frame was fundamentally grounded in left-wing principles.

In this thesis, I conceptualize left-wing authoritarian legacy as the political and institutional inheritance of communist regimes that existed in CEE between approximately 1945 and 1991. This period, shaped by Soviet rule, influence, and the Tito regime, involved the elimination of democratic institutions, the establishment of centrally planned economies, and the monopoly rule by communist parties. This legacy shaped not only the post-communist transformation of public institutions (Hanley, 2011) but also societal attitudes, political discourse, and the structure of competition within party systems even after democratization (Linz & Stepan, 1996; Kitschelt et al., 1999; Jurkynas, 2004; Jou, 2010). This conceptualization also follows Pop-Eleches' definition of legacies as “the structural, cultural, and institutional starting points of ex-communist countries at the outset of the transition” (Pop-Eleches, 2007, p. 910).

To analyze the impact of these legacies, I compare new democracies<sup>2</sup> (countries that transitioned from left-wing authoritarian regimes in the early 1990s) with old democracies – long-consolidated Western democracies with no experience of such regimes. For the purposes of this study, countries such as Spain, Portugal, and Greece, which democratized in the 1970s after right-wing authoritarian rule, are also treated as old, well-established democracies, given the nearly 50 years of uninterrupted democratic consolidation by 2025. This distinction is both conceptual and empirical: Dinas & Northmore-Ball (2020) also use the category “long-consolidated democracies” as a benchmark to compare ideological orientations in new democracies after authoritarian regimes.

Many studies treat post-communist democracies as a homogeneous group, despite evidence suggesting significant variations between former Soviet republics, Eastern Bloc states, and ex-

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<sup>2</sup> Hungary is included in the group of democracies with a left-authoritarian legacy despite its recent democratic backsliding. While Freedom House (n.d.) has rated it as *Partly Free* in *Freedom in the World* (since 2019), a *Transitional or Hybrid Regime* in *Nations in Transit* (since 2020), and *Partly Free* in *Freedom on the Net* (since 2022), it underwent a full democratic transition in the early 1990s and remained a functioning democracy for over two decades. Its inclusion reflects the long-term legacy of left-authoritarian rule, not current regime quality.

Yugoslav countries. Jou (2010) highlights that the nature of communist rule in Yugoslavia differed significantly from that in the Soviet Union, with greater decentralization and ideological pluralism. Similarly, Kitschelt (1995) argues that post-communist party systems develop differently depending on whether they emerged from direct Soviet rule or domestic communist regimes. Thus, I acknowledge that there may be some variations in ideological party systems configuration between these three groups of countries preceded by left-wing authoritarian regimes.

## **1.2. Party System Polarization and Left-Right Scale**

This sub-chapter explores the theoretical and empirical foundations of party system polarization and the use of the left-right scale for understanding political competition and ideological alignment in post-communist democracies. It begins by reviewing the growing importance of understanding political polarization, its causes, and its effects on democratic stability. The first section delves into factors that influence polarization, including the impact of electoral systems and the number of political parties. Following this, the next segment discusses the left-right scale as a single metric for unifying the multidimensional nature of contemporary European politics, emphasizing its enduring significance in polarization studies. Many researchers continue to rely on the left-right scale as a central axis for analyzing party systems, as it remains an essential tool for capturing political competition across diverse political contexts

### **Party System Polarization and its Factors**

The study of political polarization has become central to contemporary political science due to its growing impact on democratic stability. Scholars warn about the rise of polarization (Dalton, 2021) and its impact of polarization on democratic backsliding (Broockman et al., 2023; Graham & Svolic, 2020; Orhan, 2022; McCoy et al., 2018). Studies have also shown that polarization affects voter mobilization, voter turnout (Hobolt & Hoerner, 2020; Dassonneville & Çakır, 2021; Ellger, 2024), and social interactions (Iyengar, 2012). These findings underline the growing relevance of polarization research for understanding both democratic quality and citizen engagement.

To develop policies to mitigate growing polarization, researchers examine various factors that influence the growth of polarization. These include investigation of forces behind the growing appearance of far left and, especially, far right parties (Bischof & Wagner, 2019; Golder, 2016).

The impact of social media and mass media in politics has also been identified as a factor of growing polarization (Barberá, 2020; Hameleers, 2019; Schaub & Morisi, 2020; Bail et al., 2018). Other researchers pay attention to how the structural and institutional factors affect the level of polarization. Curini & Hino (2012) show that the type of cabinet expectations, presidential elections, the electoral salience of policies, and the share of independent voters are relevant factors of party polarization. However, two of the most conventional and most investigated structural factors of party polarization are the electoral system and the number of parties.

Many studies confirmed that countries with majoritarian electoral systems show lower party polarization than proportional representation (PR) systems encourage centrifugal tendencies (Downs, 1957; Sartori, 1976; Cox, 1990; Lijphart, 1994; Dalton, 2021). These studies collectively show that PR systems are positively correlated with higher polarization because they encourage the emergence of a broad range of political parties, some of which may hold more extreme positions. In contrast, majoritarian systems are associated with lower polarization as they tend to promote a two-party system where parties moderate their positions to appeal to the broadest possible electorate. However, a few studies contradict this claim, for example, Bernaerts et. al (2023, p. 158) argue that countries with proportional party systems/consensus democracies tend to have a more compromised political structure and less polarization than majoritarian ones, due to high levels of political inclusion, the institutions of consensus democracies.

The number of political parties in a system is often cited as a significant factor in determining the level of political polarization. Downs' spatial model claims that the higher number of parties will increase the party system polarization as parties need to be differentiated from one another (Downs, 1957). Many fundamental studies on party systems support this claim, arguing that a larger number of parties, often found in PR systems, is associated with greater political fragmentation and ideological party polarization (Sartory, 1976; Lijphart, 1999; Cox, 1997). However, Dalton (2021) finds that other factors, particularly the electoral system, hold stronger explanatory power than the number of parties. Dalton (2008) also emphasizes the importance of the quality of party systems, as while the number of parties may play a role in polarization, it is not the sole or even the primary determinant.

## **Left-Right Scale as a Single Metric of Multidimensionality**

Contemporary European political polarization is characterized by its multidimensionality. The number of studies has investigated the different dimensions and their interrelations (McCoy et al., 2018; Arndt, 2016; Rovny & Whitefield, 2019; Kriesi et al., 2006). These studies state that in addition to the traditional left-right dimension, other dimensions have emerged that increasingly influence modern polarization, sometimes becoming even more significant than the traditional dimension in certain countries.

Researchers provide evidence that the number of issue dimensions increases in Europe. For instance, due to the immigration challenge in EU countries, the cultural dimension is gaining more and more importance in Europe (Kriesi et al., 2006). The study of cultural cleavages has developed through concepts such as the universalism-particularism divide (Damhuis & Westheuser, 2024; Bornschier et al., 2021), the transnational cleavage (Hooghe & Marks, 2018), and the GAL vs. TAN divide (Hooghe et al., 2002). Also, such dimensions as postmaterialism (Crepaz, 1990; Kitschelt & Hellemans, 1990), EU integration (Otjes & Katsanidou, 2017; De Wilde & Lord, 2016), and the liberal-conservative dimension (Pew Research Center, 2014) are gaining importance in Europe.

Despite the multidimensionality of contemporary political polarization, the left-right dimension has long served as the primary axis for understanding party competition and voter alignment in European politics. The use of the general left–right dimension to represent political conflict has deep historical roots in European political development. As Downs (1957) first conceptualized, this axis was understood primarily in economic terms, reflecting differing views on the role of the state in regulating markets and distributing wealth. Further, this general left-right axis gained more meaning due to political transformation and the rise of new political debates and cleavages. Huber & Inglehart (1995) state:

*“The structure of party competition reduces the discussion of these issues to a single dimension. The terms left and right have been used so widely that they are the leading candidates to be used as labels for the two poles of this dominant dimension, almost regardless of its specific content at a given time and place.” (p. 82)*

Over time, however, scholars have demonstrated that the substantive content of “left” and “right” varies significantly across time and space. Thus, the thesis acknowledges that the content of the left-right scale may differ across countries, as some issue dimensions may be

more prevalent and/or the previous regime influenced the understanding of the “Left” and “Right”. For instance, Kitschelt (1992) shows crucial differences between left-right understanding in Western and Eastern Europe. In East European party systems, the Left represents anti-market/authoritarian views while the Right supports pro-market/libertarian ideologies. In Western European party systems, the Left stands for antimarket/libertarian positions and the Right advocates for pro-market/authoritarian principles (Kitschelt, 1992, p. 20).

I follow the logic of previous studies to use a single left-right axis to generalize the complex multidimensional system of party competition. The meaning of left and right is not fixed; rather, it varies depending on the salience of specific policy issues and the historical context in which parties operate. Thus, this thesis aligns with many studies of party polarization, in particular with Dalton's (2021) study. Dalton (2021) used this general dimension to investigate party system polarization and grounded it by the following statement:

*“positions on this [Left/Right] scale summarize the issues and cleavages that structure political competition in a nation. Left/ Right labels are thus general reference points that help people understand and evaluate political parties and other political stimuli.” (p. 2)*

Building upon the idea of a left-right axis as a core dimension for capturing the multidimensionality of party systems, various measurements and datasets have been developed to operationalize this scale across different political contexts and timeframes. Firstly, Castles & Mair (1984), one of the earliest large-scale expert surveys on party positioning, developed a ten-point left–right scale based on expert assessments of parliamentary parties. They emphasized that such expert surveys offer a consistent and cost-effective way of capturing ideological positioning, particularly when mass surveys or manifesto data are unavailable or inconsistent. The scale they proposed ranged from 0 (Ultra-Left) to 10 (Ultra-Right), with intermediary zones 1.25-3.75, 3.75-6.25, 6.25-8.75, corresponding to Moderate Left, Centre, and Moderate Right, respectively (Castles & Mair, 1984, p. 87). Notably, authors pointed out that this scale reflects general ideological judgments, often shared across Western democratic contexts, and is not limited to national definitions of political ideology.

Secondly, Gabel & Huber (2000), through manifesto analysis and factor analysis of policy positions, suggested that the left–right scale is essentially a composite dimension encompassing multiple ideological subdimensions – most notably economic policy, welfare preferences, and

issues related to state-market relations. Further study, Benoit & Laver (2007), has demonstrated that expert surveys tend to produce more reliable and valid estimates of party positioning than manifesto-based content analysis. Their work also shows that in Western Europe, party positions on economic, social, and environmental issues correlate strongly with their placement on the general left–right scale. In Eastern Europe, however, they note a weaker correspondence, with social or economic policies variably driving the left–right divide in some countries. For example, economic issues dominate the left–right classification in countries like Estonia and the Czech Republic, while social policies play a greater role in Hungary or Slovenia (Benoit & Laver, 2007, p. 93).

Thirdly, Huber & Inglehart (1995) conducted a landmark study using expert surveys in 42 countries and reaffirmed the cross-national utility and perceived clarity of the left–right dimension, even in recently democratized societies. They found that political experts across both established and newly formed democracies largely agree on the location of parties along the left–right scale. Despite concerns that new democracies may lack ideological anchoring, authors showed that expert consensus was only slightly lower in new democracies than in long-established ones. This finding validates the use of the left–right dimension even in post-authoritarian and post-communist contexts.

Further, the Chapel Hill Expert Survey (CHES, n.d.; Bakker et al., 2012; Jolly et al., 2022)<sup>3</sup> continues to be one of the most widely used tools for assessing party positions in Europe. Since 1999, CHES has provided data on both general ideological positioning (Irgen) and specific dimensions like economic left–right (Irecon) and cultural GAL–TAN (green–alternative–libertarian vs. traditional–authoritarian–nationalist). These multi-dimensional estimates allow for richer interpretations of party ideologies but also reinforce the continued relevance of a unidimensional left–right scale in organizing party competition. In turn, Comparative Study of Electoral Systems (CSES, n.d.-a)<sup>4</sup> holds the mass-level surveys of ideological self-evaluation and evaluation of party positions. While this mass-evaluation of party positions is widely used by scholars, this data is less stable and less reliable in the context of real parties' stances on the left-right scale than data based on the expert evaluation of parties' ideological placements.

This thesis uses ParlGov Dataverse (ParlGov, n.d.) as the primary empirical database, as it integrates results of expert surveys from different sources, primarily relying on CHES,

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<sup>3</sup> See all CHES Datasets on party positions across Europe here: <https://www.chesdata.eu/ches-europe>

<sup>4</sup> See all Data and Documentation - CSES here: <https://cses.org/data-download/download-data-documentation/>

enhancing the robustness of the datasets. It draws on the classification of left-right positions by Castles & Mair (1984), Huber & Inglehart (1995), Benoit & Laver (2007), and CHES (Irgen 1999, 2002, and 2006), ensuring a reliable allocation of left-right values to parties. ParlGov was selected not only for its widespread use and reliability but also because it provides comprehensive data essential for the empirical analysis in this thesis. The database includes a wide range of valuable measures for over 30 democratic countries across Europe and beyond, as well as results from elections throughout each country's history. This makes it easy to extract the vote shares from the most recent national parliamentary elections of EU countries, with the corresponding left-right values.

Thus, while the general left–right dimension may be an abstraction, it remains the most powerful and coherent way to capture the structuring of political competition, especially when comparing countries with different historical trajectories and institutional frameworks. Its continued application in both advanced and new democracies, supported by consistent expert-based measurement, justifies its central role in this research. So, in this thesis, I use the left–right scale as a common reference point for comparing the dispersion of parties in party systems across post-communist and consolidated democracies.

In Western Europe, socialism is commonly associated with the welfare state, largely due to the success of social-democratic policies in Scandinavian countries (Sartori, 1976, p. 124; Kriesi et al., 2006). In contrast, in CEE countries that experienced communism in the last century, leftist ideologies are associated with authoritarianism due to the link between the left ideology and the previous regime (Kitschelt, 1992, p. 20). Therefore, I argue that democracies preceded by left-authoritarian regimes will exhibit ideological marginalization on the left side of the dimension. The following sub-chapter provides a comprehensive overview of the theory on how previous regimes have influenced the configuration of party systems.

### **1.3. The Impact of Left-Authoritarian Legacies on Party System**

This sub-chapter explores the theory of the impact of left-authoritarian legacies on party systems in post-communist democracies. It begins by providing an overview of foundational theories in post-communist studies, focusing on how the legacies of past regimes continue to influence democratic development, party system structures, and ideological alignment. Then moves on to more specific segments that discuss how left-authoritarian legacies shape the ideological center of the party system, the ideological anchoring in new democracies, and party

polarization. Further, it presents the theoretical foundation for the simultaneous effects of legacies on the ideological center and party polarization, with particular attention to the role of Soviet indoctrination and generational shifts over time. Finally, the sub-chapter addresses gaps in prior research and explains how this thesis contributes to filling these gaps.

### **Foundational Theories in Post-Communist Studies**

The legacies of left-wing authoritarian regimes in CEE democracies continue to shape democratic development, party system structures, and ideological alignment decades after formal regime change. Despite the collapse of communism more than 30 years ago, the institutional configurations, political culture, and social cleavages that emerged under one-party rule have not vanished. Instead, these legacies exert a long-term influence, shaping both elite behavior and citizen orientations in the post-authoritarian era. This segment presents how scholars have approached this issue through different lenses, from regime typologies and transition trajectories to studies of political competition, party systems structure, and salience of political cleavages.

The impact of authoritarian legacies on contemporary democratic systems has been a central concern in post-communist political studies. Seminal works by Linz & Stepan (1996) laid the foundation for understanding how the structural and ideological imprint of past regimes continues to shape party systems, political attitudes, and institutional development in new democracies. Their distinction between totalitarian, authoritarian, and post-totalitarian regimes served as a vital starting point for evaluating the nature of transitions and how past regime characteristics affect democratic consolidation.

A foundational contribution to this debate comes from Kitschelt (1992, 1995), whose work in the early 1990s set the framework for understanding how variations in authoritarian rule influence post-transition outcomes. These studies identified different types of communist regimes – bureaucratic-authoritarian, national-accommodative, and patrimonial – and argued that the degree of centralization, repression, and economic modernization shaped the nature of political competition after 1989. Kitschelt et al. (1999, pp. 19-42, 60-77) demonstrated that bureaucratic-authoritarian systems such as the former East Germany or Czechoslovakia, where ideological control and industrial development were high, were more likely to support programmatic, ideological party systems post-transition. In contrast, patrimonial or clientelist regimes like Romania or Bulgaria, where communism operated through informal networks and

patronage, tended to foster weaker programmatic differentiation and more populist or personalistic party systems. Intermediate cases like Poland and Hungary, characterized by national-accommodative communism and negotiated transitions, occupy a middle ground between these extremes (Kitschelt, 1992; Kitschelt, 1995; Kitschelt et al., 1999).

Further, studies examine how different types of communist legacies affect the electoral success of radical right parties in post-communist Europe. Bustikova & Kitschelt (2009) claim that the structure of communist rule, particularly whether it was national-accommodative or patrimonial, has a long-lasting impact on post-transition party competition. In national-accommodative regimes (such as Hungary or Poland), early party differentiation on cultural issues and social policy compensation mechanisms helped contain public discontent and limited the appeal of the radical right. Conversely, patrimonial regimes (such as Romania or Bulgaria), characterized by low institutional capacity and high inequality, proved to be fertile ground for radical right mobilization, especially in the wake of welfare retrenchment and economic dissatisfaction (Bustikova & Kitschelt, 2009, p. 459).

In addition to regime type, studies highlight the role of ethnic composition in shaping radical right support. Bustikova & Kitschelt (2009) suggest that when a titular majority faces a small and identifiable minority, radical right parties are more likely to gain traction by mobilizing ethno-nationalist sentiments. Their study offers an important comparative perspective by linking institutional legacies of late communism to contemporary party dynamics, demonstrating that inequality, welfare reform, and ethnic tensions interact with regime-type legacies to structure political conflict and ideological competition in the region (Bustikova & Kitschelt, 2009, p. 459).

Scholars also investigate how regime legacies, ethnic divisions, and electoral systems affected the development of party systems based on a detailed account of the Baltic states. Freire & Kivistik (2016, p. 297) argue that Lithuania developed a viable center-left alternative partly because of lower levels of Russian migration and less ethnic tension, whereas in Estonia and Latvia, the left was fragmented and largely excluded from government coalitions, reinforcing a right-leaning ideological bias. These findings underline how both macro-level regime types and micro-level contextual factors interact to shape ideological landscapes in post-communist Europe.

In his comparative study of Slovenia and Croatia, Jou (2010) explores how left–right ideological orientations are structured in two post-communist societies that shared a Yugoslav past and experienced peaceful transitions to democracy. This study contributes to the literature by demonstrating how the contents of left and right in post-communist democracies evolve in response to national trajectories, and that cleavages may be driven more by sociocultural and democratic value orientations than by economic policy (Jou, 2010, p. 98).

### **The Impact of Left-Authoritarian Legacies on the Ideological Center of the Party System**

The ideological alignment of citizens in post-communist democracies is significantly influenced by their historical regime experiences. Markowski (1997) contributes a valuable empirical perspective, arguing that ideological structuration varies considerably across the region and is shaped not only by socio-economic factors but also by historical regime experiences and the pathways to democracy. In post-communist countries, citizens had limited exposure to meaningful ideological debates during communism, receiving instead a simplified view of socialism versus capitalism, which constrained the development of strong left-right political identities. It also affected the different meanings of Left and Right labels in post-communist new democracies compared to consolidated ones. Kitschelt (1992) demonstrates that, unlike Western European systems, where the dominant axis of competition tends to be between anti-market/libertarian and pro-market/authoritarian, East European party systems in the early 1990s were organized primarily along an anti-market/authoritarian vs pro-market/libertarian axis.

The further studies on the conceptualization of left-right divide in post-communist democracies compared to Western well-established democracies elaborated on markedly different aspects. Scholars such as Huber & Inglehart (1995) have argued that in post-communist states, due to the association of the previous regime with socialism and authoritarianism, left-wing ideologies were often perceived negatively, while right-wing positions were often linked to capitalism, political liberalization, and democratization. This contrasts with Western Europe, where the left is commonly associated with the welfare state, progressive values, inclusiveness, liberalization, and democracy, while the right emphasizes free-market capitalism and conservatism, including potential authoritarian tendencies.

While the current study does not delve deeply into the conceptual divergences of left and right across regions, it acknowledges that the positioning of political parties along the left-right

spectrum differs systematically between new democracies (particularly those emerging from left-wing authoritarian regimes) and consolidated Western democracies. Thus, I argue that this distinct conceptualization of the left-right divide acts as an additional factor reinforcing the pattern examined in this research.

Regarding the pattern investigated in this thesis, a substantial body of literature suggests that attitudes toward previous authoritarian regimes are intertwined with citizens' ideological orientations. Freire & Kivistik (2018) investigated how different types of authoritarian legacies, left-wing in the Baltic States and right-wing in Southern Europe, affect citizens' ideological alignment with democracy and authoritarian alternatives. Drawing on longitudinal survey data from 1985 to 2008, their study reveals that citizens who position themselves on the right tend to express stronger negative evaluations of the former Soviet regime and greater support for democracy compared to those on the left. Conversely, in Southern Europe, left-wing individuals are more supportive of the democratic transition and retain more critical views on the previous regime. Although these patterns weaken over time, the study reveals that the attitude toward the previous regime is closely tied to the ideological positioning at the mass level.

Further, Dinas & Northmore-Ball (2020) introduce and empirically test the concept of “anti-dictator bias.” This concept posits that citizens in democracies emerging from authoritarian rule tend to shift their ideological self-placement away from the side of the spectrum associated with the former regime. For instance, in democracies preceded by right-wing authoritarian regimes, individuals are more likely to self-identify on the left, and vice versa. Drawing on a rich dataset of mass-level surveys covering 50 countries over the period from 1970 to 2012, the authors provide cross-regional evidence for this pattern, making their study one of the most ambitious of its kind in terms of scope and temporal coverage. Dinas & Northmore-Ball (2020, pp. 1974-1976) investigating demographic characteristics, found that generational differences play a critical role in democracies following left-wing regimes. Older and younger cohorts exhibit distinct attitudes toward the previous regime and the ideologies it represented. Specifically, the older generation appears to be more pro-left and exhibits support for the previous regime, while younger cohorts demonstrate the opposite pattern. They cite Soviet indoctrination as an explanatory factor.

Empirical results confirmed that in democracies transitioning from right-wing authoritarianism, citizens were more likely to reject far-right ideologies and exhibit stronger

left-leaning preferences (Dinas & Northmore-Ball, 2020). However, they did not find statistically significant evidence of a comparable pattern in democracies that emerged after left-wing dictatorships. They attributed this to generational balancing: the older, more left-leaning cohorts and the younger, more right-leaning cohorts offset each other in aggregate measurements, thus neutralizing the overall effect.

While previous research on ideological divides and implications of prior regimes has largely focused on mass attitudes, this thesis examines these dynamics at the level of the party system. I expect that political parties, in their need to secure sufficient electoral support to enter parliament, will mirror the evolving ideological preferences of the electorate. Thus, the following hypothesis is formulated:

***H1:** Democracies with left-wing authoritarian legacies exhibit a more right-leaning ideological center of gravity of the party system than consolidated democracies without such a legacy.*

### **Ideological Anchoring of New Democracies and Party Polarization**

The scholarly literature examining the ideological consequences of authoritarian legacies in new democracies has increasingly recognized the critical role of regime type, political transitions, and institutional frameworks in shaping citizens' ideological orientations. Freire (2008) explains that ideological and partisan identities are primarily formed through political socialization, which is shaped by age and political experience. However, in countries with authoritarian legacies, where political pluralism was suppressed for long periods, the formation of these identities was significantly constrained. Freire (2008, p. 198) demonstrates that Portugal, Spain, and Greece, after the transition from right-authoritarian regimes, exhibited lower levels of left-right ideological recognition compared to established democracies. Freire (2006) presents empirical results that between Southern Europe (new) and Western (old) democracies, the difference in the percentage of people who were able to position themselves on the left-right scale, was decreasing since the democratic transition of in 1970s. However, in 2002, around 30 years after the regime change, there still remained a significant gap between these two groups of countries.

Among the most relevant contributions to this topic is the comparative work by Freire & Kivistik (2016). This study investigates a number of factors related to the regime change in the Baltic States and in Southern Europe that affect mass ideological structuring. They examine

whether the type of authoritarian legacy, type of democratic transition, and/or the level of politicization of political issues play a decisive role in structuring the left–right divide and its level of ideological anchoring at the mass level. Using mass survey data, Freire & Kivistik (2016) demonstrate that these factors had a significant effect on the level of anchoring in people’s self-placement in the left-right dimension. For example, while Lithuania saw a more pronounced anchoring of the left–right divide due to clearer government alternations, Estonia and Latvia experienced weaker ideological structuring, attributed in part to the blurred salience of socio-economic conflicts and the dominance of ethnic divisions in early party competition.

Furthermore, Rohrschneider & Whitefield (2009) emphasize that the structure of political cleavages in post-communist democracies cannot be understood without acknowledging how parties prioritize ideological issues and the salience of these issues. Their analysis of 87 parties across 13 post-communist European countries shows that although socioeconomic issues dominate, salience varies significantly across national contexts, which creates the illusion of unstructured or *sui generis* systems. Authors argue for a model of structured diversity, where ideological cleavages exist but their expression is filtered through local political and institutional conditions.

In earlier research, Freire (2006) provided a broader conceptual and empirical investigation of left–right ideological identities in new Southern European democracies (Portugal, Spain, Greece) compared to long-established democracies. He tested whether ideological anchoring was weaker in new democracies due to their authoritarian pasts, finding that social identities, rather than traditional class or socio-economic cleavages, play a stronger role in shaping ideological self-placement. Freire's (2006) empirical results revealed that the process of democratic socialization – being raised and politically active under democracy – significantly influences the strength of ideological identities. Also, the findings confirm that age democracy positively correlates with ideological anchoring (Freire, 2006, p. 156).

Building on this foundation, I argue that in post-authoritarian democracies, the formation of partisan and ideological identities is constrained compared to long-established democracies in the EU. New democracies typically suffer from a lack of ideological anchoring due to short democratic experience, weak party institutionalization. Lower ideological anchoring and a less salient left-right divide, altogether, could lead to a decreased level of polarization of the party system as it’s less important for parties to ideologically distinguish themselves. Thus, the following hypothesis was formulated:

*H2: Democracies with left-wing authoritarian legacies exhibit a lower party system polarization than consolidated democracies without such a legacy.*

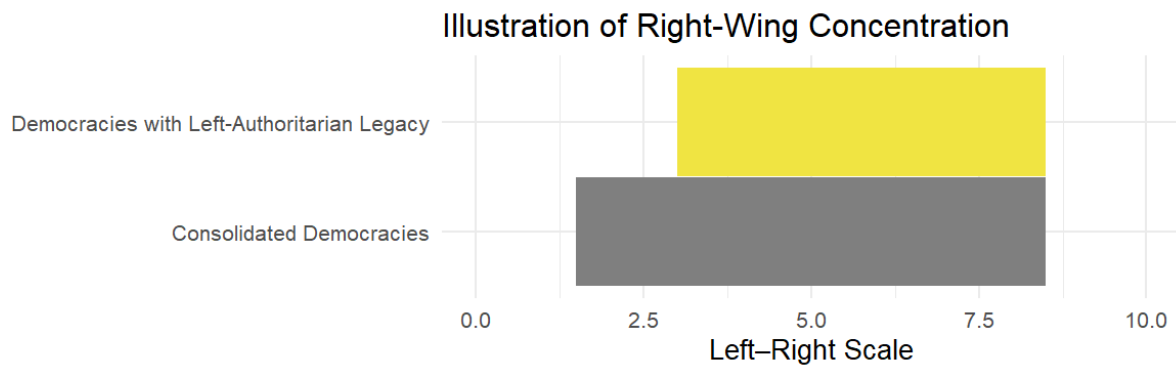
### **Simultaneous Effect on Ideological Center and Party Polarization**

Downs (1957) suggests that parties occupy different policy positions on the scale to distinguish them on the ideological dimension. However, as previous literature suggested, many factors influence the dispersion of the parties on the scale: from structural factors such as the number of parties and the type of electoral system to less investigated, the legacy of the previous regime. If the legacies of a previous authoritarian regime result in the marginalization of the forces associated with it, this can be followed by (1) the rise of forces on the opposite side of the dimension to keep the ideological differences between parties, or (2) no corresponding rise of forces in the opposite side of dimension.

The first suggests that the ideological center of gravity of the party system will show a right-wing shift while maintaining the relatively same level of party system polarization compared to long-established consolidated democracies. The second suggests that the ideological center of gravity of the party system will show a right-wing shift with a simultaneous decrease in party system polarization compared to long-established consolidated democracies. I argue that the empirical evidence should demonstrate the second pattern, due to the effect of regime legacy, and that these democracies are also relatively new. As the age of democracies often correlates with lower ideological left-right recognition and anchoring, allowing party systems to experience a right-wing shift primarily because of the weakening of the far left, and not the strengthening of the far right. Thus, the following hypothesis is formulated:

*H3: Democracies with left-wing authoritarian legacies exhibit simultaneously a more right-leaning ideological center of gravity of the party system and lower party system polarization than consolidated democracies without such a legacy.*

On these grounds, I expect that left-authoritarian legacies weakened or marginalized far-left parties without a corresponding strengthening of far-right parties, compared to consolidated democracies. This dynamic is the central mechanism discussed in this thesis. To explore it, I introduce and define the concept of Right-Wing Concentration, which refers to a shift of the ideological center to the right and a decrease in the spread of parties surrounding that center. *Figure 1* below illustrates the expected range of parties on the left–right scale, visually representing the anticipated party system pattern.



**Figure 1:** Illustration of the Hypothesized Ideological Range of Parties on the Left-Right Scale

*Source:* Created by the author.

### Soviet Indoctrination and Trend Over Time

The role of Soviet indoctrination is an important factor in explaining the generational shifts in ideological preferences observed in post-Soviet countries. Dinas & Northmore-Ball (2020) find strong support for “the anti-dictator bias” in countries that transitioned from right-wing authoritarianism, where citizens often rejected ideology associated with the former regime in favor of more democratic and left-wing positions. However, they find no comparable mechanism in post-communist countries that transitioned from left-wing authoritarian regimes. They attribute this asymmetry to the intensity of the USSR republics and its satellites. They argue that the results of successful Soviet indoctrination have muted or distorted ideological opposition, especially in the early years after regime collapse. They find compelling evidence of a generational divide in post-communist Europe: older cohorts tend to be more left-leaning, likely reflecting their political socialization under the former regime, whereas younger generations lean more to the right, consistent with a rejection of the old order (Dinas & Northmore-Ball, 2020, pp. 1974-1976)<sup>5</sup>.

Although their findings offer important insights into how authoritarian legacies shape ideological identities, the study also has notable limitations<sup>6</sup>. First, the dataset used covers a wide range of countries, but it remains unclear which specific cases are included in the post-communist category, limiting the interpretability of regional patterns. Second, while their data

<sup>5</sup> Similarly, Pop-Eleches & Tucker (2013) suggested that Soviet socialization also impacts civic participation. They showed that the more people were socialized during the communist regimes, the lower level of civic participation they exhibited.

<sup>6</sup> Supplemental material for Dinas & Northmore-Ball (2020) article is available online at the CPS website. To see: <http://journals.sagepub.com/doi/suppl/10.1177/0010414019852699>.

spans a long period (1970–2012), it does not capture the most recent developments in party systems and ideological competition. In turn, this thesis focuses specifically on the period 2010–2024, which corresponds to a few decades after the collapse of the Soviet Union and the democratic transition of CCE. It is within this timeframe that the diminishing influence of Soviet-nostalgic cohorts is expected to enhance the empirical visibility of the expected pattern. Although in an even longer time perspective, the collective memory associated with the previous regime is likely to lose political salience, thus weakening the mechanism, this falls beyond the temporal scope of the present study. Moreover, this thesis conducts an analysis within the EU, addressing the limitations of Dinas & Northmore-Ball (2020) and providing comparable groups of countries while limiting the effects of other factors that could impact the configuration of the party system.

Thus, the impact of Soviet indoctrination is a key explanatory factor for expecting the pattern of rightward shift with decline in party polarization in party systems of post-communist democracies to intensify in the first decades after the regime change and democratic transition. Immediately after the collapse of the Soviet Union, despite the critical attitude of a large part of the population towards the previous regime and the ideology it represented, the electorate still included a significant number of individuals who had been heavily socialized under the Soviet regime. These individuals' beliefs, shaped by decades of ideological conditioning, often demonstrate more favorable attitudes towards left-wing ideas and the former political system – a phenomenon commonly referred to as “Soviet nostalgia”. In contrast, younger cohorts were more critical of the Soviet past and exhibited stronger support for democracy, pro-market reforms, and right-leaning ideologies (Dinas & Northmore-Ball, 2020).

Summarizing, I argue that while Dinas & Northmore-Ball (2020) presented well theoretically grounded hypotheses regarding the marginalization of left forces in democracies preceded by left-authoritarian regimes. However, the limitations of their study, specifically the scope of the study and its timeframe, led to a struggle to empirically verify the mechanism presented for post-left-authoritarian regimes. My thesis draws on more contemporary data (2010–2024) and is geographically focused on EU member states, which share institutional and structural similarities that enhance the validity of cross-country comparisons. I agree that Soviet indoctrination enforced the so-called “Soviet nostalgia” of older cohorts. Dinas & Northmore-Ball (2020) observed that the older generation demonstrates more support for left-leaning ideology, while the younger generation demonstrates more support for right-leaning ideologies.

Based on this observation and considering the voter replacement over time, I expect that the pattern of rightward shift accompanied by a decline in party polarization should intensify during the first decades after the regime change, which is the timeframe of this study. While over a longer historical horizon, the political legacy of the authoritarian regime is expected to fade, thereby weakening the pattern, this study focuses on the temporal window during which its effects are anticipated to intensify. Thus, I present the following hypothesis:

**H4:** *The pattern of simultaneously more right-leaning ideological center of gravity of the party system and lower party system polarization will become increasingly evident over time in democracies that have left-wing authoritarian legacies, as compared to consolidated democracies without such legacies.*

### **Addressing the Gaps in Prior Research**

While existing studies provide valuable insights into the effects of authoritarian legacies on democratic development, three key limitations can be identified in the current literature: (1) the scope of case selection, (2) the timeframe of the data, and (3) the level and type of measurement employed. These limitations restrict the generalizability and relevance of earlier findings, particularly for understanding the current ideological configuration of party systems in post-authoritarian democracies.

First, prior research often suffers from either overly narrow or excessively broad case selection. Some studies rely on small-N qualitative comparisons (e.g., Freire & Kivistik, 2018) or limited regional clusters, while others include large samples across different regions with inclusion of some countries that are not classified as democracies, complicating causal inference. For example, Dinas & Northmore-Ball (2020) examine regime legacy effects across Latin America and Europe, including non-democratic countries at the time their study was conducted (e.g., Russia, Belarus, Venezuela). To enhance analytical precision and internal validity, this thesis focuses exclusively on EU member states, allowing for systematic comparison between post-left-authoritarian democracies and consolidated democracies within a common institutional and legal framework.

Second, the majority of previous studies either focus on the early transition period or rely on outdated data, thereby capturing only the short-term effects of regime change. This leaves unanswered questions about the persistence and evolution of legacy effects over time. For instance, much of the comparative literature on post-communist Europe was conducted in the

1990s and early 2000s, often using data from the immediate aftermath of regime collapse (e.g., Linz & Stepan, 1996; Kitschelt, 1995). In contrast, this thesis uses ParlGov data spanning from 2010 to 2024, with particular emphasis on 2024, to provide an updated empirical assessment of long-term impacts. This allows for the identification of enduring ideological patterns, rather than short-term transitional anomalies. Thus, the thesis contributes to the academic discussion with the findings on the most recent party system developments.

Third, many of the closest studies to this thesis focus on mass-level data, especially self-placement of voters or their perceptions of parties' ideological positions. While this offers insight into political attitudes, it is less suited for measuring the structural configuration of party systems. Moreover, mass-level data is often temporally inconsistent and sensitive to short-term events. To overcome this limitation, this study relies on ParlGov (n.d.) party-level data derived from expert surveys, which provide stable and systematically comparable left–right placements of parties across countries and over time (Döring & Manow, 2024). This approach aligns more directly with addressing the prime interest of this study, investigating the dispersion of the parties in the left-right scale across the EU.

By addressing these three critical gaps, this thesis contributes a more robust and up-to-date analysis of how the legacy of left-authoritarian regimes continues to shape ideological competition and party systems. Focusing on party-level dynamics within the EU allows for a more accurate assessment of long-term legacy effects of previous regimes and offers a novel contribution to the literature on party system polarization, regime legacies, and democratic development in post-communist Europe.

#### **1.4. Dependent variables: Country Ideology, Dalton Polarization, and Right-Wing Concentration**

This sub-chapter introduces the conceptualization of the three key dependent variables used to capture the dispersion of the parties on the left-right scale: Country Ideology, Dalton Polarization, and Right-Wing Concentration (RWC). The thesis adopts Dalton's (2008) conceptualization of polarization, incorporating both ideological dispersion and the quality of party competition. It begins by explaining how Caravaca et al. (2022)<sup>7</sup> define Country Ideology and Dalton Polarization and follows with an introduction to RWC as a novel variable, designed

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<sup>7</sup> The processed dataset, ideology and polarization results can be viewed and found at <https://eupoliticalbarometer.uc3m.es>.

to combine the rightward shift of the ideological center of the party system and reduction of party polarization into a single metric. The RWC score is constructed by Taagepera's logic for multiplicative indexes and is designed to ensure that high values are only assigned when both a rightward ideological shift and low polarization are present.

Different researchers define polarization in various ways. Some focus on polarization at the mass level, others at the party level; some study ideological polarization, while others examine affective polarization. Reiljan (2020, p. 377) defines polarization as “a clustering within the society that divides the population into sizeable groups on opposite sides”. The degree of polarization is determined by the distance between them, the homogeneity within them, and their relative sizes. McCoy et al. (2018, p. 18) define it as a process of social sorting in which people increasingly describe politics as “Us” versus “Them”. Sartori (1976, p. 120) defines polarization as ideological distance, while Dalton (2021, p. 2) argues that “a standard measure of party system polarization is the dispersion of all parties along the Left/Right dimension”. In addition to dispersion, Dalton also highlights that it is important not only to take into account the number of parties, but also their quality (Dalton, 2008).

This paper adopts Dalton's (2008, 2021) conceptualization of party system polarization, referred to as Dalton Polarization. It's one of the key measures to analyze the ideological configuration of party systems. Dalton's approach, which was first introduced in his 2008 work, emphasizes that party polarization is the ideological spread of parties around the weighted average of parties' left-right positions. Following Caravaca et al. (2022), the weighted average of parties' left-right positions is conceptualized as Country ideology, representing the ideological center of gravity of the party system.

Dalton Polarization, therefore, captures the degree to which parties are ideologically spread around the system's center of gravity. Unlike earlier fragmentation measures that only counted the number of parties (e.g., Laakso and Taagepera's Effective Number of Parties<sup>8</sup>), Dalton (2008) emphasized that the quality of party competition is often more consequential than the quantity. He introduced the Polarization Index, which incorporates both the distance of each party from the ideological center and its vote share, thereby offering a nuanced measure of how ideologically divided a political system is. A value of zero means that all parties are clustered in the same ideological space, while a value closer to ten reflects deep polarization, where votes

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<sup>8</sup> Presented in Laakso & Taagepera (1979) study.

are concentrated at opposing extremes of the spectrum. This Index, formally called the Party System Polarization Index, is widely utilized, in particular in CSES Modules 1–4 (CSES, n.d.-b).

Following the same logic in this thesis, the Dalton Polarization concept is operationalized as the Polarization Index and is in line with Dalton (2008, 2021) and CSES (n.d.-b). However, unlike Dalton’s measurement of party system polarization, which is based on voter perceptions of parties’ left-right positions extracted from CSES (Dalton, 2008, p. 899; Dalton, 2021), I rely on the ParlGov database, which provides left-right party positions based on expert surveys.

Country Ideology is conceptualized as the ideological center of gravity of a party system. As stated by Caravaca et al. (2022), it is calculated as the weighted average of all parties’ positions on the left–right scale, where each party’s score is weighted by its share of the national vote. This measure provides a single, interpretable value that summarizes the overall ideological leaning of a country’s party system – whether it tends to cluster on the left, right, or around the center. In the context of this research, this metric is particularly valuable because it allows for comparisons of ideological trends across time, countries, and by regime legacies.

Country Ideology is operationalized as Ideology Index, ranging from 0 to 10, with a higher value indicating a more right-leaning party system, while lower values indicate a left-leaning one. The formula for the Polarization Index created by Dalton (2008) and used in CSES (n.d.-b) includes a Party system average L-R score, equivalent to the Ideology Index used in this.

Thus, conceptualization and operationalizations of Dalton Polarization and Country Ideology are based on the previous research and are in line with constructed indices by Dalton, presented in his research (2008, 2021) and used in CSES (n.d.-b). These two indices reflect concepts appropriately, which speaks to the validity of the variables. Also, these variables are suitable to investigate how the legacy of left-wing authoritarian regimes has shaped party system structures in European democracies.

Although these two concepts offer valuable insights, they each reveal only a part of the broader picture. Downs (1957, pp. 126-127) presents a spatial model: “in multiparty systems, parties will strive to distinguish themselves ideologically from each other and maintain the purity of their positions”. According to it, if far-left ideological positions are socially or electorally stigmatized in new democracies transitioned from left-authoritarian regimes, then, theoretically, one might expect more parties to shift rightward to maintain ideological distance

from one another. This would make Country Ideology more right-leaning, while keeping Dalton Polarization relatively stable.

However, new democracies are hypothesized to demonstrate weaker ideological structuring, ideological anchoring at the mass level, and less recognition of the left-right scale (Freire, 2008, p. 202). These factors together reduce the need for purity positioning of parties to distinguish themselves ideologically on the left-right scale compared to long-established democracies, allowing parties to be more concentrated and resulting in less polarized party systems. Thus, I argue that if in new democracies, far-left parties are largely absent or electorally irrelevant, far-right parties won't become proportionally more prevalent compared to the older democracies. In the context of democracies preceded by left-authoritarian regimes, it is expected to lead to a concentration of parties around a moderately right center, thereby demonstrating a more right-wing ideological center and reducing polarization compared to consolidated democracies.

To capture the core pattern, I investigate in this thesis the simultaneous rightward ideological shift and reduction in party system polarization in post-authoritarian democracies, I introduce a third concept – Right-Wing Concentration (RWC). RWC serves as a way to combine these two dynamics into a single metric. The RWC score is calculated using the multiplicative logic of index construction proposed by Taagepera (2008), who emphasized that when two dimensions jointly amplify an effect, their interaction is best expressed multiplicatively rather than additively. He also clearly explains why indices should be multiplicative when dimensions are logically dependent on each other. Thus, RWC is computed by multiplying the Ideology Index by the reversed Polarization Index (ten minus the original value), then dividing by ten to maintain a 0-10 scale. This method allows me to capture the ideological shift to the right, coupled with low polarization, to test the hypothesis of the long-term structural impact of the left-wing authoritarian legacy on party systems.

The logic behind the RWC formula reflects a broader methodological principle emphasized by Taagepera: when two dimensions are meant to reinforce one another, their combination should ensure that a low value in one significantly weakens the overall score. Both dimensions must co-occur to register a strong effect (Taagepera, 2008). In practical terms: when Ideology Index = 0 (or very low), the RWC score will be 0 (or very low); and when Polarization Index reaches 10 (or very high), then reversed Polarization Index will be 0 (or close to 0), resulting RWC score be 0 (or close to 0). This formula ensures that high RWC scores only arise when both conditions are met – a party system is ideologically right-leaning and weakly polarized. If either

condition is not satisfied, systems with high polarization (even if right-leaning) or leftist/centrist systems with low polarization would result in lower RWC scores. Thus, applying multiplication rather than addition aligns precisely with Taagepera's logic: a strong value on one dimension cannot compensate for a weak value on the other.

The inclusion of the RWC is necessary because it captures a distinct empirical mechanism that cannot be observed when Country Ideology and Dalton Polarization are considered separately. A country might have a right-leaning center of gravity but also a highly polarized system (e.g., with both far-right and far-left parties), or it might have low polarization but a leftist or centrist ideology center. Only when both conditions are present – ideological shift to the right with ideological concentration – does the structural imprint of authoritarian legacy become visible. And the RWC offers a concise and clear way to test the core mechanism of this thesis. It complements the existing literature on party system structure and polarization while addressing a gap in how legacies of authoritarianism influence the ideological architecture of democratic competition.

To summarize, Country Ideology and Dalton Polarization are essential as each of them captures distinct but complementary dimensions of party system structure. Country Ideology reflects the overall ideological leaning of the system, allowing researchers to observe shifts toward the left or right over time or across regimes. Dalton Polarization, meanwhile, measures the spread of party positions, offering insight into the extent of ideological competition and fragmentation within a party system. Together, they provide a richer, multidimensional view of party system dynamics than either metric alone. The RWC provides a unique empirical lens to detect ideological realignment with narrowing, following Taagepera's principles of logical quantitative modeling. A country may be right-leaning but highly polarized (low RWC), or centrist with low polarization (also low RWC), so only systems that combine ideological shift to the right and reduced polarization score show an increased RWC, highlighting a pattern invisible in separate indices. This variable offers a concise operationalization of the theoretical mechanism at the heart of my thesis: the legacy of authoritarian rule does not simply produce ideological change, but also constrains the ideological range of democratic competition. All three concepts and their operationalization are built on robust theoretical and empirical foundations, rooted in comparative political science. Together, they form the empirical core of this thesis.

## 2. RESEARCH DESIGN AND METHODOLOGY

This chapter outlines the research design and methodology. It begins by specifying the scope of the research and defining the operationalization of the left-authoritarian legacy, which is the key independent variable in the study. It then justifies the decision to use the ParlGov datasets, explaining their relevance and advantages for analyzing party system characteristics and ideological polarization. The third section focuses on the operationalization of the ideological offer and the parliamentary party system composition, outlining the coding and measurement processes used in the study. The subsequent sections detail the operationalization of the three dependent variables: country ideology, Dalton polarization, and right-wing concentration, with a specific focus on the methods used to calculate these indices. The goal is to provide a transparent and replicable framework that ensures the validity and reliability of the research findings.

### 2.1. The Scope of the Research and Operationalization of Left-Authoritarian Legacy

This thesis focuses exclusively on EU member states, offering a coherent and institutionally consistent set of cases for comparative analysis. The EU provides a unique political environment where member states share common democratic norms, regulatory frameworks, and institutional standards, shaped through years of economic, legal, and political integration. This level of cohesion makes EU states particularly suitable for isolating the effects of historical legacies, such as authoritarian regime backgrounds, while minimizing confounding factors related to institutional variability, economic underdevelopment, or geopolitical divergence.

The decision to focus on EU countries is based on three considerations. First, institutional homogeneity: EU member states share common democratic principles, political processes, and institutional frameworks mandated by EU membership criteria, making them comparable as a single group. Second, economic and social integration: The EU's economic integration and regulatory frameworks create similar external constraints and opportunities, reducing variability due to external economic or geopolitical factors. Third, party system structuration: EU countries generally exhibit structured party systems where the left-right ideological dimension is salient and well-documented, in contrast to some non-EU post-communist countries where issue-based or charismatic voting may dominate.

The independent variable in this thesis is the Left-Authoritarian Legacy, defined as the presence or absence of a left-wing authoritarian regime prior to a country's democratic transition. It is operationalized as a dichotomous variable, coded as 1 for countries that experienced left-wing authoritarian rule between the end of World War II and democratization in the late 1980s or early 1990s, and 0 for countries without such a legacy. This variable captures the long-term societal, institutional, and political effects of communist governance. Most of the countries included in this group joined the EU during the 2004 "Big Bang" enlargement, which marked the EU's major eastward expansion; Bulgaria and Romania followed in 2007, and Croatia joined in 2013. Within the EU, countries with a Left-Authoritarian Legacy are Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Slovenia, and Croatia<sup>9</sup>.

While these eleven cases are grouped under the shared category of left-authoritarian legacy, they differ meaningfully in the nature, duration, and structure of their former regimes. The Soviet republics, the Eastern Bloc states, and the Yugoslav successor states followed distinct communist paths: some countries experienced prolonged direct Soviet rule, while others maintained formal sovereignty under Soviet influence or developed their own distinct communist trajectories. These varied experiences of left-authoritarian governance help explain the nuanced differences in post-transition ideological patterns across the region.

The post-Soviet republics (Estonia, Latvia, Lithuania) were fully incorporated into the Soviet Union, experiencing direct Soviet governance and the loss of national sovereignty. These historical conditions are typically associated with a deeper ideological rupture following independence and a pronounced rejection of the far left in public and party discourse (Freire & Kivistik, 2018).

In contrast, the post-Eastern Bloc states (Poland, Hungary, Romania, etc) retained formal sovereignty throughout the Cold War but were ideologically aligned and politically subordinate to the Soviet Union. While their communist regimes were implemented through domestic party structures rather than direct Soviet administration, these countries functioned as Soviet satellites and adopted similar institutional and ideological models (Kitschelt, 1995). These regimes were strongly shaped by Soviet-style governance, though their legacy effects may differ in intensity and form compared to the post-Soviet republics.

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<sup>9</sup> Classification of EU countries by Left-Authoritarian Legacy presented in *Appendix 1*.

Lastly, Slovenia and Croatia – successor states of Yugoslavia – experienced a different model of left-authoritarianism under Tito (ruling Yugoslavia from 1945 until his death in 1980). The Yugoslav communist system was decentralized, nationally developed, and liberalized from the 1970s onward (Jou, 2010), which may have produced distinct post-transition dynamics compared to the post-Soviet and Eastern Bloc states with more centralized and externally imposed regimes.

While these distinctions are not used for formal subgroup analysis in this study, they offer important historical context for understanding the diversity of communist legacies. Acknowledging these differences enhances the interpretation of cross-case variation in party system trajectories without fragmenting the main conceptual groupings, which is especially important in a quantitative approach where the inclusion of overly small groups may dilute statistical clarity and compromise empirical results and comparability.

To assess the influence of legacy effects, these eleven countries are compared with sixteen consolidated EU democracies that did not experience left-authoritarian rule. This control group includes countries with long-standing democratic traditions, such as Germany, France, Sweden, and the Netherlands, as well as Southern European states like Portugal, Greece, and Italy. The latter three countries transitioned from right-wing authoritarian regimes with the unfolding of democratization processes between 1974 and 1975, marking the beginning of the so-called third wave of democratization. Portugal's transition took place after a military coup and a revolutionary process dominated by leftist forces in April 1974; Greece democratized in November 1974 after the fall of the military junta following a failed intervention in Cyprus; and Spain transitioned to democracy in November 1975 through negotiated pacts between liberal elites and the leftist opposition after Franco's death (Freire & Kivistik, 2016, p. 296-297). These transitions took place earlier and under different conditions, in contrast to the new EU member states from Central and Eastern Europe, which have undergone more recent transitions and have different post-authoritarian trajectories. In addition, all three countries joined the EU before the mid-1980s, which allows categorizing them as consolidated democracies in this thesis.

This results in a total of 27 cases: 11 democracies with a left-authoritarian legacy and 16 consolidated democracies. The inclusion of only EU member states ensures that all cases operate under similar institutional pressures and are exposed to the same supranational legal and political norms, limiting the number of other factors that could affect the results of the

analysis. Moreover, the EU context offers a unique environment where party system data is more systematically available, particularly for expert-coded ideological scores.

The scope of this research offers several key advantages. Prior studies have either employed small-N comparisons, such as case studies contrasting Baltic states with Southern European countries, or large-N quantitative approaches spanning multiple regions and time periods (Freire & Kivistik, 2018; Dinas & Northmore-Ball, 2020). These designs often suffer from trade-offs: small-N studies allow for in-depth contextual analysis but lack broader generalizability, while large-N studies risk reduced internal validity by grouping together highly dissimilar regimes and political environments.

In sum, this study applies consistent time coverage, coding rules, and case selection criteria to a focused set of EU member states, enabling a more internally valid and balanced analysis. First, it enables a meaningful comparison between new and long-established democracies within a consistent regional and institutional setting. Second, it allows the analysis to bridge the limitations of small-N and large-N designs, offering a middle ground: it increases the number of cases for generalization while maintaining a structured and comparable set of cases.

### **2.3. Methodological Rationale and Strategy of the Empirical Investigation**

This thesis employs a quantitative comparative analysis<sup>10</sup> to investigate how left-authoritarian legacies influence the ideological configuration of party systems within the EU. The research strategy is guided by a structured comparison between countries with a left-authoritarian past and consolidated democracies. The aim is to determine whether and how this legacy impacted the dispersion of the parties on the left-right scale, through the scope of Country Ideology, Dalton polarization, and their interplay through RWC.

To examine the effects of left-authoritarian legacies on party systems, this study introduces three key dependent variables: Country Ideology, Dalton Polarization, and Right-Wing Concentration (RWC). The first two are drawn from existing scholarship (Dalton, 2008; CSES, n.d.-b; Caravaca et al., 2022) and represent the ideological center and spread of a party system. The third variable, RWC, is developed specifically for this thesis and is constructed as a multiplicative index to capture the combined effect of rightward ideological shift and reduced polarization. This approach follows Taagepera's principle that multiplicative formulas are

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<sup>10</sup> All data processing and visualization were conducted in R (version 4.3.2, 2023-10-31), using the following packages: ggplot2, ggrepel, tidyverse, writexl, ggpubr, gridExtra, grid, gtable, broom, and reshape2.

particularly effective for capturing the interaction of two conceptually distinct components in a single, interpretable measure (Taagepera, 2008). The next sub-chapter provides a comprehensive overview of the conceptualization and measurement of each variable.

To ensure the empirical validity of the RWC, the first step of the analysis (sub-section 4.1) presents a detailed overview of the RWC's strengths and weaknesses and includes a test of independence between the CI and PI. For the former, I present a visualization based on a 100,000 simulated party system<sup>11</sup>. For the latter, I conduct correlation and regression analysis based on the real data I use in the subsequent analysis to ensure that there is no redundancy between the input variables. Establishing this independence is important to justify the multiplicative construction of the RWC and its value in this research, which serves as the main tool for identifying ideological asymmetries due to legacy. I am as transparent as possible about how the RWC measure functions, as this step also validates the statistical and conceptual framework on which further comparisons are built.

As the second step of the analysis, I examined the ideological distribution of political parties both among all parties that participated meaningfully in elections and among only those that successfully entered parliament. This follows the logic of Huber et al. (2005) study, which applied a number of electoral parties and legislative ones to examine party attachments and party identification. In parallel, I do a comparison across both groups of democracies, those with a left-authoritarian legacy and consolidated ones, to assess whether the ideological landscape available to voters differs significantly from the one institutionalized through parliamentary representation, and whether these patterns systematically diverge between regime groups. The purpose of this step is to have a clear understanding of the parties' competition and voter preferences and identify potential patterns that differ across countries.

The ideological offer is based on all parties included in the ParlGov database. According to the ParlGov coding rules (Döring & Manow, 2024), the dataset primarily includes parties that received more than 1.0% of the vote share in national elections or gained parliamentary representation, ensuring that minor and irrelevant actors are largely filtered out. This approach enables a comprehensive yet manageable representation of the political options available to voters across countries. So, including all parties allows for the capture of the entire ideological

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<sup>11</sup> The following conditions were created for the simulated party system: number of parties from 2 to 10 parties, ideological left-right positions ranging from 0 to 10, and vote shares from 1 to 100. The coding was performed in R.

offer that voters had access to, including weak, emerging, marginal, or niche ideological forces that may not yet have institutional strength and struggle to gather enough popular support to enter the parliament. In contrast, the parliamentary party system is operationalized more narrowly, including only those parties that secured at least one parliamentary seat following elections. This captures the subset of political actors who successfully transitioned from electoral competition to parliamentary representation, thereby shaping the formal political landscape. Thus, this approach allows for an assessment of how the ideological structure shifts when moving from the parties' ideological offer to the institutionalized party system.

I employ rug plots to visually compare the distribution of parties along the left–right scale in each case. Parties that received more than 1%<sup>12</sup> of the vote but failed to meet the parliamentary threshold will effectively disappear from the plots and are considered “weak” or “marginal”. This will visually illustrate the differences in the range of political parties in ideological offer and in the parliament. Furthermore, I examine and compare the Dalton Polarization, Country Ideology, and RWC within the ideological offer of parties and the parliamentary party system. This comparison aims to answer the questions “How different dispersion of parties in ideological offer from parliamentary party system?” and “Does the RWC score become stronger, weaker, or does it not change at all if we move from including all parties in the calculation to only those that have been elected to parliament?” Although this comparison provides an important context for the transformation of ideological offer into parliamentary representation, the analysis of the trend over time is limited to parliamentary parties, which remain the main focus of the study.

The third step of the analysis examines the group means of the three dependent variables based on the data retrieved from the ParlGov 2024 database, comparing democracies with a Left-authoritarian legacy to consolidated ones without such a legacy. Given the binary nature of the independent variable (technical term is `Left_Auth_Leg`), t-tests are applied to determine whether observed group differences are statistically significant. This method is justified because the point-biserial correlation between a binary and continuous variable essentially mirrors the standardized difference in means. Moreover, in the context of a modest sample size ( $n=27$ ), this approach offers the clearest and most statistically appropriate means to uncover

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<sup>12</sup> Some parties present in the datasets, even if they received less than 1% of the vote or vote share, are absent. They included, for example, those who entered the parliament by quotas for national minorities or as part of a political alliance. To see a detailed overview of parties included in the dataset, find the ParlGov 2024 codebook here: <https://dataverse.harvard.edu/file.xhtml?fileId=10437091&version=1.0&toolType=PREVIEW>

meaningful patterns in how party systems differ across historical backgrounds. This approach directly addresses the research question presented in the very beginning of the thesis: how different the dispersion of the parties on the left-right scale is in new democracies with left-authoritarian legacy compared to consolidated democracies without such legacy.

The fourth step complements the group means analysis with correlation analysis, measuring the strength and significance of the association between `Left_Auth_Leg` and the three dependent variables. These correlations reinforce the results of the t-tests and determine the strength of the relationships between Left-authoritarian Legacy on Dalton Polarization, Country Ideology, and Right-Wing Concentration, contributing to answering the research question. It's complemented with plots of Country positions on the graph, where the x-axis is Country Ideology, and the y-axis is Dalton Polarization.

The fifth step offers a more nuanced exploration of Right-Wing Concentration, the variable most tightly linked to the main hypothesis (*H3*) in the core of this thesis: simultaneous rightward shift and reduction in party polarization in democracies with left-authoritarian legacy. Here, scatterplots map countries' positions in two-dimensional space, Country Ideology and Dalton Polarization, with curved lines indicating Equal-RWC Scores<sup>13</sup>. These graphs not only visualize how party systems are positioned by historical background, but also allow for a deeper understanding of how the hypothesized mechanism manifests itself.

The sixth step presents a longitudinal analysis for the period 2010–2024. Using data extracted from all available ParlGov datasets, this part examines whether and how the dispersion of parties on the left-right scale has been changing over time among EU member states. Here, I focus solely on parliamentary party systems, which is the most reasonable approach. I provide longitudinal results of similar approaches used in the previous steps of the study, which were based only on the most recent ParlGov 2024 dataset. Thus, trends in Country Ideology, Dalton Polarization, and RWC are tracked using group means, correlation analyses, and visualized in plots. I emphasize that the trend over time is best tracked by the group means approach, which is discussed comprehensively. This dynamic perspective is crucial for assessing the persistence and evolution of legacy effects in two to three decades after the regime transition.

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<sup>13</sup> Equal-RWC Score is an RWC value that can be obtained as a result of different combinations of CI and PI. Accordingly, Equal-RWC curves are visual demonstrations of these combinations.

Finally, the seventh step introduces an OLS regression analysis that situates the legacy variable within a broader explanatory framework. It evaluates the relative importance of Left-Authoritarian Legacy compared to conventional variables such as the number of parties and the type of electoral system. Many studies relied on the effective number of parties calculated by the Herfindahl index or the Laakso-Taagepera index to operationalize the number of parties (Hubel et al., 2005; Dalton, 2021). In turn, I operationalize it as the number of parliamentary groups, as it better aligns with the dataset, which is in use, and the approach adopted for parties that enter the parliament as part of a political alliance (see more in the 2.4 sub-chapter). The number of parliamentary groups was taken from IPU Parline (n.d.) for 2022-2023 years, as it corresponds to the last parliamentary elections, which are indicated in ParlGov 2024. The electoral system follows a threefold classification: proportional, majoritarian, and mixed systems (IPU Parline, n.d.; Bormann & Golder, 2013). Only France has a mixed electoral system among the EU, so in fact it is just a proportional/majoritarian divide.

These structural indicators were merged with data retrieved from the ParlGov database (Döring & Manow, 2024) to create a harmonized dataset with new variables. Both simple and multivariate linear regressions were conducted to assess the explanatory power of all three variables for Country Ideology, Dalton Polarization, and Right-Wing Concentration. This step adds significant value by testing whether historical legacy outperforms conventional variables in accounting for patterns of ideological configuration, thereby reinforcing the theoretical relevance and empirical evidence of the thesis.

Taken together, these methodological steps form a coherent and carefully sequenced approach to addressing the research question. By combining cross-sectional comparisons with longitudinal trend analysis, the study captures both the current state and historical trajectory of ideological configurations across EU democracies. The analysis integrates established indicators of party system ideology, such as Dalton Polarization and Country Ideology, with the original Right-Wing Concentration index. These variables are examined using a sequence of statistical techniques that include group means comparisons with t-tests, correlation analysis, data visualization, and multivariate OLS regressions. Each technique is chosen to suit the binary nature of the independent variable and to support the study's comparative logic. This multi-method strategy enables a thorough investigation of how left-authoritarian legacies influence the ideological dispersion of parties in democracies and its dynamics over time.

### 2.3. Operationalization of Country Ideology, Dalton Polarization, and Right-Wing Concentration

This subchapter describes the operationalization of three key variables central to the empirical analysis: Country Ideology, Dalton Polarization, and Right-Wing Concentration (RWC). Operationalization of variables Country Ideology and Dalton Polarization following Caravaca et al. (2022) methodology. Importantly, formulas for the Ideology Index and Polarization Index were created by Dalton (2008) and align with the methodology used by the CSES for their Party System Polarization Index for Modules 1–4 (CSES, n.d.-b). I calculate these indices based on two indicators provided by the ParlGov dataset: the ideological left–right placement of political parties and their vote shares in the most recent national parliamentary elections.

**Country Ideology** refers to the overall ideological orientation of a country's party system, capturing the average position of political parties on the left–right ideological scale. The Country's ideology reflects whether the parties, on average, are more left- or right-leaning. It is operationalized as the **Ideology Index (II)**, calculated as the weighted average of the ideological left-right positions of political parties, using their vote shares as weights. The formula for the Ideology Index (II) is:

$$II_c = \frac{\sum_{i=1}^N \text{VoteShare}_i * \text{PartyLR}_i}{\sum_{i=1}^N \text{VoteShare}_i},$$

where  $\text{VoteShare}_i$  is the vote share and  $\text{PartyLR}_i$  is the left–right position of party  $i$  in country  $c$ .

The Ideology Index ranges from 0 to 10, where 0 represents the extreme left and 10 represents the extreme right. A higher II value indicates a more right-leaning party system. This operationalization is fully aligned with the Party system average L-R score used in CSES for calculation Party System Polarization Index (CSES, n.d.-b).

**Dalton Polarization** measures the degree of ideological dispersion of political parties within a country, considering both their positions on the left–right scale and their electoral strength. It reflects how ideologically spread out or clustered the parties are. Dalton Polarization is operationalized as the **Polarization Index (PI)**, calculated using a formula proposed by Dalton:

$$PI_c = \sqrt{\sum_{i=1}^N \text{VoteShare}_i * \left(\frac{\text{PartyLR}_i - II_c}{5}\right)^2},$$

where  $II_c$  denotes the Ideology Index of country  $c$ , while  $VoteShare_i$  and  $PartyLR_i$  are, as defined above, party vote share and left–right position of party  $i$  in country  $c$ , respectively.

The Polarization Index ranges from 0 to 10, where 0 indicates that all parties occupy the same ideological position, and 10 signifies that the parties are positioned at the extremes of the left–right scale (Dalton, 2008, p. 906; Caravaca et al., 2022, p. 12). The division by 5 serves as a scaling factor because 5 represents the maximum possible distance between the ideological center and the extreme points on a 0–10 left–right scale. This adjustment ensures that the resulting index spans the 0–10 range, enhancing interpretability and comparability across cases (CSES, n.d.-b).

**Right-wing concentration (RWC)** refers to the simultaneous rightward ideological shift of political parties and reduction in party system polarization on the left–right scale. RWC reflects the extent to which a country's party system is both centered more toward the right and less ideologically polarized. The RWC score increases when two conditions are met: the Ideology Index (II) increases (indicating a rightward shift) and the Polarization Index (PI) decreases (indicating lower ideological dispersion). Following Rein Taagepera's logic of **multiplicative index construction** – where interacting dimensions are combined to meaningfully capture a complex phenomenon (Taagepera, 2008) – RWC is operationalized as:

$$RWC_c = \frac{II_c * (10 - PI_c)}{10},$$

where  $II_c$  is the Ideology Index for country  $c$ , and  $PI_c$  is the Polarization Index for country  $c$ <sup>14</sup>.

The Right-Wing Concentration (RWC) score ranges from 0 to 10. A higher RWC score indicates a more right-leaning ideological center combined with lower polarization. A lower RWC score indicates either a less right-leaning center, higher polarization, or both. The division by 10 standardizes the RWC score to fit within the 0–10 range and ensures comparability across countries.

Higher values represent a political landscape where the ideological center is more right-leaning,

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<sup>14</sup>  $10 - PI_c$  is a reversed Polarization Index for country  $c$ , reflecting lower polarization as higher values.

while party system polarization is simultaneously low. Thus, it is designed to capture the hypothesized legacy of left-authoritarian regimes: the marginalization of the far-left without a corresponding mainstreaming of the far-right, resulting in a party system that is more right-leaning and less polarized. It is important to note that low polarization can occur around a left-leaning, centrist, or right-leaning ideological center, and that a rightward shift does not necessarily imply low polarization. Therefore, the RWC score increases only when both conditions are present: a rightward ideological shift combined with ideological concentration (lower polarization). In all other cases – for example, a rightward shift with high polarization, or low polarization centered around the left or center – the RWC score will be comparatively lower.

The RWC score, calculated as a multiplicative function of the Ideology Index and the reversed Polarization Index, follows Taagepera's logic that meaningful compound indices should reflect interaction between conceptually related dimensions and the underlying theoretical construct. A more detailed theoretical discussion of the methodological approach and the reasoning behind adopting this approach for the construction of the RWC score is provided in Subchapter 1.4.

A potential caveat concerns the interdependence of these two components: when the Ideology Index is centered around 5, the Polarization Index can theoretically take its maximum value (10). However, as II approaches the extremes (0 or 10), ideological consensus might naturally constrain polarization, leading to lower PI values. Therefore, one could argue that II and PI are interdependent and that a higher Ideology Index by definition means a lower Polarization Index. This would imply that the RWC score is disproportionately influenced by one component over the other, which would contradict Taagepera's principle that in a properly constructed multiplicative index, neither dimension should dominate the outcome. The first subsection of the analysis (4.1) examines how RWC functions, addressing the concern. And then based on data gathered for the main part of the analysis, draws the correlation analysis between the variables and employs regression analysis to assess the strength of the relationship and the extent to which II and PI explain each other's variation, at least in practice.

It is important to briefly present the results here to reassure the validity of the RWC score. The correlation analysis reveals that the relationship between II and PI is weak and statistically insignificant, indicating that they do not meaningfully constrain each other in the observed dataset. Additionally, a regression analysis using II as a dummy variable confirms that the

variation in the PI explained by it is minimal and statistically insignificant. To further validate the RWC score, three additional regression analyses were conducted to determine how much of its variation is explained by II and PI separately and jointly. The results demonstrate that the RWC score is almost entirely accounted for by its two components, confirming that it accurately captures the combined effect of rightward ideological shift and ideological concentration. A more detailed presentation of these findings is provided in Subchapter 4.1.

RWC is a key analytical tool in this thesis, as it builds on the earlier established measures of Country Ideology and Dalton Polarization to capture their interaction: a simultaneous rightward shift in the ideological center and a decrease in party polarization. This dynamic reflects the main mechanism theorized in the thesis. Specifically, it is expected that in new democracies with left-authoritarian legacies, the far left has been weakened or marginalized without a corresponding rise in far-right party strength. This asymmetry leads to a more right-leaning ideological center with reduced polarization – two patterns that, when examined separately, may not fully capture the interaction effect. The RWC score is designed precisely to address this gap by combining II and PI into a single measure. A higher RWC score thus signals a stronger manifestation of the hypothesized mechanism and serves as the main indicator for evaluating its presence and intensity across cases.

## **2.4. Justification to use the ParlGov as a database source**

### **Overview and Justification of the Selected Dataset**

This study investigates the relatively long-term effects of left-wing authoritarian legacies on the composition of party systems along the left–right ideological spectrum in European democracies, approximately 30–40 years after democratization of those which experienced a left-authoritarian regime. To measure Country Ideology and Dalton Polarization, I employ the ParlGov datasets, as it integrates multiple expert-based measures (including CHES) into a coherent and consistent dataset suitable for comparative political research. ParlGov is widely recognized in the academic community and maintained by scholars affiliated with the University of Bremen and others, making it a reliable and scientifically authoritative source.

ParlGov provides left-right party positions and vote share in the parliamentary elections in a wide number of cases, including EU member states. It offers party-level ideological placements on the left-right scale based on expert surveys rather than public opinion, thereby reflecting more stable and structural ideological patterns rather than temporary public sentiment. These

placements are coded on a 0–10 left–right scale, enabling cross-country comparability and longitudinal tracking. ParlGov provided the most appropriate dataset for the purposes of this thesis, as it also contains the vote share received by each party in the most recent parliamentary elections in every EU member state.

This combination allows me to trace how parties cluster ideologically within countries and how the structure of ideological competition has been influenced by the legacy of previous left-wing authoritarian regimes that preceded the democratic transformation of Central and Eastern Europe after the Cold War. While I primarily use the most recent ParlGov 2024 Release, I also examine trends over time by conducting the same analysis using all available ParlGov Releases for the years 2022, 2020, 2018, 2015, 2014, 2013, 2012, 2011, and 2010 – a total of 10 datasets covering a 15-year period (2010–2024). This makes ParlGov particularly well-suited for investigating long-term patterns in party competition and ideological structuring across European democracies.

I use vote share and left-right party placement, both provided in the “election” sheet, as this ensures data consistency. Vote share refers to the number of percentage points that parties gained in the most recent national parliamentary elections. ParlGov dataset aggregates information on national parliamentary and European Parliament elections across multiple countries. However, for the purposes of this study, only data from the most recent national parliamentary elections of EU member states are used. Data from European Parliament elections and older elections were excluded, as European Parliament elections are widely considered “secondary elections”, characterized by lower voter turnout and different voting behavior, making them less valid for capturing the party system polarization and their ideological center of gravity of national party systems.

Datasets of different releases consist only of those elections that happened before the Release was aggregated and published. Thus, “the most recent parliamentary elections” vary from dataset to dataset, which is necessary to study the trend over time. For Example, the ParlGov 2024 Release includes all elections and cabinets until June 2023. Thus, the last parliamentary elections among the EU member states vary from 2018 to 2023, representing the party configuration one year before the release was published.

### **Handling Coalition Vote Shares and Missing Values**

There were a few cases when some parties ran and entered the parliament as part of an electoral

alliance. In such cases, the following approach was adopted: if parties entered the parliament in an electoral alliance and then split into separate groups, I divide the vote share of this alliance into the vote share for each party of the coalition based on gained seats in the parliament ( $seats/seats\_total\_coal*vote\_share\_coal$ ). In the cases when the alliance didn't split and is a parliamentary group in the parliament, I take into account for analysis only the leading party.

A good example is the 2022 elections in Hungary: 6 opposition parties ran as an alliance, United for Hungary, but then split when they got into parliament. Following my approach, I split the vote share of the coalition into the vote share for each party of the coalition based on the number of seats they got. In the same elections, Fi+KDNP ran and entered the parliament as a coalition, and also considering that ParlGov gives a left-right value to this alliance, I do not divide the vote share of this coalition for each party. However, I do show both parties on a rug plot, as they have different left-right positions and are present in the parliament. I also divide Unity (Összefogás) alliance, which consisted of MSZP, Együtt, Demokratikus Koalíció (DK), and Párbeszéd Magyarországért in the 2014 elections of Hungary. Other cases when I broke the alliance are the Romanian 2008 and 2012 elections, I applied this method to the Democratic Alliance (ADA).

In contrast, during the 2019 elections in Poland, five political groups ran as electoral alliances and continued to function as joint parliamentary groups after the elections. In this case, I do not divide their vote shares in the analysis but plot each party individually on the ideological spectrum (rug plot), as they retained distinct ideological profiles within the coalition. After the 2011 elections in Romania, the major alliances Kukuriku Coalition (SDP, HNS, IDS, HSU) and HDZ-led Coalition (HDZ, DC, HGS) (especially the first one) remained politically coordinated and often acted as single blocs in parliament during the immediate post-election period – thus they were kept as political groups and were not divided into smaller parties.

### **Limitations and Methodological Caveats**

The ParlGov dataset provides valuable insights into the ideological positioning of party systems across European democracies, but it also has limitations that must be carefully considered. First of all, the primary limitation of the ParlGov dataset lies in the limited country coverage and missing ideological data in its earliest releases, particularly from 2010 and 2011. Specifically, the datasets from 2010 and 2011 lack full country coverage or omit key ideological data. For example, Croatia is entirely absent from the 2010–2012 datasets, while

Luxembourg is missing from the 2011 and 2012 releases. Additionally, although Malta and Cyprus are included in the 2010 dataset, they lack assigned left–right values for party positions, so they cannot be used in the analysis. These gaps reduce the comparability and comprehensiveness of the longitudinal analysis in the early years, slightly limiting the consistency of cross-time observations in those specific cases.

Another limitation is the time-invariance of party positions on the left-right ideological scale. While ParlGov offers a stable, expert-based measure of party ideologies, these positions are not adjusted over time to reflect any ideological shifts that may occur during the study period. As Huber & Inglehart (1995, p. 78) note, the positions of parties can evolve, particularly over extended periods, making it crucial to account for these dynamics in political research. The 15-year period covered in this study may see considerable changes in party ideologies, especially among newer parties, which are typically more flexible in their ideological positioning than older, established parties. This presents a limitation for a dataset that employs time-invariant ideological placements, as it fails to capture such shifts, which could impact the study of long-term ideological trends.

Mainstream parties often reinforce stable ideological divides, while niche or new parties are more likely to shift positions to address emerging issues. Rovny & Edwards (2012) highlight that established mainstream parties tend to benefit from the stability of the existing ideological dimensions and focus on defining political conflict along those lines. These parties, which have a stable electorate and predictable coalition partners, often contribute to the “freezing” of party systems along a stable competition axis (Lipset & Rokkan, 1967). In contrast, niche or new parties are more likely to adapt and shift their ideological positions to cater to emerging issues or voter concerns that are not adequately addressed by the mainstream parties (Rovny & Edwards, 2012, p. 60). Thus, the dataset’s reliance on unweighted mean values derived from expert surveys may overlook the nuanced ideological shifts among newer or more flexible political organizations.

Another limitation is that some parties lack left-right values, mostly because these parties are new, weak, or don’t demonstrate any left-right ideology. Such parties could not be included in the statistical or visual analyses and were therefore excluded. Moreover, the use of imputed values—based on the mean for the respective party family—for missing ideological scores may affect the accuracy of the ideological profile, as these estimates, while reasonable, may not fully capture the party’s true position (Döring & Manow, 2024).

As mentioned above, missing vote-share data also posed a limitation. In some cases, parties lacked vote shares because they ran within political alliances; where possible, I allocated vote shares proportionally based on seat shares within the coalition, while others were excluded from statistical analysis but retained in the visualization of parties' ideological distribution on the left-right scale. In both instances, the impact on the overall results is limited, as these parties are generally minor actors.

During the analysis, another limitation became apparent: certain left–right values appear with an unusually high frequency in the ParlGov datasets, raising concerns about data precision and potential over-reliance on fixed or reused estimates. For instance, in the unfiltered ParlGov 2024 election sheet, the value 6 appears 484 times, 7.4 appears 461 times, 1.3 appears 397 times, and 8.7 appears 355 times, while other values occur far less frequently. Even after filtering the dataset to include only EU countries, these values remain disproportionately common – 8.7, in particular, appears 36 times among all the parties and 24 times in the parliamentary ones<sup>15</sup>. This clustering suggests that certain values may be assigned repeatedly, potentially due to rounding, imputation, or estimation conventions. Notably, 8.7 is often allocated to the most right-wing party in a country, raising further questions about its reliability as a distinct ideological marker. Such value repetition may obscure finer variation in party positions and potentially influence measures of the dependent variables used in this thesis.

## Summary

To summarize, this sub-chapter justified the use of the ParlGov as the primary empirical source for examining party system configurations across EU democracies. ParlGov offers reliable, expert-based data on party ideology and vote share, making it particularly well-suited for comparative analyses of party system polarization. Its coverage of both ideological positioning and electoral performance enables the calculation of core indices for Country Ideology and Dalton Polarization, and Right-Wing Concentration score, used throughout the thesis. The dataset allows for cross-sectional and longitudinal analysis of ideological patterns through consistent coding across countries and election years. Special attention was given to

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<sup>15</sup> In the unfiltered ParlGov 2024 dataset, the most frequent left–right values are: **6** (484 occurrences), **7.4** (461), **1.3** (397), **8.7** (355), **2.5** (171), and **6.2** (160). When filtered to include only EU countries and last parliamentary elections for the ideological offer, the most frequent values are: **8.7** (36), **6** (27), **7.4** (22), **3.3** (19), **1.3** (17), and **2.5** (14). In the filtered parliamentary dataset (EU countries only, parties with 1+ seats), the top values are: **8.7** (24), **6** (21), **7.4** (14), **3.3** (13), **1.3** (12), and **2.5** (8). These patterns suggest an unusually high concentration around a few fixed values, especially for extreme or rounded figures like **8.7** and **6**.

methodological choices regarding coalition vote shares, data filtering, and case-specific handling of electoral alliances. While ParlGov offers significant strengths for comparative political research, its limitations include time-invariant ideological scores, imputed values, and recurring use of certain left–right scores, which may affect measurement precision. Nonetheless, its consistency, breadth, and expert-based methodology make it the most appropriate source for the study’s aims.

### 3. ANALYSIS AND RESULTS

This chapter analyzes data from ParlGov 2010-2024 Releases<sup>16</sup> to provide a detailed empirical overview of the most recent developments in party system structure across EU member states. It presents the analysis and results of the research steps conducted. The chapter begins with a verification of the independence of the ideological center and polarization indices (Sub-chapter 4.1), ensuring that the measures used to represent Country ideology, Dalton polarization, and Right-Wing Concentration are valid and reliable. Sub-chapter 4.2 compares the ideological offer and parliamentary party system composition, providing insights into how parties are distributed along the left-right scale and voter preferences. Sub-chapter 4.3 presents a discussion of the group means based on the ParlGov 2024 dataset, interpreting the results and their implications. Sub-chapter 4.4 presents and discusses the results of the correlation analysis, comparing the ideological offer with the parliamentary party system for 2024. In Section 4.5, a deeper analysis of right-wing concentration is undertaken, exploring its distribution and factors contributing to its prevalence across different countries. Section 4.6 addresses trends over time from 2010 to 2024, examining the shifts in the ideological landscape through group means, correlation analyses, and visualizations. Finally, Section 4.7 evaluates the explanatory power of the left-authoritarian legacy, comparing it with other well-established factors of polarization through regression analysis, offering a comprehensive understanding of the factors shaping post-authoritarian party systems and their value. Each step meaningfully contributes to answering the research question by offering a comprehensive picture of how historical regime backgrounds have shaped the dispersion of parties along the left–right ideological scale.

#### 3.1. Verifying the Reliability and Validity of the RWC Formula

##### **Simulated party systems to investigate the functioning of the RWC score**

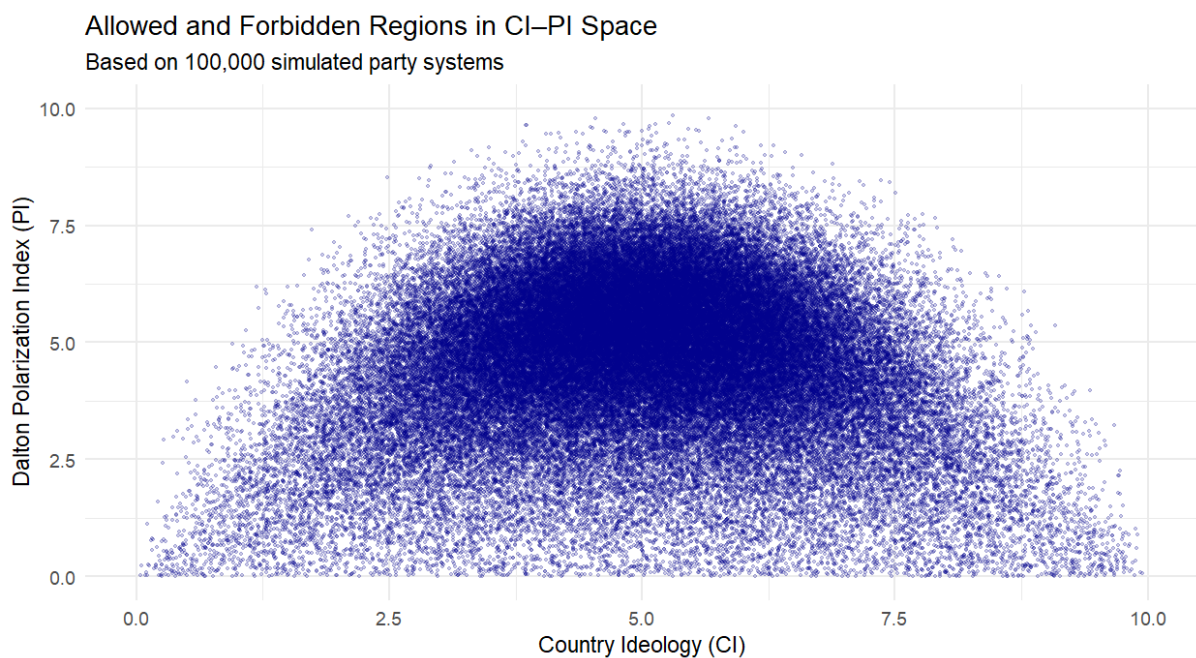
One potential caveat presented in the methodology concerns the construction of the RWC score. It relates to the mathematical and conceptual relationship between its two underlying components: the Ideology Index (II) and the Polarization Index (PI). As it often happens with indices, not all combinations of II and PI are possible. In our case,  $PI = 0$  is possible at any value of II from 0 to 10, but a maximum PI value of 10 appears to require  $II = 0$ . This raises the question: how high can PI reasonably go when II is more extreme, say at 2 or 8? To explore these limitations and assess whether this potential dependency poses a threat to the

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<sup>16</sup> To see: <https://dataverse.harvard.edu/dataverse/parlgov/>

independence of the two indices, I constructed a simulated plot of the possible II–PI combinations.

Using 100,000 simulated party systems with between 2 and 10 parties, ideological left-right positions ranging from 0 to 10, and vote shares from 1 to 100, I created a scatterplot with II on the x-axis and PI on the y-axis (**Figure 2**). The plot shows all simulated configurations (marked in blue), forming a semicircle, with most simulated cases clustered around the center and fewer occurring near the ideological extremes. The white areas on the graph represent theoretically “forbidden” zones – combinations of II and PI that cannot coexist in a real or simulated party system<sup>17</sup>.



**Figure 2:** Allowed and Forbidden Regions in CI-PI Space Based on 100,000 Simulated Party Systems

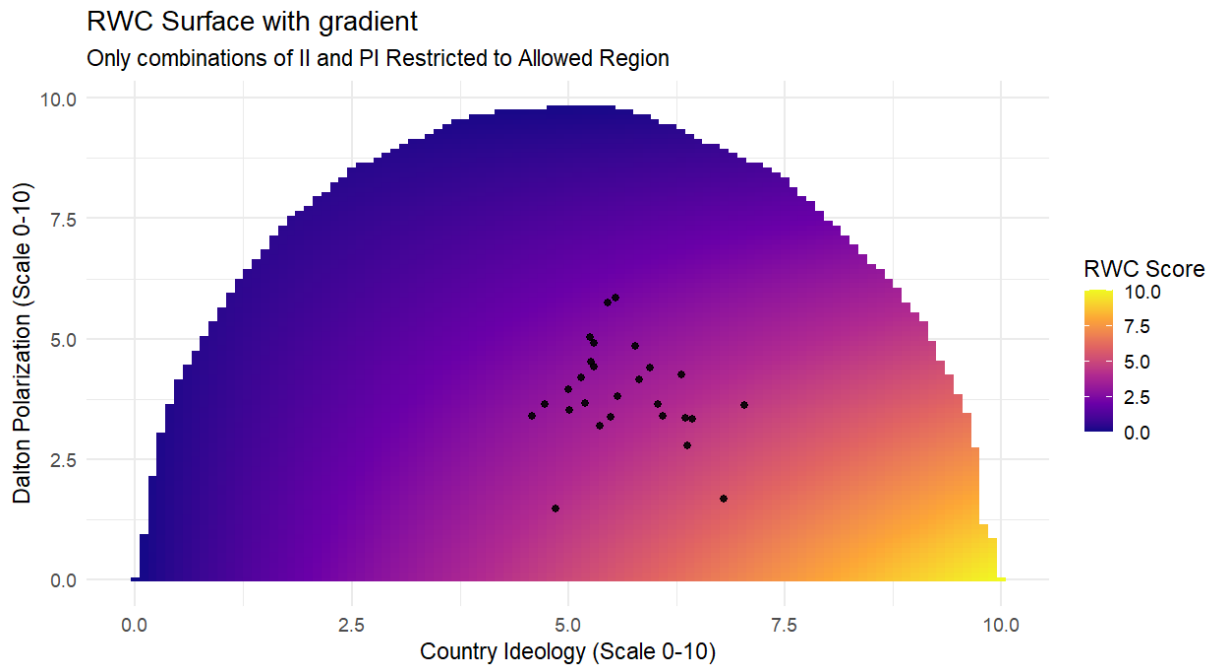
**Source:** Created by the author in R (version 4.3.2) using ggplot2 and tidyverse packages.

I proceed with the creation of the RWC Surface with a gradient (**Figure 3**), for a deeper understanding of how the RWC score function. The gradient transitions from blue (RWC = 0) to yellow (RWC = 10). The plot indicates that higher RWC scores are linked to higher II values and simultaneously lower PI values. This demonstrates a rightward shift and a reduction in polarization, reflecting the underlying concept effectively. The EU countries

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<sup>17</sup> The recommendation to investigate “allowed” and “forbidden” zones was given by Rein Taagepera to improve transparency of the RWC score and clarity of its functioning.

analyzed in this thesis, marked with black dots, are concentrated in the center-right portion of the allowed region, where theoretical combinations are both valid and relatively frequent. This pattern suggests that while a theoretical interdependence exists between II and PI, the real-world data occupy a sufficiently broad and variable subset of the allowed space to merit further statistical investigation.



**Figure 3:** RWC Surface with gradient, with EU positions marked as black dots

**Source:** Created by the author.

### Correlation Analysis based on EU cases

To further assess the empirical relationship between Ideology and Polarization indices, I proceed with a series of correlation and OLS regression analyses to determine whether II and PI are statistically independent in practice. If a strong correlation were observed between the two, the validity of the RWC formula would be compromised, as the RWC score would rely on components that do not vary independently. If no such correlation is observed, it would support the RWC’s validity and its usefulness as a compound measure capturing the interaction of ideological shift and polarization in this thesis analysis.

The correlation analysis was used to analyze the relationship between the Ideology Index and the Polarization Index based on the ParlGov 2024 dataset, among EU member states. Pearson’s correlation coefficient was calculated to measure the strength and direction of the linear

association between these two variables. The results for the parliamentary party system revealed a weak and statistically insignificant correlation ( $r = -0.18$ ,  $p = 0.365$ ). The 95% confidence interval for the correlation coefficient ranges from  $-0.525$  to  $0.213$ , further indicating the absence of a meaningful linear relationship between II and PI. When expanding the analysis to include the entire ideological offer (all parties), the Pearson correlation coefficient between the II and the PI was also found to be very weak and statistically insignificant ( $r = 0.03$ ,  $p = 0.888$ ). The 95% confidence interval ranged from  $-0.355$  to  $0.404$ , again suggesting no meaningful linear relationship between the two indices. These findings confirm that the ideological center of gravity and the degree of party system polarization vary independently in the dataset in both parliament and in the whole ideological offer, eliminating concerns about the dependence between these two components in practical terms<sup>18</sup>.

Next, the relationship between the RWC score and each of its underlying indices was examined, both for the parliamentary party system and for the entire ideological offer of 2024. The correlation between RWC and the II for the parliamentary party system was found to be positive, strong, and statistically significant ( $r = 0.69$ ,  $p < 0.001$ ). This result aligns with theoretical expectations, as the RWC score should increase when the ideological center shifts to the right. For the full ideological offer, the correlation between RWC and II was also positive and statistically significant ( $r = 0.60$ ,  $p = 0.001$ ), confirming that rightward shifts in the ideological center are associated with higher RWC values in both cases.

The correlation analysis between RWC and the PI was also conducted. For the parliamentary parties, a strong, negative, and statistically significant relationship ( $r = -0.83$ ,  $p < 0.001$ ) was shown, suggesting that as polarization decreases, the RWC score increases. For the entire ideological offer, the correlation was a bit weaker ( $r = -0.78$ ,  $p < 0.001$ ), indicating a similarly strong inverse relationship between polarization and the RWC score when considering all parties.

While the RWC score is constructed as a multiplicative index of the Country Ideology Index (II) and the reversed Dalton Polarization Index (PI), the empirical analysis shows that the correlation between RWC and PI ( $r = -0.83$  for parliamentary parties,  $r = -0.78$  for all parties) is stronger than the correlation between RWC and II ( $r = 0.69$  for parliamentary parties,  $r =$

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<sup>18</sup> The Spearman correlation test showed very similar results to the Pearson correlation test. The RWC–II link was slightly weaker ( $r = 0.61$ ;  $p = 0.001$ ), the RWC–PI link was slightly stronger ( $r = -0.86$ ;  $p = 0.000$ ). Most notably, for parliamentary party systems, and the II–PI correlation remained weak and insignificant ( $r = -0.20$ ;  $p = 0.318$ ).

0.60 for all parties). This indicates that, in this particular dataset, variation in polarization contributes slightly more to the variation in RWC than shifts in ideological center. However, this does not undermine the validity of the RWC index. The two components – Country Ideology and Dalton Polarization – remain logically independent, as evidenced by the weak and statistically insignificant correlation between II and PI in both analyses. Both dimensions are theoretically necessary to capture the mechanism of interest: the interaction between rightward ideological shift and reduced polarization. Following Taagepera's logic, the purpose of the multiplicative index is not to ensure equal empirical weight, but it requires that neither component be logically redundant or deterministically tied to the other (Taagepera, 2008). Thus, the RWC score remains a theoretically sound and empirically interpretable measure for the phenomenon investigated.

### **Regression Analysis based on EU cases**

To further verify the independence between the two components of the RWC score, an OLS regression model was estimated with the Polarization Index as the dependent variable and the Ideology Index as the predictor. The results for the parliamentary parties revealed that II does not meaningfully explain variation in PI (adjusted  $R^2 = -0.0058$ ,  $p = 0.365$ ). This finding supports the conceptual independence of the two components: even though the model explains a very small portion of the variation, this relationship is not statistically significant. Similarly, when analyzing the entire ideological offer, the regression showed that II also does not meaningfully explain variation in PI (adjusted  $R^2 = -0.0392$ ,  $p = 0.888$ ), further confirming the independence of the two indices.

Finally, a multiple regression model was estimated with both II and PI included as predictors of RWC for both the parliamentary party system and the entire ideological offer. The model's performance was exceptional in both cases, with an adjusted  $R^2$  of 0.9944 for parliamentary parties and 0.9971 for the full ideological offer, indicating that the two variables together almost perfectly explain the variation in the RWC score. Both coefficients were highly statistically significant ( $p < 0.001$ ), with positive effects for II and negative effects for PI, fully in line with the theoretical concept and construction of the RWC score. These results confirm that the RWC score successfully captures the intended interaction between rightward ideological shifts and reduced polarization, regardless of whether the analysis is based on the parliamentary party system or the full ideological offer.

The correlation and regression analyses thus validate the robustness of the RWC measure. Although Dalton Polarization appears to exert a somewhat stronger independent effect than Country Ideology, both dimensions remain crucial for capturing the mechanism of interest, and their combined influence on RWC is overwhelmingly strong. These findings affirm that the multiplicative logic underpinning the RWC construction is both theoretically and empirically justified in both the parliamentary party system and the entire ideological offer.

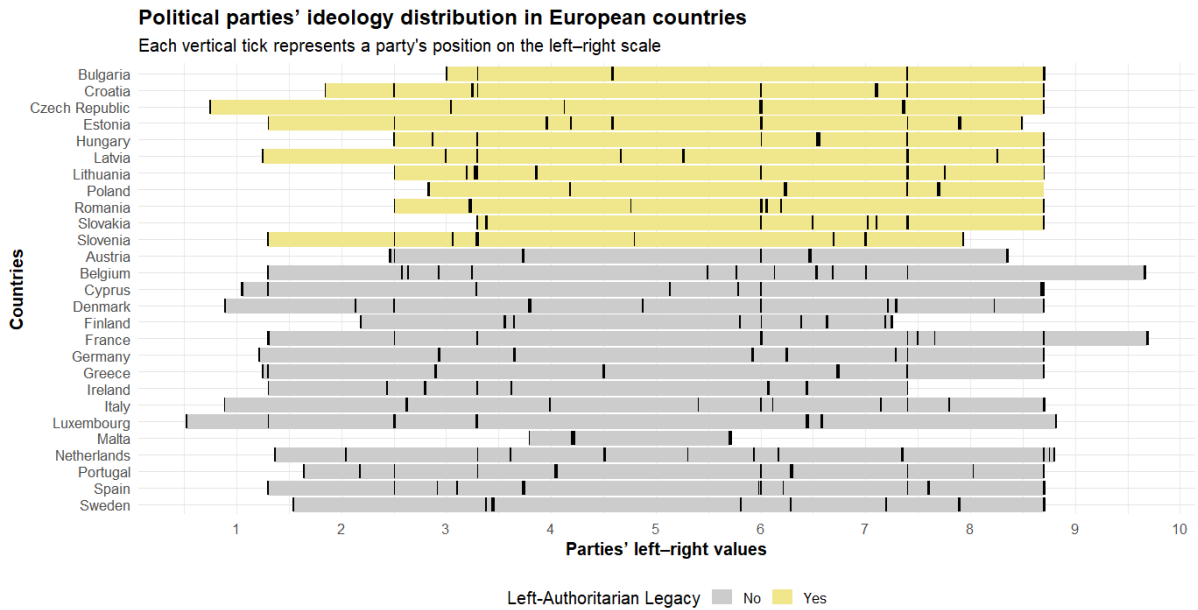
### **3.2. Distribution of Parties on Left-Right Scale**

Before engaging in formal statistical analysis, it is essential to establish a clear visual understanding of how political parties are distributed across the ideological spectrum in European democracies. This sub-chapter provides a descriptive foundation for the quantitative comparisons that follow by contrasting the range of parties in the ideological offer (primarily, all political parties receiving at least 1% of the vote) with the parliamentary party system, which includes only those parties that successfully enter parliament. This comparison is critical because it reveals not only what ideological options are formally available to voters, but also which ones gain institutional representation due to voter preferences.

*Figures 4* and *5*<sup>19</sup> visually compare the ideological configurations of the ideological offer and parliamentary party systems, respectively, across EU member states. In both Figures, the x-axis displays party positions on the 0-10 left–right scale, ranging from far left to far right. Countries are grouped by regime legacy: democracies with a left-authoritarian past are shown in yellow, while consolidated democracies are depicted in grey. Each vertical tick represents a political party, with thicker ticks corresponding to higher vote shares, allowing for a visual assessment of both ideological placement and relative electoral weight.

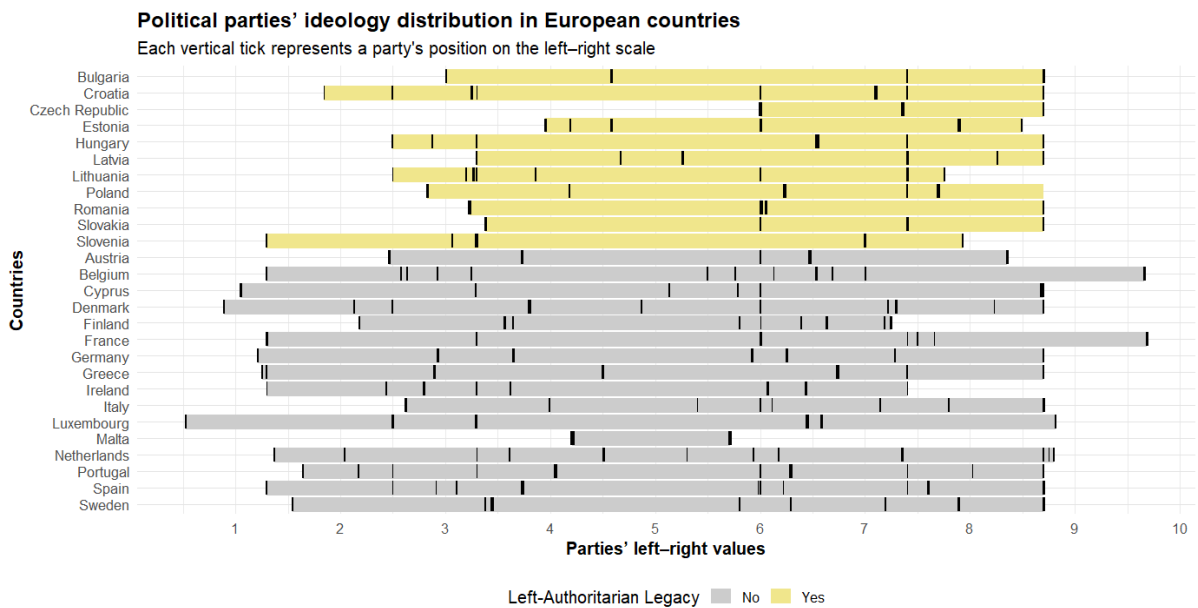
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<sup>19</sup> The limitations of the ParlGov dataset regarding the unusually high frequency of certain left–right values are clearly visible in *Figures 4* and *5*. Particular attention should be paid to the value 8.7, which is disproportionately assigned to the most right-wing party in many EU countries. This pattern raises concerns about potential clustering or estimation conventions in the dataset that may obscure finer distinctions in party ideology.



**Figure 4:** The Ideological Range of Political Parties by Countries: Ideological Offer for 2024

**Source:** Created by the author based on the ParlGov 2024 dataset.



**Figure 5:** The Ideological Range of Political Parties by Countries: Parliamentary Party System for 2024

**Source:** Created by the author based on the ParlGov 2024 dataset.

The first observable pattern is that all countries show a relatively similar ideological range on Figure 4, indicating that a variety of ideological choices in both groups of democracies presented to the public. However, a more revealing pattern emerges when comparing these

electoral offers to the actual composition of parliaments. Figure 4 shows that in democracies with a left-authoritarian past, the parties that enter parliament are more tightly clustered around the center and moderate right. Left-leaning parties, with a score less than 2.5, are often marginalized and absent from the parliamentary system, despite being part of the ideological landscape in many countries. This asymmetry suggests that while ideological diversity exists in the public sphere, it does not translate into parliamentary representation in the same way it does in consolidated democracies<sup>20</sup>.

The Czech Republic offers a compelling illustration of this pattern. In the 2021 parliamentary election, ten parties received more than 1% of the vote, with ideological positions ranging from 0.75 for Communist Party of Bohemia and Moravia (KSČM) to 8.7 for parties like Freedom and Direct Democracy (SPD), Free Bloc (Volný blok), and Tricolour Citizens' Movement (Trikolóra). Despite this wide ideological offer, only four parties entered parliament: Action of Dissatisfied Citizens 2011 (ANO 2011), Civic Democratic Party (ODS), Mayors and Independents (STAN), and Freedom and Direct Democracy (SPD). These four parties are ideologically positioned between 6.0 and 8.7, indicating that the entire left and moderates of the ideological spectrum were effectively excluded from parliamentary representation.

A similar pattern is visible in other cases as Estonia and Latvia. In Estonia's 2023 election, two explicitly left-leaning parties – Estonian Greens (EER) and Estonian United Left Party (EÜVP), with ideological positions of 2.5 and 1.3, respectively – failed to secure seats in parliament. In contrast, the parties that entered parliament represented ideological positions ranging from 3.9 to 8.5. Estonian Reform Party (RE), which won the election and formed the government, held a position of 7.9 on the left–right scale, highlighting the center-right dominance of Estonia's parliamentary party system. Latvia's 2022 election follows the same logic: while 16 parties received over 1% of the vote, covering the full spectrum from 1.25 to 8.7, only seven parties entered parliament with an ideological range from 3.3 to 8.7.

Thus, in democracies with a left-authoritarian legacy, political parties span a wide ideological range, including left-leaning, centrist, and right-leaning positions. However, the composition of parliament is dominated by centrist and right-leaning parties. This indicates that, although left-wing ideologies are present among the electoral options, they struggle to translate into

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<sup>20</sup> The left-right values and the vote share numbers allocated to each party and presented in the discussion here are available in the 2024 dataset I've compiled. It can be found in the Online Appendix, along with datasets for other years.

parliamentary representation. As argued in this thesis, this electoral asymmetry reflects the lasting imprint of authoritarian legacy, which continues to shape party competition and voter alignment in ways that disadvantage left-oriented parties.

In contrast, in established democracies (grey bars), the difference between the two charts is less pronounced. For example, in Germany, France, Spain, Sweden, and other countries, the distribution of parliamentary parties closely mirrors the ideological offer. In Germany, for example, the parliament includes The Left (Die Linke) (far left party, with score 1.21) as well as Alternative for Germany (AfD) (far right party, with score 8.7), alongside centrist actors like the Social Democratic Party (SPD) and Christian Democratic Union (CDU) with left-right scores of 3.65 and 6.25, respectively. In Spain, both Unidas Podemos and Vox hold seats, representing the ideological poles of the left and right. Sweden shows a similar pattern, with the Left Party (V), positioned at 1.55, and the Sweden Democrats (SD), positioned at 8.7, both entering parliament. These examples demonstrate that in older democracies, ideological inclusion is more proportional: parties of various ideological orientations tend to gain sufficient public support to cross the electoral threshold and take part in parliamentary politics.

The observed asymmetry in representation raises the question of electoral thresholds and their influence on the translation of ideological supply into parliamentary outcomes. In CEE countries, electoral thresholds are generally set at a 5% level for individual parties. In contrast, many consolidated democracies either have lower thresholds or employ electoral systems that facilitate the inclusion of a wider range of parties. For instance, the Netherlands has a de facto threshold of approximately 0.67%, allowing for greater parliamentary diversity. Sweden employs a 4% national threshold, while Denmark's threshold is 2%, supplemented by provisions that enable parties to gain representation through constituency seats. Germany maintains a 5% threshold but provides an alternative route to representation by allowing parties that win at least three constituency seats to bypass the threshold. These more accommodating systems enable parties across the ideological spectrum to enter the parliaments.

However, even when taking electoral thresholds into account, it is important to note that many far-left parties in consolidated democracies regularly surpass the 5% threshold and secure meaningful parliamentary representation. For instance, parties such as Unbowed France (FI) in France, the Progressive Party of Working People (AKEL) in Cyprus, the Workers' Party of Belgium (PTB/PVDA), and the Communist Party of Greece (KKE) have all achieved vote shares well above 5%, with some even ranking among the largest parties in their respective

parliaments. Similar trends are observed in Sweden, Denmark, and the Netherlands, where far-left parties such as the Left Party, the Red-Green Alliance, and the Socialist Party consistently cross electoral thresholds and maintain a stable parliamentary presence. These examples highlight that in consolidated democracies, far-left ideologies are not only electorally viable but also consistently institutionally included, underscoring a contrast with post-left-authoritarian systems, where such parties are often structurally and electorally marginalized.

### **3.3. Group Means Comparative Analysis**

In this sub-chapter, I present the comparative analysis of group means of each dependent variable and t-tests to examine the differences between democracies preceded by left-authoritarian and consolidated democracies. These methods are particularly appropriate given the binary nature of the independent variable (technical term for Left Authoritarian Legacy is `Left_Auth_Leg`), which distinguishes between countries that were and were not preceded by left-wing authoritarian regimes.

The use of means comparisons offers several advantages. First, it is statistically justified: when the independent variable is dichotomous, the correlation coefficient becomes a point-biserial correlation, essentially a standardized version of the difference in means. Second, it is substantively more intuitive: presenting differences in average scores allows for a clearer interpretation of how party system structures diverge across historical background, especially in terms of ideological alignment and polarization. Third, given the relatively small sample size of the European Union ( $n = 27$ ), group-based comparisons are more robust and interpretable than complex regression-based techniques.

Nonetheless, I complement this approach with a set of simple bivariate correlations between `Left_Auth_Leg` and the dependent variables (Country Ideology, Dalton Polarization, and RWC) in the next sub-chapter. While group means highlight direction and magnitude of differences, correlations offer additional insight into the strength and statistical significance of the relationships. Together, these two methods provide a robust foundation for assessing whether and how the legacy of left-wing authoritarianism continues to shape the dispersion of parties on the left-right scale in countries.

To examine how the ideological landscape differs between electoral competition and parliamentary representation, *Tables 1* and *2* present the group means of Country Ideology, Dalton Polarization, and RWC for consolidated democracies (Cons Dems) and post-left-

authoritarian democracies (PostLAR Dems). The analysis begins with a comparison of group means within the ideological offer presented in **Table 1** and follows with the comparison of group means within the parliamentary party system presented in **Table 2**.

The findings in **Table 1** offer clear support for the core hypotheses of the thesis. Countries with a left-authoritarian legacy have, on average, a more right-leaning Country Ideology (+0.61), show lower Dalton Polarization (-0.60), and exhibit higher RWC scores (+0.72) compared to consolidated democracies. Importantly, the magnitude of these differences is both substantively and statistically significant, with p-values well below conventional thresholds ( $p < 0.05$ ) for Country Ideology and RWC but for Dalton Polarization falling just short of the conventional 5% threshold. Still, it suggests a pattern of ideologically right-leaning and concentrated party systems in these post-communist countries, confirming that the legacy of left-authoritarianism remains structurally embedded in the ideological configuration of party systems, even more than three decades after the democratic transition.

The differences observed in the group means analysis are more pronounced than those suggested by the visualizations in the previous sub-chapter (**Figures 4 and 5**). This prompts a revision of the earlier claim that the dispersion of parties on the left–right scale in the ideological offer does not significantly differ between the two groups of countries. Instead, the updated interpretation is that the ideological dispersion captured through Country Ideology, Dalton Polarization, and RWC does indeed differ between post-communist democracies and consolidated ones, but not strongly in the ideological offer.

**Table 1:** Group Means and T-tests: Ideological offer for 2024

	Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value
1	Country Ideology	5.35	5.96	0.61	-2.76	0.01
2	Dalton Polarization	4.31	3.71	-0.60	2.05	0.06
3	RWC	3.02	3.75	0.72	-3.79	0.00

**Source:** Created by the author based on data from ParlGov 2024.

**Note:**  $\Delta$  denotes the difference in means between groups of countries.

To assess whether the same patterns hold in the parliamentary party system, which is the main focus of this study, a parallel analysis was conducted. Results, which are presented in **Table 2**, show that the patterns remain directionally consistent with the results within the ideological

offer. The strength and statistical significance of the differences are even stronger. In particular, the difference in Country Ideology demonstrates a bigger magnitude: +0.66 compared to +0.61 among all parties, in ideological offer. Differences between groups of countries in Dalton Polarization here are statistically significant and show -0.92 delta compared to -0.60 among all parties. Also, parliamentary systems exhibit substantially higher differences in RWC scores: +0.97 compared to +0.72 among all parties. Importantly, the magnitude of these differences is both substantively and statistically significant, with p-values well below conventional thresholds ( $p < 0.05$  in all three cases).

**Table 2:** Group Means and T-tests: Parliamentary Party System for 2024

	Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value
1	Country Ideology	5.36	6.02	0.66	-2.78	0.01
2	Dalton Polarization	4.23	3.32	-0.92	2.82	0.01
3	RWC	3.08	4.04	0.96	-3.80	0.00

**Source:** Created by the author based on data from ParlGov 2024.

The results confirm a pattern of rightward shift of ideological center and a simultaneous reduction in party polarization in democracies with left-authoritarian legacy compared to those without. Moreover, the findings indicate that parties are present in a wide ideological spectrum, many left-leaning parties, especially far-left ones, fail to gain parliamentary representation in post-communist democracies. It results in a more evident structural imprint of the authoritarian legacy in the parliamentary arena. These findings are the first confirmation of **Hypotheses 1, 2, and 3**. The next sub-chapters aim to reinforce these findings and get deeper into the details of the dynamics.

### 3.4. Correlation analysis and visualization on 2024 data

To complement the group means comparison, this sub-chapter presents a correlation analysis between the independent variable, Left-Authoritarian Legacy (Left\_Auth\_Leg), and the three dependent variables: Country Ideology, Dalton Polarization, and Right-Wing Concentration (RWC). The purpose of this step is to assess the strength and statistical significance of the relationships established in the previous section, using a different but methodologically appropriate approach. I acknowledge that the independent variable is binary, the relatively small scope of cases ( $n = 27$ ), and that I do not control for a number of other variables that may

affect the correlation. Thus, I classify correlations with  $r > 0.5$  as strong,  $r$  between 0.4 and 0.5 as moderate, and  $r < 0.4$  as weak.

Similarly to previous subchapters, the correlation analysis is conducted in two stages. First, I examine the relationship between variables within the broader ideological offer, and then I focus on the parliamentary party system, which reflects the institutionalized outcomes of party competition and is the core focus of this thesis. This part aims to empirically strengthen the results of the previous sub-chapter.

Table 3 presents the correlation coefficients between Left\_Auth\_Leg and the three dependent variables based on the ideological offer. The analysis reveals moderate correlations in the expected direction for all three variables. The correlation between Left-Authoritarian Legacy and Country Ideology indicates a statistically significant, strong positive relationship ( $r = 0.513$ ,  $p < 0.01$ ). This suggests that post-communist democracies tend to have more right-leaning ideological centers in electoral competition compared to consolidated democracies. For Dalton Polarization, the correlation is  $-0.328$  ( $p > 0.05$ ), which is weak, negative, and not statistically significant at the conventional 5% level. This means that while the trend suggests lower polarization in countries with a left-authoritarian legacy, the result is not strong enough to rule out chance. In turn, the correlation between Left\_Auth\_Leg and RWC shows a stronger positive relationship between the two with even higher statistical significance than between the legacy and Country Ideology ( $r = 0.598$ ,  $p < 0.01$ ). This confirms that the dynamic captured by the RWC – simultaneous rightward shift and reduced polarization – is pronounced in countries with a communist past, considering all parties that participate in the national elections.

**Table 3: Correlation Matrix: Ideological offer for 2024**

	Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy
Country Ideology	NA	$r = 0.028$ ; $p = 0.888$	$r = 0.595$ ; $p = 0.001$	$r = 0.513$ ; $p = 0.006$
Dalton Polarization	$r = 0.028$ ; $p = 0.888$	NA	$r = -0.785$ ; $p = 0$	$r = -0.328$ ; $p = 0.095$
RWC	$r = 0.595$ ; $p = 0.001$	$r = -0.785$ ; $p = 0$	NA	$r = 0.598$ ; $p = 0.001$
Left-Authoritarian Legacy	$r = 0.513$ ; $p = 0.006$	$r = -0.328$ ; $p = 0.095$	$r = 0.598$ ; $p = 0.001$	NA

**Source:** Created by the author based on data from ParlGov 2024.

**Table 4** presents the correlation coefficients based on the parliamentary party system. Here, the relationships are stronger across all three variables than in the ideological offer. The correlation between the presence/absence of Left-Authoritarian Legacy and Country ideology is reflected by  $r = 0.52$  ( $p < 0.01$ ). That means that democracies after left-wing authoritarian regimes are

more likely to have a more right-wing ideological center of gravity of the party system, especially across parliamentary parties, than consolidated democracies with no such legacy. In turn, the relationship with Dalton Polarization is statistically significant and moderately negative ( $r = -0.459$ ,  $p\text{-value} < 0.05$ ). Here, the results show that party polarization in parliamentary systems in post-communist countries is significantly lower than in the control group. Most notably, the correlation between Left\_Auth\_Leg and RWC suggests a robust and highly significant relationship ( $r = 0.63$ ,  $p < 0.001$ ). This means that in countries with a left-authoritarian legacy, the parliamentary party system tends to exhibit even stronger right-wing concentration across groups of countries and the scope of parties.

**Table 4:** Correlation Matrix: Parliamentary Party System for 2024

	Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy
Country Ideology	NA	$r = -0.181$ ; $p = 0.365$	$r = 0.691$ ; $p = 0$	$r = 0.52$ ; $p = 0.005$
Dalton Polarization	$r = -0.181$ ; $p = 0.365$	NA	$r = -0.832$ ; $p = 0$	$r = -0.459$ ; $p = 0.016$
RWC	$r = 0.691$ ; $p = 0$	$r = -0.832$ ; $p = 0$	NA	$r = 0.633$ ; $p = 0$
Left-Authoritarian Legacy	$r = 0.52$ ; $p = 0.005$	$r = -0.459$ ; $p = 0.016$	$r = 0.633$ ; $p = 0$	NA

**Source:** Created by the author based on data from ParlGov 2024.

In sum, the higher correlation between historic background and variables, especially RWC, is demonstrated in the parliamentary party system than in the ideological offer, suggesting that the mechanism under investigation is more pronounced in the parliamentary party system. This indicates that the dynamic right-wing concentration, which is manifested in the simultaneous rightward shift of parties' center of gravity and reduced polarization, is more clearly observable in the parliament than in the overall ideological offer across all parties. In practice, this means that despite the fact that all EU countries have approximately the same spread of parties on the general left-right scale, countries that have experienced leftist authoritarian regimes show a “bias” towards leftist positions, so the spread of parties in parliament is narrowing to the right.

## Visualization

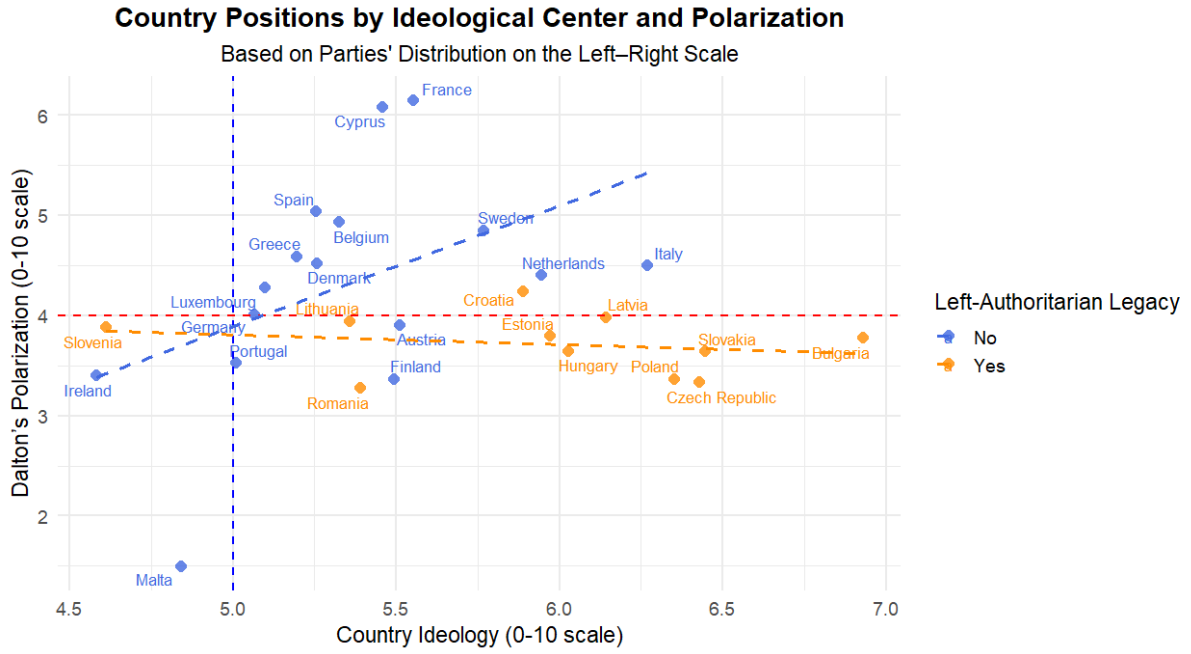
To visualize the results of the correlation analysis and gain a deeper understanding of the interaction between the variables, I've created **Figures 6** and **7** that show Country Positions, where the horizontal axis represents Country Ideology, while the vertical axis represents Dalton Polarization. Democracies transitioned from left-authoritarian regimes, are marked with orange dots, while consolidated democracies are marked in blue. **Figure 6** is based on the ideological offer, while **Figure 7** is based on the parliamentary party system.

Both Figures reveal that, with the exception of Slovenia and Croatia, all new democracies are clustered in the lower right corner of the plot ( $II > 5, PI < 4$ )<sup>21</sup>. This clustering indicates a more right-wing ideological center of countries and a relatively low level of party system polarization. This pattern suggests a general trend in parties' dispersion: parties in democracies that transitioned from left-authoritarian regimes tend to adopt more right-leaning ideological positions and exhibit lower levels of polarization, in comparison to consolidated democracies. The visuals provide confirmation for **Hypotheses 1 and 2**, and, particularly important, for **Hypothesis 3**.

Overall, the relationship between ideological center and polarization reveals important distinctions in how party systems differ between the investigated groups of countries. The trend lines show that in consolidated democracies, a more right-leaning ideological center also means a higher polarization (as right-wing populist parties emerge in some countries, increasing the spread of parties), but in post-communist democracies, more right-leaning ideology is associated with lower party polarization. Interestingly, one would expect consolidated democracies to have a peak of Country Ideology around 5, but it is closer to 5.5, indicating that consolidated democracies are slightly more right-leaning than simply being positioned around the center. This is also shown in *Tables 1 and 2*, where the Group mean of the consolidated democracies is 5.35-5.36.

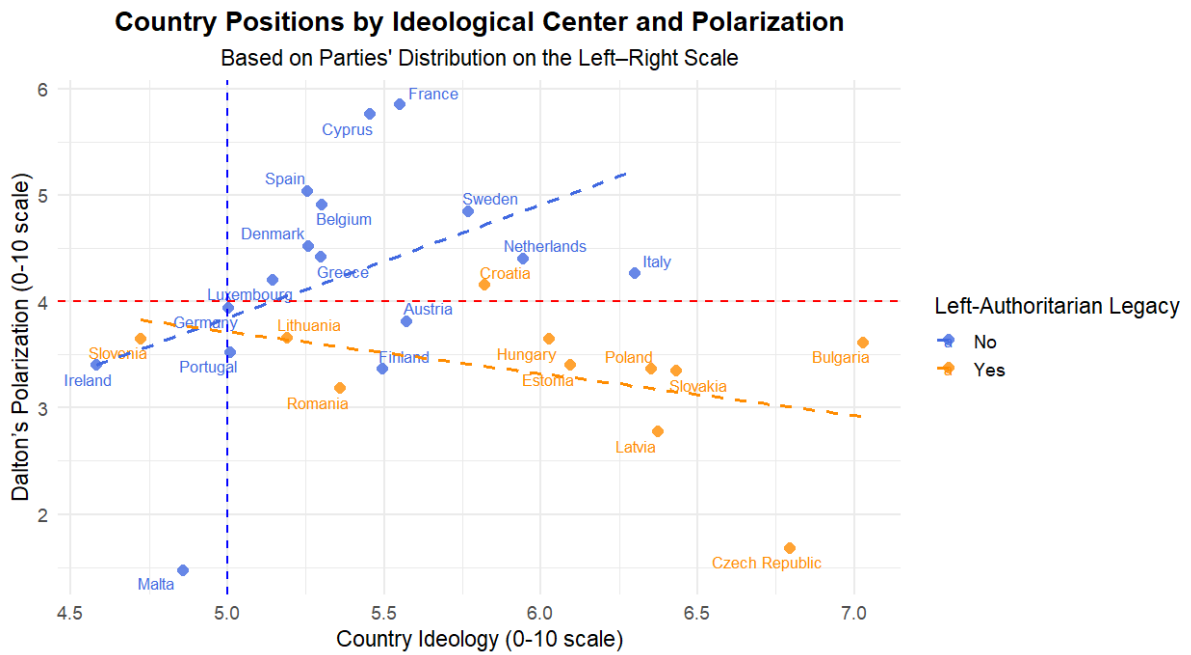
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<sup>21</sup> Dividing the plot into four parts using  $PI=4$  and  $CI=5$  follows the division by Caravaca et al. (2022) in a similar plot presented in Figure 9 in their study.



**Figure 6: Country Positions and Trend Line: Ideological offer for 2024**

*Source: Created by the author based on data from ParlGov 2024*



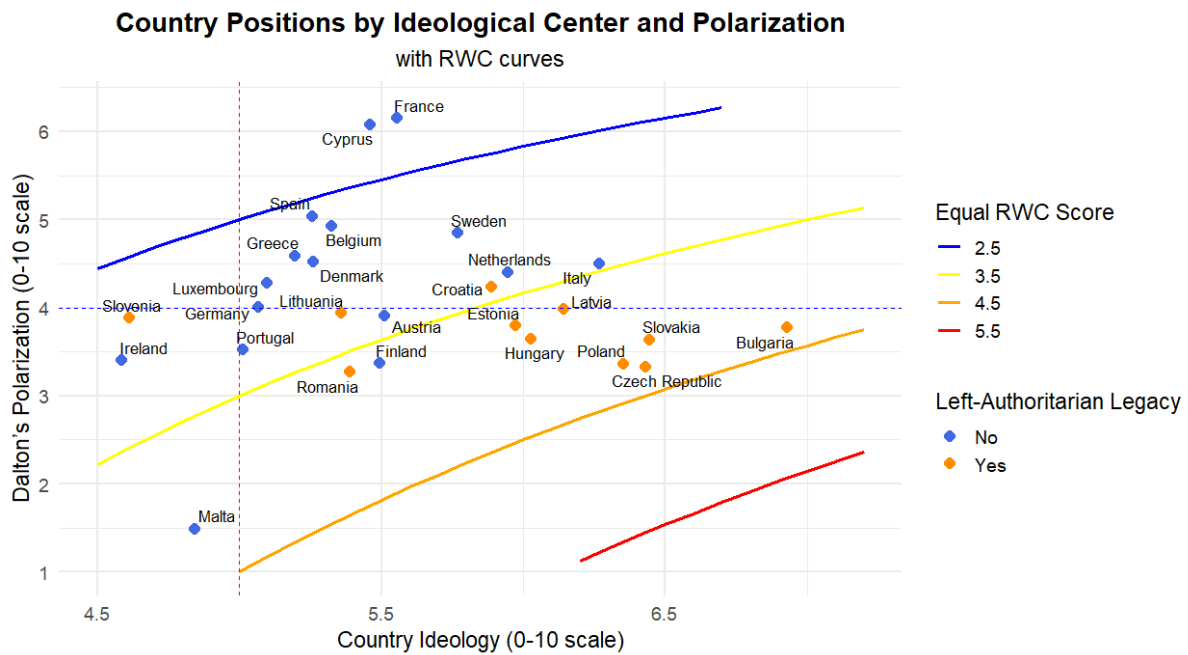
**Figure 7: Country Positions and Trend Line: Parliamentary Party System for 2024**

*Source: Created by the author based on data from ParlGov 2024*

### 3.5. Deeper into Right-Wing Concentration Analysis

This sub-chapter investigates the Right-Wing Concentration (RWC) scores in greater detail by analyzing how countries are positioned regarding Equal-RWC curves on the plot, similarly constructed. Each curved line on the plot represents an Equal-RWC Score, as different combinations of II and PI can produce the same RWC value. The lower curves (blue→red) correspond to higher RWC values. Thus, they demonstrate benchmarks on the plots. For example, the yellow curve represents all dots on the plot of the II and PI combination, which gives RWC Score = 3.5. These charts allow not only to see how countries are arranged on the II-PI graph (what was shown in *Figures 6* and *7*), but also in which range of the RWC they are located. I consider Right-Wing Concentration to be demonstrated if parties are located below the yellow curve ( $RWC < 3.5$ ), and in the bottom right corner ( $PI < 4$ ,  $CI > 5$ ) because the essence of the RWC concept is that countries demonstrate a more right-wing ideological stance and lower party polarization. Countries with Left-Authoritarian Legacy are colored in orange, while consolidated democracies are colored in blue. *Figures 8* and *9* present the country positions based on ideological offer and parliamentary party systems, respectively.

*Figure 8* illustrates that post-communist countries tend to cluster between RWC values of 3.5 and 4.5 (mostly under the yellow line and above the orange one). The plot indicates that Lithuania, Slovenia, and Croatia are situated above the yellow line, suggesting that they experience a lower level of Right-Wing Concentration compared to other new democracies. However, Lithuania is located in the bottom-right corner of the plot, whereas Slovenia and Croatia are not. This positioning suggests that Lithuania can be classified as a country with weak Right-Wing Concentration, while Slovenia and Croatia do not share this classification. Among the consolidated democracies, only Malta and Finland fall below the yellow curve ( $RWC > 3.5$ ). Finland is located in the bottom-right corner alongside a group of countries with a left-authoritarian legacy, indicating that it exhibits a Right-Wing Concentration similar to that of post-communist democracies. Malta, on the other hand, is unique within the EU due to its two-party system, which results in a very low level of polarization and a central ideology, rather than a right-wing concentration. Thus, the plot shows how distinct ideological offers are between an investigated group of countries.



**Figure 8:** Country Positions and RWC Curves: Ideological Offer for 2024

**Source:** Created by the author based on data from ParlGov 2024.

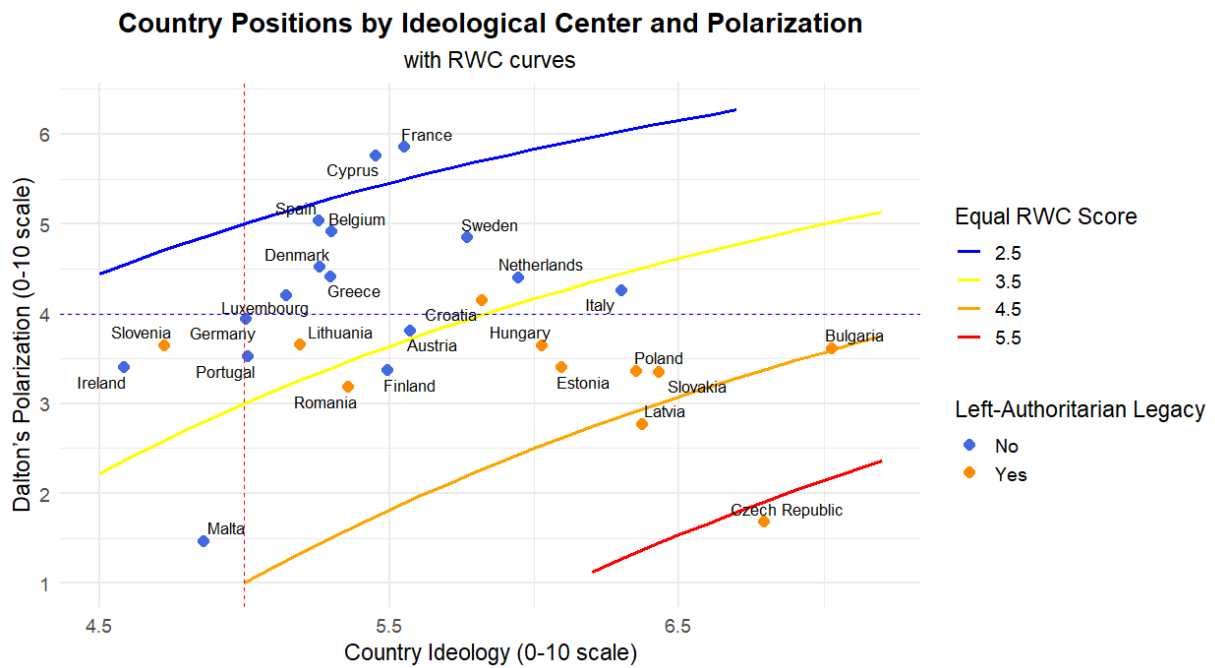
**Figure 9**, based on the parliamentary system, shows that all post-left-authoritarian democracies fall below the yellow line, with the same three exceptions: Slovenia, Croatia, and Lithuania, similarly to **Figure 8**. Let's take a closer look at outliers<sup>22</sup>. Lithuania's WRC value is 3.3, slightly less than 3.5, but it is in the lower right corner of the plot. Lithuania's Country Ideology value is 5.5, and Party polarization is 3.7, so I consider that Lithuania also represents the pattern, like other post-communist countries, but weakly. In contrast to Lithuania, Slovenia and Croatia are not even in the lower right corner of the plot, which suggests that these countries fall more into the group of countries without a left-authoritarian legacy. That's a very interesting finding as Croatia and Slovenia, as part of Yugoslavia in the last century, had a domestic communism under the Tito regime, a higher level of decentralization, and started the democratization process in 70s (Jou, 2010). Thus, communism in Yugoslavia differed in a number of ways from communism in the Eastern Bloc and the Soviet republics, and this explains the absence (or very weak) pattern in these countries, unlike other states with a leftist-authoritarian legacy. In turn, Czechia is positioned even below the RWC = 4.5 curve, indicating an exceptionally narrow and right-leaning ideological structure of the parliamentary party system. That was also very visible in the range of parties on the left-right scale in **Figure 3**.

<sup>22</sup> The Country Indices for Country Ideology, Dalton Polarization, and RWC for all the years of the studied period are presented in **Appendix 2**.

Unlike other consolidated democracies, Malta, Finland, and Italy fall below the yellow  $RWC=3.5$  curve, indicating that their RWC scores are similar to those of democracies with a leftist legacy. Malta is a unique case for the EU, characterized by a party system that is dominated by two main parties: the Labour Party (PL), which is center-left, and the Nationalist Party (PN), which is center-right. Thus, Malta's party system polarization is very low ( $PI = 1.5$ ), and Country ideology is very close to the center ( $II = 4.9$ ). Since independence in 1964, only these two parties have governed, indicating a strongly bipolar political landscape. Third parties exist (e.g., ADPD – The Green Party), but they rarely win seats. This is very much in line with the Downs spatial model, which suggests that in two-party systems, parties will lean toward the center to reach voters in the center and potential ones on the other side due to voter volatility (Downs, 1957). He states that as the number of political parties increases, the party system tends to become more polarized, as parties must differentiate themselves ideologically from others (Downs, 1957).

Italy also falls under the  $RWC = 3.5$  curve due to its right-leaning ideological center ( $II = 6.3$ ), although party polarization exceeds 4 ( $PI = 4.3$ ). In the 2022 elections, the two parties that received the highest share of votes represent opposite poles on the left-right spectrum: the right-wing populist Brothers of Italy (FdI) with 26% of the vote and a left-right position of 8.7, and the social-democratic Democratic Party (PD) with 19.07% of the vote and a left-right position of 2.62. This configuration indicates a significant ideological distance between the leading political forces, which contributes both to high polarization and to the concentration of the right-wing in the party system, as several other right-leaning parties also entered the parliament.

Finland's position is very intriguing; despite its being a consolidated democracy, its RWC value and position in the right-bottom corner in *Figures 8* and *9* (in contrast to Malta and Italy) reflects a pattern more commonly demonstrated in post-communist democracies. One possible explanation for this is its unique historical context, which includes the legacy of Soviet influence, the Winter War, and post-war neutrality (Allison, 1985; Aunesluoma & Rainio-Niemi, 2016). These factors may have produced ideological effects similar to those seen in former Eastern Bloc countries and former Soviet republics.



**Figure 9:** Country Positions and RWC Curves: Parliamentary Party System for 2024

*Source:* Created by the author based on data from ParlGov 2024.

### 3.6. Longitudinal Analysis of the Parties' Dispersion on the Left-right Scale for 2010-2024

This sub-chapter presents a longitudinal analysis of the ideological structure of parliamentary party systems across European democracies from 2010 to 2024. It examines temporal trends through ideological ranges, group means, correlation patterns, and visualizations. Three key indicators (II, PI, and RWC) were calculated using the filtered data from all ten available ParlGov datasets that cover the period from 2010 to 2024. The filtering process followed the same logic as for the ParlGov 2024 dataset, which was used in the previous sub-chapters of this analysis.<sup>23</sup> The sub-chapter provides a comprehensive analysis of whether and how ideological divergence of party systems between consolidated and post-communist democracies has evolved over time.

#### The Ideological Range of Political Parties Over Time

This section explores the evolution of the ideological range within parliamentary party systems. The rug plots for all the years presented in *Appendix 3* visualize the distribution of parties

<sup>23</sup> See the **Online Appendix**. It provides the Datasets for all the years used in this thesis, the Codebook, and the applied Code in R.

along the left–right ideological scale over time. Each vertical tick on the plots represents a party’s ideological position, with the thickness of the tick proportional to the party’s vote share. Post-communist democracies are shaded in yellow, while consolidated democracies are shown in grey.

In the early part of the observed period (2010-2014), the ideological spectrum in most post-communist democracies is notably narrow, concentrated around the middle of the left–right scale ( $II = 5$ ), with few strong parties at either ideological extreme. Notably, Croatia and Slovenia deviate from this pattern: from 2013 onward, both countries maintain stable representation of left-wing parties, resulting in an ideological range that more closely resembles that of consolidated democracies and shows no significant rightward shift over time. In contrast, other post-communist democracies exhibit a consistent absence of electorally strong left-wing parties throughout the 2010-2024 period. Over time, right-leaning parties become increasingly dominant across these countries, contributing to a visible shift toward Right-Wing Concentration. A few short-term exceptions, including a declining far-left party in the Czech Republic, a brief far-left surge in Romania, and the early rise of a far-right alliance in Hungary, punctuate the broader trend.

A particularly illustrative case is the Czech Republic, where the Communist Party of Bohemia and Moravia (KSČM) – the successor to the pre-1989 ruling party – maintained an explicit association with its authoritarian legacy. According to the ParlGov, KSČM holds a left–right score of 0.71, the lowest among all parties in EU democracies with a left-authoritarian past. Founded in 1990, the party retained a stable parliamentary presence for decades, receiving up to 15% of the vote in national elections. However, its support gradually eroded, and in the 2021 elections, KSČM captured only 3.61% of the vote, falling below the parliamentary threshold for the first time. Scholars have long noted that the party’s core support came from the older generation, shaped by Soviet-era political socialization (Bozóki & Ishiyama, 2003). This long-term erosion reflects generational change and diminishing influence of Soviet-nostalgic cohorts. This case serves as a clear example of the influence of Soviet indoctrination, lending support to the thesis’s expectation of a gradual ideological shift toward right-wing concentration in post-communist democracies.

Romania and Hungary represent two additional, but ideologically divergent, outliers that deviate temporarily from the dominant pattern. In Romania, the far-left People’s Party – Dan Diaconescu (PP-DD) entered parliament in 2012 with 15% of the vote and a left–right

placement of 1.3, the most leftist position in that year's dataset. However, the party was dissolved by 2015, and its influence was short-lived. In Hungary, the trend runs in the opposite direction: the radical right MIÉP–Jobbik alliance, placed at 9.71 on the left–right scale, secured 16.67% of the vote and parliamentary seats in 2010. In 2014, Jobbik ran independently and increased its vote share to 20.22%, maintaining its far-right position at 8.7. These cases illustrate that while ideological extremes occasionally emerge, far-left forces remain unstable, whereas far-right actors, especially in Hungary, can become entrenched, reinforcing long-term patterns of rightward concentration.

Consolidated democracies do not exhibit the same level of rightward shift or polarization change over time as new democracies. However, across all the countries, it is evident that right-leaning parties have become more common gradually. In 2010, only four countries had a party with a score of more than 8.5 on the left-right scale. By 2015, this number increased to nine countries, and by 2024, it reached eleven out of sixteen countries. Therefore, similar to post-communist democracies, right-leaning parties in consolidated democracies are also gaining prominence, although to a lesser extent.

### **Group Means Analysis to Track the Trend Over Time**

The full set of group means across all years in the study period (2010–2024) is presented in *Appendix 4*. It reveals limited but noteworthy differences between consolidated and post-communist democracies. Statistically significant differences between the two groups are observed in 2022 and 2024 across multiple indicators, while in 2020, only the RWC scores show a significant gap. In earlier years, including 2018, the p-values for all variables fall short of the conventional 5% significance threshold, suggesting that group differences were weaker or more ambiguous in the past. Although the robustness of this table is constrained by the limited number of statistically significant results, it still offers important cues about the emergence and timing of structural divergence between regime types.

Visualization is used to better understand the evolving patterns. I created *Figures 10, 11, and 12*, which track the trends in Country Ideology, Dalton Polarization, and Right-Wing Concentration for both country groups from 2010 to 2024. These visualizations complement the tabular results by illustrating the gradual divergence between post-communist and consolidated democracies, especially the consistent upward trajectory of RWC in the former group. Even where statistical tests are inconclusive, the visual evidence offers ample material

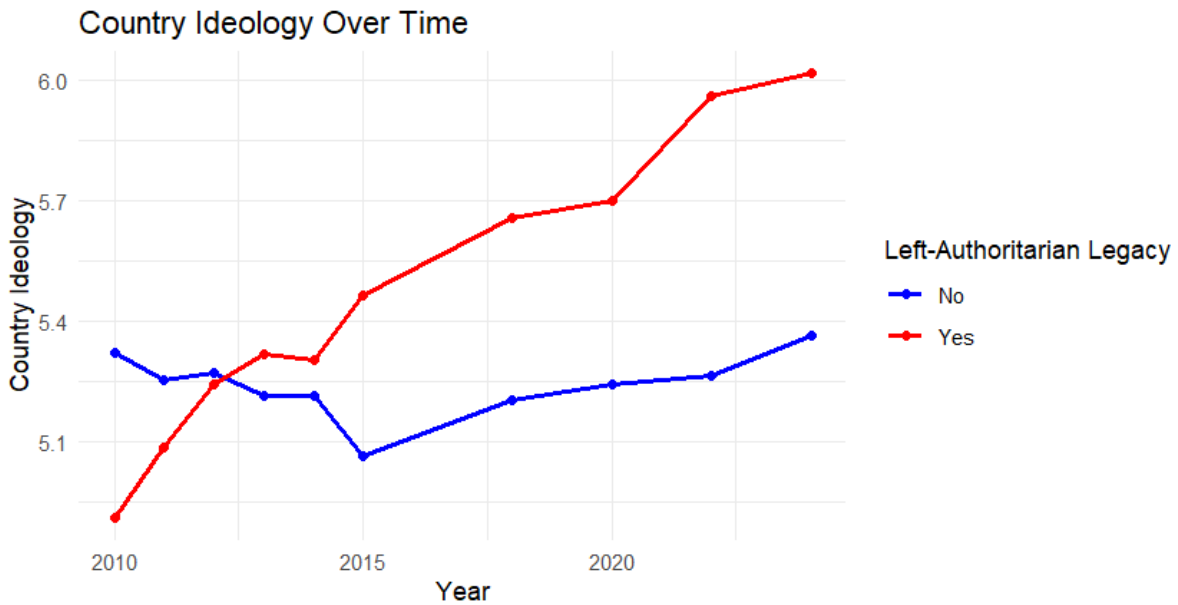
for interpretation and supports the thesis's central argument regarding the growing ideological asymmetry shaped by authoritarian legacies.

In *Figure 10*, post-communist democracies (red line) show a gradual rightward shift over time, while the Country Ideology of consolidated democracies (blue line) remains relatively constant. Notably, in 2010, the Country Ideology of new democracies is more left than in old democracies, and then demonstrates a gradual increase over time. After 2015, the ideological shift in post-communist democracies became more pronounced, and by 2023, their mean ideology rose to nearly 6.0. This trend indicates a gradual right-leaning shift of the center of gravity in new democracies over time. It aligns with the theoretical expectations that democracies transitioned from left-wing authoritarian regimes exhibit a rightward shift that intensifies over time within the timeframe of this study.

Meanwhile, long-established democracies remain with a relatively stable Country Ideology around 5.0-5.4 over time from 2010 to 2024. Interestingly, in the early years, II is slightly decreasing, reaching its lowest value in 2015 (II = 5.06). Most likely, it was associated with the immigration crisis of 2014-2015 and the first response to it – inclusive policies, often associated with “left-wing” politics in Western Europe<sup>24</sup>. However, this crisis subsequently strengthened the right-wing forces in the countries, which is reflected in a gradual, minor shift of the ideological center slightly to the right (Campo et al, 2024; Van Prooijen et al., 2018). By 2024, this shift reached its highest level over the years of the study, II = 5.36. The gap between groups of countries grows over time, showing diverging trajectories in ideological alignment, especially in recent years.

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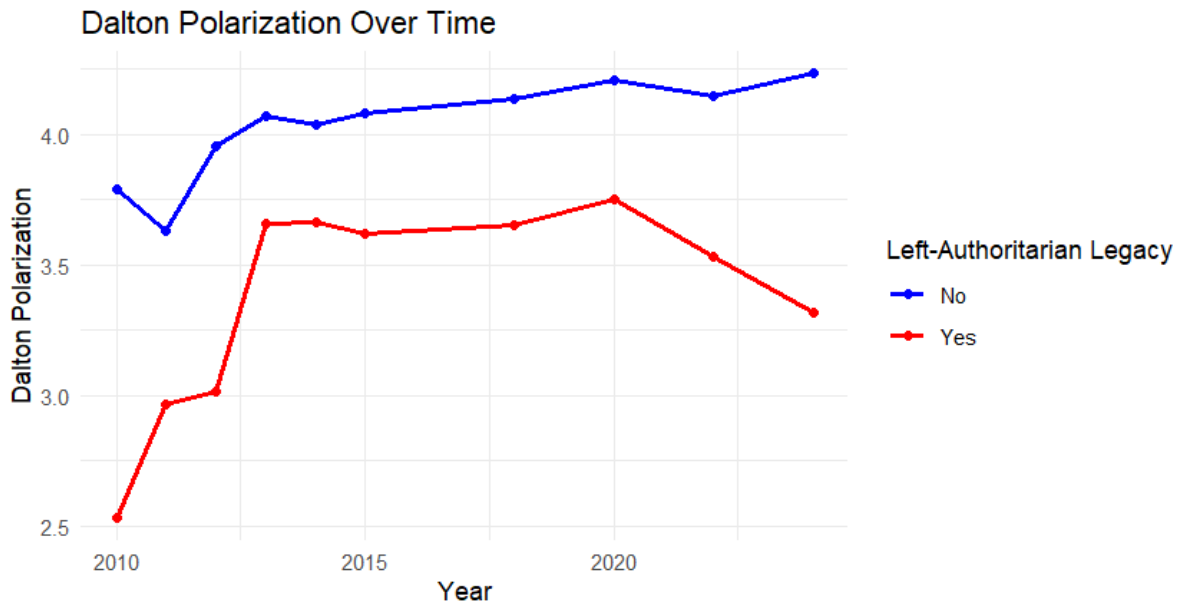
<sup>24</sup> This is only a theoretical explanation, not based on solid research, so I argue that this may be a factor in the trend, but other factors may also have had an impact. Thus, a study on the impact of the 2015 immigration crisis on the Country ideology of consolidated democracies would provide a more solid explanation for the trend.



**Figure 10:** Trend of Country Ideology over time (2010-2024)

**Source:** Created by the author based on data from ParlGov 2010-2024 Releases

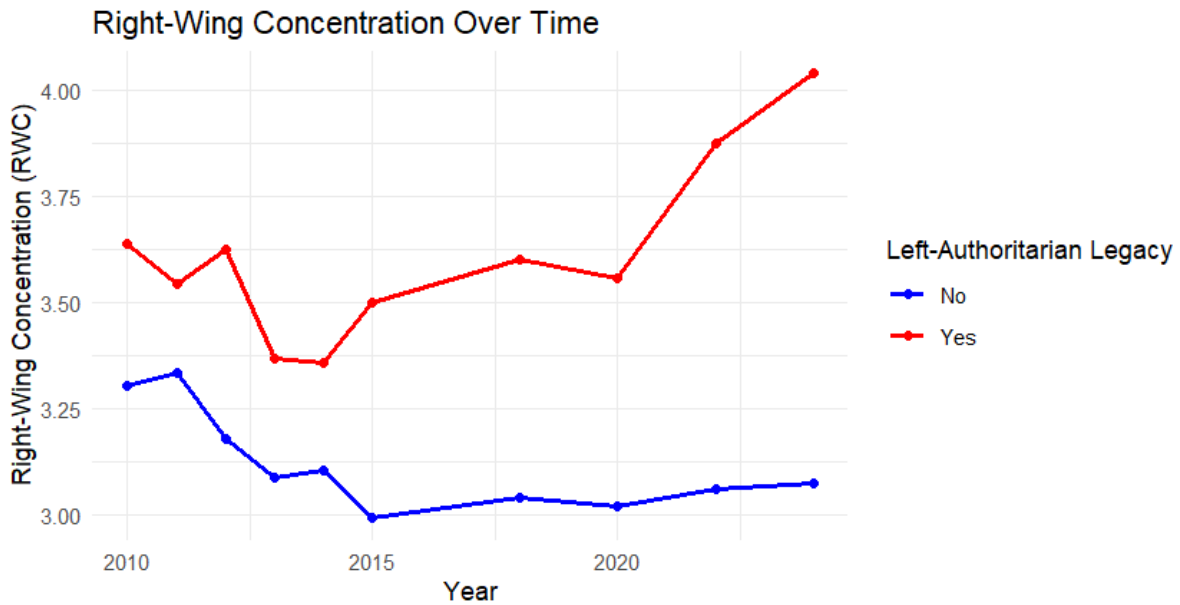
**Figure 11** presents the trend over time of Dalton Polarization. The consistent gap between the red and blue lines indicates that consolidated democracies present broader ideological representation than post-communist democracies. Since 2013, consolidated democracies have maintained a high and relatively stable level of party polarization, ranging from 4.0 to 4.25, which suggests ongoing ideological diversity. In contrast, post-communist democracies started with much lower party polarization (2.53 in 2010), experienced an increase in polarization (reaching 3.66 in 2013), and then exhibited relatively stable polarization from 2013 to 2020. However, after 2020, polarization declined to 3.32 by 2024. The initial rise in polarization among new democracies may reflect a period of political diversification and the emergence of multiple parties during the (post-) transition period. The decline in polarization after 2020 indicates ideological consolidation, largely driven by the dominance of centrist and right-leaning parties and the diminishing influence of left-leaning parties.



**Figure 11:** Trend of Dalton Polarization over time (2010-2024)

**Source:** Created by the author based on data from ParlGov 2010-2024 Releases

**Figure 12** demonstrates the trend over time of RWC scores. It shows that since 2015, democracies that transitioned from left-wing authoritarian regimes exhibit a sharp increase in the Right-Wing Concentration, while consolidated democracies remain relatively stable. Post-communist democracies initially experienced a decline in their RWC score, dropping from 3.64 in 2010 to 3.36 in 2014. This was followed by an increase until 2020, when the RWC score reached 3.56. By 2024, there was a significant rise, with the score exceeding 4.0. In contrast, consolidated democracies showed a gradual decline in their RWC score, falling from 3.30 in 2010 to 2.99 in 2015. After this decline, their RWC scores remained relatively stable, fluctuating between 2.99 and 3.08 with minimal variation over time. These findings support **Hypothesis 4**, which suggests that over time, democracies transitioning from left-authoritarian regimes will exhibit a more pronounced right-leaning ideological center of gravity and lower levels of party system polarization.



**Figure 12:** Trend of Right-Wing Concentration over time (2010-2024)

**Source:** Created by the author based on data from ParlGov 2010-2024 Releases

The main theoretical explanation for this trend is Soviet indoctrination. The Dinas & Northmore-Ball (2020) found that the older generation shows a greater leaning to the left in democracies after left dictatorship, specifically countries that were part of the Soviet Union or under its curtain. In turn, the self-placement of the younger generation on the left-right scale and their party preferences tends to be more right-leaning. Dinas & Northmore-Ball (2020, p. 1965) explained this phenomenon by Soviet indoctrination, meaning that the successful inculcation of the population with the regime’s guiding idea, primarily relying on education, mitigates so-called “anti-dictator bias”. Thus, over time, as the younger generation, who were either not exposed to Soviet indoctrination or only briefly in their early years, make up a larger portion of the electorate, and the political landscape, particularly political parties, adapts to these changing voter preferences.

It is important to note that, in the long run, the previous regime will likely lose its explanatory power due to the decreasing relevance of its influence and the consolidation of new democracies. However, considering that this study is conducted 20 to 35 years after the collapse of the Soviet Union – a period of only 2 to 3 generations – this timeframe is relatively short in terms of state development. Therefore, the current data reflects the lingering effects of a left-authoritarian experience, evidenced by a shift away from left-wing positions and a growing concentration around center-right ideologies. In sum, while this pattern is expected to decrease

in the longer term – something researchers can investigate in the future – the findings from this thesis indicate that the pattern (right-wing concentration of new democracies over time) is actually becoming more prominent within the timeframe examined.

### **Correlation Analysis to Track the Trend Over Time**

The full set of correlation analyses conducted across all years in the study period (2010–2024), examining the relationship between the Left-Authoritarian Legacy and the dependent variables, is presented in *Appendix 5*. These results reveal an evolving pattern over time. Between 2010 and 2018, correlations were generally weak and not statistically significant for most variables, indicating no stable or consistent relationship between regime legacy and the overall ideological structure of party systems during this period. From 2020 onward, however, the relationships began to strengthen, with several moderate to strong correlations reaching statistical significance. Given the dichotomous nature of the independent variable and the relatively small sample size, correlations above 0.5 are considered sufficiently strong to support meaningful interpretation.

A closer look at *Appendix 5* shows that the strength and significance of correlations increase gradually over time, particularly for RWC. In early years such as 2010–2014, the correlation between left-authoritarian legacy and RWC ranges from 0.23 ( $p = 0.253$ ) to 0.39 ( $p = 0.049$ ), statistically weak or marginal at best. From 2015 onward, the values show a clear upward trend: correlations are 0.36 ( $p = 0.65$ ), 0.42 ( $p = 0.029$ ), 0.51 ( $p = 0.007$ ), 0.58 ( $p = 0.001$ ), 0.63 ( $p = 0.000$ ) in 2015, 2018, 2020, 2022, 2024, respectively. A similar pattern is observed for Country Ideology, where the correlation becomes statistically significant in 2020 but only reaches a strength above 0.5 in the most recent years: 0.54 in 2022 ( $p = 0.003$ ) and 0.52 in 2024 ( $p = 0.005$ ). By contrast, the relationship between Dalton Polarization and legacy remains weaker and only becomes statistically significant in 2024, with a moderate negative correlation ( $r = -0.46$ ,  $p = 0.016$ ).

Interestingly, early years exhibit a different configuration of relationships. While neither RWC nor Country Ideology shows a significant correlation with left-authoritarian legacy between 2010 and 2014, Dalton Polarization does. In 2010, the correlation between legacy and PI was strong and statistically significant ( $r = 0.63$ ,  $p = 0.001$ ). In 2012, the correlation declined to moderate in strength ( $r = 0.40$ ,  $p = 0.025$ ), while the correlation of Legacy with Country Ideology is negligible ( $r = 0.03$ ,  $p = 0.905$ ). This suggests that in the early stages of democratic

consolidation, post-authoritarian countries were generally less polarized than consolidated democracies, but not yet ideologically distinct in terms of the average position of parties.

These findings point to a dynamic evolution in ideological structure. In the initial years, new democracies displayed lower levels of polarization, explaining the temporary significance of PI, but lacked consistent ideological orientation or density. Over time, as party systems matured and ideological diversity of parties increased, voter preferences in post-authoritarian states increasingly shifted toward center-right and right-leaning parties, contributing to the rise of right-wing concentration. This progression is further visualized in *Appendix 6*, where each country is positioned by its Country Ideology (x-axis) and Dalton Polarization in all the years of the analysis.

*Appendix 6* illustrates that between 2010 and 2014, countries with a left-authoritarian legacy tended to be positioned lower on the spectrum compared to consolidated democracies, and they exhibited a wide and inconsistent range of ideological centers. In 2010, the orange trend line for post-communist democracies shows an upward slope, meaning that more right-leaning ideological centers were associated with higher levels of polarization. This pattern likely reflects the early phase of ideological diversification in new democracies, where the emergence of right-wing parties disrupted centrist systems, increasing polarization as new actors entered the field. In the following years, the trend line becomes less inclined and levels off in 2014. From 2015 onward, the trend line takes on a gradual downward slope, suggesting that in post-communist democracies, countries with more right-leaning centers also tend to exhibit lower levels of polarization, reflecting the structural consolidation of the right and the marginalization of the left. In contrast, consolidated democracies have only minor changes in their placement in the plot over the years, including a slight shift to the right, which was discussed earlier in the context of group means.

These visual patterns complement the statistical findings and reinforce the thesis's core argument. As shown in both *Appendix 5* and *Appendix 6*, the relationship between regime legacy and all three ideological variables, especially RWC, intensifies over time. What begins as a less fragmented and more ideologically wide landscape of countries' ideological centers in the early 2010s gradually solidifies into a structurally asymmetric system. Suggesting that post-authoritarian democracies are increasingly defined by right-leaning ideological centers and the marginalization of left parties, which leads to right-wing concentration of political systems. This shift likely reflects the generational replacement of voters and the institutional

consolidation of party systems, and it supports the broader claim that the legacy of authoritarianism continues to shape democratic political competition well after formal regime change.

### **Visualization of Right-Wing Concentration to Track the Trend Over Time**

This section presents the trends in Right-Wing Concentration (RWC) from 2010 to 2024, drawing on the visualizations provided in *Appendix 7*, following the logic of creating *Figure 9* (as the parliamentary system investigated here). These Figures help trace the ideological evolution of both post-communist and consolidated democracies by plotting country positions, by their polarization levels and ideological centers, over time. The bottom right corner ( $CI > 5$ ,  $PI < 4$ ) and Equal-RWC curves, especially the yellow one ( $RWC = 3.5$ ), serve as benchmarks for identifying systems with right-wing concentration, enabling a comparative assessment across countries and years.

Based on 2010 data, post-communist democracies are generally characterized by center and left-leaning ideological centers and low levels of polarization. Only Estonia, Slovenia, and Poland are located in the bottom right corner and below the yellow curve ( $RWC > 3.5$ ). In contrast, countries like Bulgaria, Lithuania, Romania, Slovakia, Latvia, and the Czech Republic clustered in the bottom-left corner, reflecting the lower levels of party polarization and more left-centered ideological profiles. Hungary stands out as the only example in the upper right corner with high party polarization around the right-leaning center. This is largely due to the presence of the radical-right MIEP-Jobbik alliance (left-right position 9.71, vote share 16.67% in 2010 elections), the dominance of Fidesz/KDNP (6.25, 52.73%), and only one left-wing party Hungarian Socialist Party (MSZP) (2.78, 19.3%).

The subsequent plots first illustrate how polarization in post-communist countries increases while their ideological centers remain relatively stable. And then, as polarization levels approach those of consolidated democracies, the ideological centers of these countries tend to shift rightward, signaling the growing dominance of center-right parties. As a result, in more recent years, more post-communist democracies appear in the bottom-right corner of the plot, below the yellow curve ( $RWC = 3.5$ ). This trend reflects the gradual rise and consolidation of right-wing forces, accompanied by a steady decline in the strength and influence of left-wing parties.

Consolidated democracies, on the other hand, do not show any significant changes over the 15-year period (2010-2024). Most of them have remained between the yellow and blue curves, which means that their RWC scores have been steadily falling between 2.5 and 3.5. However, here are a few outliers. Ireland (in 2010-2012 and 2013-2015) and Finland (2010-2024) have shown characteristics of right-wing concentration – both countries have right-wing ideological centers combined with relatively low polarization, leading to RWC scores above 3.5. In contrast, Malta, despite also scoring RWC above 3.5, is not an example of right-wing concentration, as its high RWC value is primarily due to extremely low polarization rather than an ideological shift to the right.

### **Summary of the sub-chapter**

This sub-chapter presents a longitudinal analysis of party system configuration in EU democracies from 2010 to 2024, highlighting the evolving ideological asymmetry between post-communist and consolidated democracies. Visualizations of group means over time show a clear trend: while consolidated democracies remained relatively stable in terms of Country Ideology, Polarization, and RWC, post-communist democracies exhibited a gradual rightward shift of their ideological center and a decline in polarization, leading to a growing RWC. The differences in RWC between groups became especially visible after 2015. Although statistically significant differences between regime types appear mostly in the later years of the study (2020–2024), the visual trends throughout the entire period consistently point to increasing divergence.

Correlation analyses further support this pattern. While the relationships between left-authoritarian legacy and ideological variables were weak or inconsistent in the early years, they gradually strengthened and reached a strong, statistically significant correlation, notably from 2020 onward, particularly for RWC. This confirms that the core pattern investigated in this thesis has been intensifying over time. Notably, in the 2010s, post-communist countries were spread around the ideological center and exhibited low party polarization. As democratic institutions developed and political pluralism deepened, post-communist democracies initially experienced rising polarization, reflecting a growing diversity of party competition. Yet, as polarization reached levels comparable to those in consolidated democracies, a notable shift occurred: left-leaning parties, particularly those on the far-left, began to lose electoral traction, while right-leaning parties gradually expanded their support. This marked the emergence of a structural realignment within post-authoritarian systems.

This progression can be theoretically explained through the lens of ideological socialization and generational replacement. Based on prior studies, older cohorts, shaped by Soviet indoctrination, were more inclined to support leftist ideologies, while younger generations tend to lean more to the right. As generational turnover progressed, this change contributed to the observed intensification of the pattern of rightward shift of ideological center and declining spread around it in post-communist democracies. These developments confirm the fourth hypothesis and reinforce the broader conclusion of the thesis: the legacy of left-authoritarian rule continues to shape democratic political competition decades after regime change.

### **3.7. Why It Matters: Comparing the Explanatory Power of Regime Legacy and Structural Variables**

To assess the broader value of this thesis's findings, this sub-chapter compares the explanatory power of the left-authoritarian regime legacy with more conventional structural variables that have been widely theorized to influence party system polarization. Specifically, it evaluates how strongly Left-Authoritarian Legacy, as a historical determinant, accounts for variation in Country Ideology, Dalton Polarization, and Right-Wing Concentration, compared to more conventional explanatory variables such as the number of parties and electoral system.

The number of parliamentary groups is widely recognized as a driver of polarization, in line with Downs' spatial theory (1957), which posits that a larger number of parties increases the potential for ideological dispersion, as parties must differentiate themselves across the left-right scale. For instance, Malta, a classic two-party system dominated by the Labour Party (center-left) and the Nationalist Party (center-right), exhibits minimal ideological polarization and a central ideological profile, as shown in the previous sub-chapters. In contrast, Denmark, with a large number of parliamentary parties distributed from the far left to the far right, demonstrates a high level of party polarization among EU democracies. In the regression analysis, I use the number of parliamentary groups as the operational indicator of the number of parties. I use IPU Parline: Global Data on National Parliaments as a source of data, as it is reliable, well-known, and provides the most recent number of parliamentary groups for 2022–2023 (IPU Parline, n.d.). These data correspond closely to data presented in the ParlGov 2024 release, which ensures temporal alignment between the variables.

Another key institutional variable is the electoral system, which has long been theorized to influence ideological competition. Classical theories hold that majoritarian systems produce

centripetal effects, favoring moderate parties and limiting fragmentation, while proportional representation (PR) systems foster centrifugal effects, encouraging ideological diversity and broader party system representation (Downs, 1957; Sartori, 1976; Cox, 1990; Lijphart, 1994). More recently, Dalton (2021) emphasized that the type of electoral system is a strong explanatory factor for party system polarization, with PR systems being significantly more polarized than majoritarian ones. In line with Dalton’s approach, I follow the three-fold classification proposed by Bormann & Golder (2013): (1) Proportional representation, (2) Majoritarian systems (i.e., plurality/majority systems), and (3) Mixed systems. This classification matches the typology used by IPU Parline, which also groups electoral systems into these three categories for comparability. According to this typology, France is classified as a majoritarian system; Germany, Hungary, Italy, and Lithuania are identified as having mixed systems; all other EU member states in the dataset are classified as proportional representation systems. Given that France is the only country with a majority system within the EU, this variable is practically binary. All models were tested using simple and multivariate linear regressions (OLS), and the results are presented in *Table 5*.

**Table 5: Regression analysis results for 2024**

	Model	Adjusted_R2	Significant_Predictors
M1:	PI ~ Number of Parties	0.3302	numb_parl_groups2(***), numb_parl_groups6(*)
M2:	PI ~ Electoral System	0.1413	electoral_systemPlurality/majority(*)
M3:	PI ~ Legacy	0.072	None
M4:	PI ~ Legacy + Number of Parties	0.4316(*)	numb_parl_groups2(***)
M5:	PI ~ Legacy + Electoral System	0.1799	None
M6:	PI ~ Legacy + Number of Parties + Electoral System	0.5513(*)	Left_Auth_Leg(*), numb_parl_groups2(***)
M7:	PI ~ Number of Parties + Electoral System	0.4238(*)	numb_parl_groups2(**)
M8:	II ~ Number of Parties	0.0289	None
M9:	II ~ Electoral System	-0.0795	None
M10:	II ~ Legacy	0.2336(**)	Left_Auth_Leg(**)
M11:	II ~ Legacy + Number of Parties	0.3626	Left_Auth_Leg(**)
M12:	II ~ Legacy + Number of Parties + Electoral System	0.3257	Left_Auth_Leg(**)
M13:	RWC ~ Number of Parties	-0.0097	numb_parl_groups2(*), numb_parl_groups9(*)
M14:	RWC ~ Electoral System	0.0805	None
M15:	RWC ~ Legacy	0.3317(***)	Left_Auth_Leg(***)
M16:	RWC ~ Legacy + Number of Parties + Electoral System	0.438(*)	Left_Auth_Leg(**), numb_parl_groups2(*)

**Note:** If a p-value is less than 0.05, it is flagged with one star (\*). If a p-value is less than 0.01, it is flagged with 2 stars (\*\*). If a p-value is less than 0.001, it is flagged with three stars (\*\*\*)

**Source:** Created by the author based on data from ParlGov 2024 and IPU Parline 2022-2023.

The number of parliamentary groups shows statistically significant explanatory power only for Dalton Polarization. This variable alone accounts for 21.9% of the variance in polarization ( $p = 0.0106$ ). This finding aligns with theoretical expectations: a more fragmented party system typically results in greater ideological dispersion, as parties occupy distinct ideological niches to differentiate themselves. However, the number of parties shows very weak explanatory power and no statistically significant results for Country Ideology (Adjusted  $R^2 = -0.031$ ,  $p = 0.602$ ) and Right-Wing Concentration (Adjusted  $R^2 = 0.094$ ,  $p = 0.115$ ). This indicates that while system fragmentation may intensify polarization, it does not meaningfully determine the ideological center or structural asymmetry of the party system.

The electoral system performs even more poorly as a predictor of ideological outcomes. Across all models tested, it fails to produce statistically significant results. Its best-performing model, predicting Dalton Polarization, explains only 9.1% of the variance ( $p = 0.122$ ), which is weak and not statistically significant. For Country Ideology and RWC, the adjusted  $R^2$  values are both negative, and  $p$ -values far exceed conventional thresholds for significance. These findings suggest that the simplified three-category typology (proportional, majoritarian, mixed), although theoretically grounded, does not sufficiently capture variation in ideological structuring across EU democracies.

When conventional structural variables are combined in multivariate models, the results remain modest at best. A combined model using the number of parliamentary groups and electoral system explains 34.1% of the variance in Dalton Polarization and is statistically significant. However, the coefficients reveal that the effect is largely driven by the number of parties (Estimate = 0.134,  $p = 0.01$ ), while the electoral system remains insignificant ( $p = 0.534$  for PR,  $p = 0.065$  for majoritarian systems). When these two variables are used to explain RWC, the result is poor (Adjusted  $R^2 = 0.075$ ,  $p = 0.209$ ), and for Country Ideology, the model performs even worse, with a negative  $R^2$  (Adjusted  $R^2 = -0.126$ ,  $p = 0.957$ ). These outcomes confirm that conventional variables, while modestly effective for polarization, fail to explain variation in Country Ideology or RWC.

The Left-Authoritarian Legacy stands out as the most powerful and consistent explanatory variable across all three ideological outcomes. As a standalone predictor, it explains 17.9% of the variation in Dalton Polarization ( $p = 0.016$ ), which is slightly below the explanatory power of the number of parliamentary groups. However, it significantly outperforms all other variables in accounting for variation in Country Ideology and Right-Wing Concentration.

Specifically, Left-Authoritarian Legacy explains 24.2% of the variance in Country Ideology ( $p = 0.005$ ) and 37.7% of the variance in RWC ( $p < 0.001$ ). These results are particularly notable given the relatively small sample size ( $n = 27$ ) and the binary nature of the variable. They support the core claim of this thesis: that historical regime background has a lasting and measurable effect on the ideological shape of contemporary democratic systems.

When combined with conventional structural variables, the explanatory power of Left-Authoritarian Legacy becomes even more robust, particularly for Dalton Polarization. A model combining Left-Authoritarian Legacy and the number of parliamentary groups explains 35.2% of the variation in Dalton Polarization ( $p = 0.003$ ), doubling the explanatory strength of either variable alone. Both coefficients are statistically significant: Left-Authoritarian Legacy remains a negative predictor ( $p = 0.026$ ), while the number of parties is a positive one ( $p = 0.010$ ). This confirms that a greater number of parties contributes to ideological dispersion. Meanwhile, post-communist countries, as relatively new democracies with weaker ideological structuring, exhibit the marginalization of the radical left that does not give rise to radical right forces, resulting in lower levels of polarization compared to consolidated democracies.

Adding the electoral system to the model yields only a marginal improvement. A model including Left-Authoritarian Legacy and electoral system explains 23.4% of the variance in Dalton Polarization ( $p = 0.027$ ), compared to 17.9% with the legacy alone. However, only the legacy variable is statistically significant in this model ( $p = 0.028$ ), while both categories of the electoral system (proportional and majoritarian) remain insignificant. This again illustrates the limited utility of electoral system classifications, at least in their simplified categorical form, for explaining ideological structuring.

The best-performing model for Dalton Polarization is the three-variable combination: Left-Authoritarian Legacy, number of parliamentary groups, and electoral system, which explains 44.9% of the variance ( $p = 0.003$ ). Yet even in this model, the primary drivers of variation remain the legacy and the number of parties, with the electoral system providing only negligible additional explanatory value.

In contrast, for Country Ideology and Right-Wing Concentration, no combination of structural and historical variables outperforms the Left-Authoritarian Legacy on its own. For Country Ideology, all multivariate models return lower adjusted  $R^2$  values than the legacy-only model. It suggests that adding the number of parties or the electoral system type introduces noise rather

than explanatory depth. The same applies to RWC: while historical background alone explains 37.7% of the variation, all multivariate combinations, whether with one or two additional variables, yield slightly lower adjusted  $R^2$  values. This confirms that the ideological asymmetry captured by the RWC score is best understood as a consequence of historical regime background, not institutional engineering or system fragmentation.

Taken together, these findings underscore the dominant role of regime legacy in shaping ideological outcomes in contemporary European democracies. Conventional structural variables provide some insights, especially regarding Dalton Polarization; however, they do not adequately capture the deeper ideological trends. These trends include the rightward shift of party systems due to the decline of left-wing competitiveness, ideologically linked to the previous regime in post-communist democracies. Thus, the enduring effect of the Left-Authoritarian Legacy emerges not only as statistically robust but also as theoretically indispensable to understanding ideological development in post-communist democracies within the EU.

## CONCLUSION AND DISCUSSION

This thesis set out to address a compelling puzzle: why, in an era marked by rising polarization, democratic backsliding, and the growing prominence of far-right parties, some countries exhibit a distinct pattern of ideological alignment compared to their counterparts? There are many studies on polarization that address this puzzle by investigating how structural, institutional, and political factors may potentially impact it (Downs, 1957; Dalton, 2008; Dalton, 2021; McCoy et al., 2018; Lijphart, 1994). In turn, this thesis turned to a less-explored historical dimension: the legacy of the authoritarian regimes. I focused on the investigation of how the legacy of the left-authoritarian regime that preceded democratic transformation of CEE countries impacted the ideological configuration of party systems over the 20-35 years of democratic transition.

More specifically, the objective of the thesis was to answer the following question: how does the dispersion of parties on the left–right ideological scale in democracies transitioned from left-authoritarian regimes in the late 1980s or early 1990s differ from consolidated democracies within the EU? Three additional sub-questions were constructed to operationalize this inquiry, focusing on the ideological center of the party system, the extent of party polarization, and their dynamics over time on the left-right scale. By answering these questions, the thesis has shed light on how authoritarian legacy continues to shape what political ideas are seen as legitimate, which actors have more chances to enter parliament, and how it impacts the party systems. The thesis showed that even in countries that have embraced liberal democracy, the ideological consequences of past regimes remain embedded in the structure of political competition.

The research drew upon a theoretical framework that merged studies on post-communism with comparative party system theory. Foundational theories by Linz & Stepan (1996), Kitschelt (1992, 1995, 1999), and Freire (2006) were particularly relevant in articulating the mechanism of how communist rule can influence the ideological positioning of votes and parties after the regime change. These theories were further complemented with newer studies on regime legacies on party systems, specifically Pop-Eleches & Tucker (2013), Freire & Kivistic (2016), and Dinas & Northmore-Ball (2020). Together gave a theoretical background to form hypotheses. The study hypothesized that post-left-authoritarian democracies would exhibit four key tendencies: a more right-leaning ideological center of gravity (**H1**), lower levels of party system polarization (**H2**), a pattern of both simultaneously I refer to as right-wing concentration (**H3**), and the intensification of this pattern over time within the scope of the study (**H4**).

The empirical analysis employed a quantitative comparative design within EU member states, using data from the ParlGov database. First, I focused on investigating the pattern in the most recent party system configuration based solely on ParlGov 2024. Then, I analyzed the dynamics over a 15-year period using all ten available ParlGov datasets from 2010 to 2024. And finally, I have investigated the explanatory power of the Left-Authoritarian Legacy in comparison to conventional structural factors, such as the number of political parties and the type of electoral system. This investigation has reinforced the value of the research findings.

To proceed with the steps of analysis aimed at answering the research question, I've calculated country-level indices to represent three dependent variables. They are the following: Country Ideology, Dalton Polarization, and a concept introduced in this thesis – Right-Wing Concentration (RWC). RWC was created to capture the simultaneous rightward shift with the narrowing of the ideological spread of parties, as this was the expected pattern for post-communist countries, grounded in the previous theory. These indices allowed for robust comparative and longitudinal analyses, including group means comparisons, correlation testing, visualizations, and regression analysis, all of which contributed meaningfully to the research question.

The findings confirm the expectations outlined in the theoretical framework. Post-communist democracies within the EU display a more right-leaning ideological center of gravity compared to their consolidated counterparts, intensifying over time. This result supports the first hypothesis and the theoretical claim that parties and voters in democracies with left-authoritarian legacy tend to distance themselves from left-leaning ideologies. The interpretation of this pattern is that leftist ideologies are often associated with the previous authoritarian regime in post-communist democracies. This pattern is more visible in parliamentary party systems than across all the parties that participated in elections, the ideological offer. It indicates that far-left parties are marginal or absent, as this position is less appealing to voters, especially over time, due to voter replacement. Rather than representing a temporary or reactive phenomenon, this rightward positioning appears to be a structurally entrenched feature of these party systems.

The second key finding concerns party system polarization. Post-communist democracies exhibit lower party polarization, indicating a more concentrated ideological space. This supports the second hypothesis and the notion that ideological competition in these systems is not only shifted to the right but also less dispersed across the spectrum. The finding of reduced

ideological range of parties' positions is significant as it challenges assumptions that new democracies are more susceptible to extremes or fragmentation.

The evidence suggests that post-communist democracies demonstrate ideological narrowing, as marginalization of the left-leaning parties (especially far-left) is not compensated by the appearance of more far-right parties. This compensation would be logical due to the Downs spatial model (Downs, 1957). However, post-communist countries are also new democracies that often exhibit a lower level of ideological recognition and anchoring (assumption grounded on previous theory). This creates less need for parties in these democracies to be very clearly distinguished on the left-right scale, and thus less need for a compensated appearance of the far-right. This logic explains a more constrained party system as compared to consolidated democracies.

Notably, polarization was relatively low initially due to the transition from one-party rule to multiparty democracy. As ideological diversity grew, polarization approached levels found in consolidated democracies. Over time, however, the diminishing influence of older, Soviet-socialized generations led to the marginalization of the left and a decline in polarization, indicating a broader sociopolitical shift rather than merely institutional change. These findings suggest that ideological narrowing is not simply a result of institutional constraints but of long-term sociopolitical change.

The most novel contribution of the thesis lies in the conceptualization and application of the Right-Wing Concentration measure. This concept was developed to capture a dual phenomenon: rightward shift of the ideological center of the party system along with a narrower spread of parties on the left-right scale. Democracies with left-authoritarian legacy systematically exhibit more pronounced RWC across all years analyzed as compared to consolidated democracies without such a legacy. These results validate the third hypothesis and introduce a new analytical tool for capturing the structural asymmetry of party competition in post-authoritarian democracies.

The longitudinal dimension of the study further strengthens its conclusions. Between 2010 and 2024, post-communist EU democracies demonstrated a gradual intensification of rightward concentration, whereas consolidated democracies showed more stable or variable patterns. This supports the fourth hypothesis, which posited that the effects of left-authoritarian legacy would intensify due to long-term factors such as generational replacement of those who were

socialized under the USSR and experienced Soviet indoctrination (Pop-Eleches & Tucker, 2013; Dinas & Northmore-Ball, 2020). The erosion of Soviet-nostalgic political views leads to making the pattern more pronounced as the younger generation expresses more negative attitudes toward the previous regime and its ideology (Dinas & Northmore-Ball, 2020). The fact that these patterns remain robust over nearly a decade and a half suggests that they are not simply outcomes of specific political crises but durable structural characteristics.

It is also important to mention the outliers to the general pattern. Slovenia and Croatia did not follow the same trend as other post-communist democracies; instead, they exhibited dynamics more akin to consolidated democracies. The nature of Tito's communism in Yugoslavia is significantly different from the communism seen under Soviet rule, which helps explain this divergence. Conversely, Finland showed signs of right-wing concentration, aligning with post-authoritarian cases despite not having a left-authoritarian legacy, likely reflecting the negative experience of relations with the USSR. These anomalies invite more detailed country-specific analyses in future research.

Finally, by comparing the explanatory power of regime legacy against traditional structural factors of polarization, such as the number of parties and the electoral system type, the regression analysis offers valuable insight. Among all the factors examined, the legacy of left-authoritarian rule showed the strongest and most significant influence, especially concerning the RWC. The number of parties had a moderate effect on party system polarization, but they could not explain the ideological center or the RWC. Furthermore, the type of electoral system had very little impact. These findings not only confirm the theoretical claim that historical experiences of authoritarian regimes shape ideological configurations but also provide empirical evidence that the legacy of left-authoritarianism is a competing and, in our case, even more powerful determinant than institutional factors in explaining dispersion of parties on the left-right scale.

These findings allow for a number of broader assessments. The research has addressed the central puzzle and fully answered the research question and sub-question raised by demonstrating that post-communist democracies are structurally predisposed to rightward ideological shift and reduced polarization. This outcome challenges simplified assumptions about democratic convergence in the EU and highlights the long shadow cast by authoritarian legacies. The thesis contributes theoretically by integrating regime legacy studies and party system theory, empirically by offering robust multi-year comparative analysis, and

methodologically by introducing a new concept, Right-Wing Concentration, that can be applied across regions and time periods. Importantly, this concept can be transformed into Left-Wing Concentration to study the dynamics of the distribution of parties on the left-right scale in democracies that have transitioned from right-wing authoritarian regimes. It would allow examination of whether these dynamics are similar in future research.

At the same time, the research is not without limitations. The analysis was confined to EU member states, which, although institutionally comparable, may not capture the full diversity of post-communist trajectories. Countries outside the EU or those with ongoing democratic backsliding might display different patterns, which limits the generalization of findings. Moreover, the study operated at the level of aggregated party system data and did not capture within-party ideological shifts, issue-based competition, or discursive dynamics. The theoretical mechanisms, such as Soviet indoctrination and generational change, were inferred based on prior studies rather than directly measured. Future research could incorporate survey data, party manifestos, or discourse analysis to more deeply trace how these legacies operate at the level of political elites and voters, and in the context of other dimensions.

Despite these limitations, the study offers important contributions: it provides valuable insights for academics researching party systems and polarization, as well as for policymakers seeking to understand the factors that shape party system configurations. This understanding is crucial for addressing rising polarization and democratic backsliding within the EU and beyond. For academics, the thesis emphasizes the importance of considering historical factors, particularly authoritarian legacies, in future research on polarization, party systems, voter alignments, and other related areas. It would enhance the clarity, robustness, and interpretive value of the research findings. For policymakers, the narrowing of ideological space and the structural weakening of left-wing representation in post-communist countries raise concerns about the maintenance of pluralism and the capacity of these systems to reflect the full spectrum of social, economic, cultural, and other interests. In societies where the legacy of authoritarianism stigmatizes the left and privileges the right, democratic competition may become constrained or performative. Political entrepreneurs face significant barriers to reintroducing strong left-wing alternatives, especially in contexts where anti-communist rhetoric remains politically effective. In summary, this thesis provides valuable insights on how the historical factor influences the dispersion of parties on the ideological dimension, helping to better address rising polarization and democratic backsliding.

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## APPENDICES

The **Online appendix** for this thesis provides the Datasets for all the years used in this thesis, the Codebook, and the applied Code in R. It is available online at:

[Online Appendix to MA thesis \(Kopytsiak, 2025\)](#)

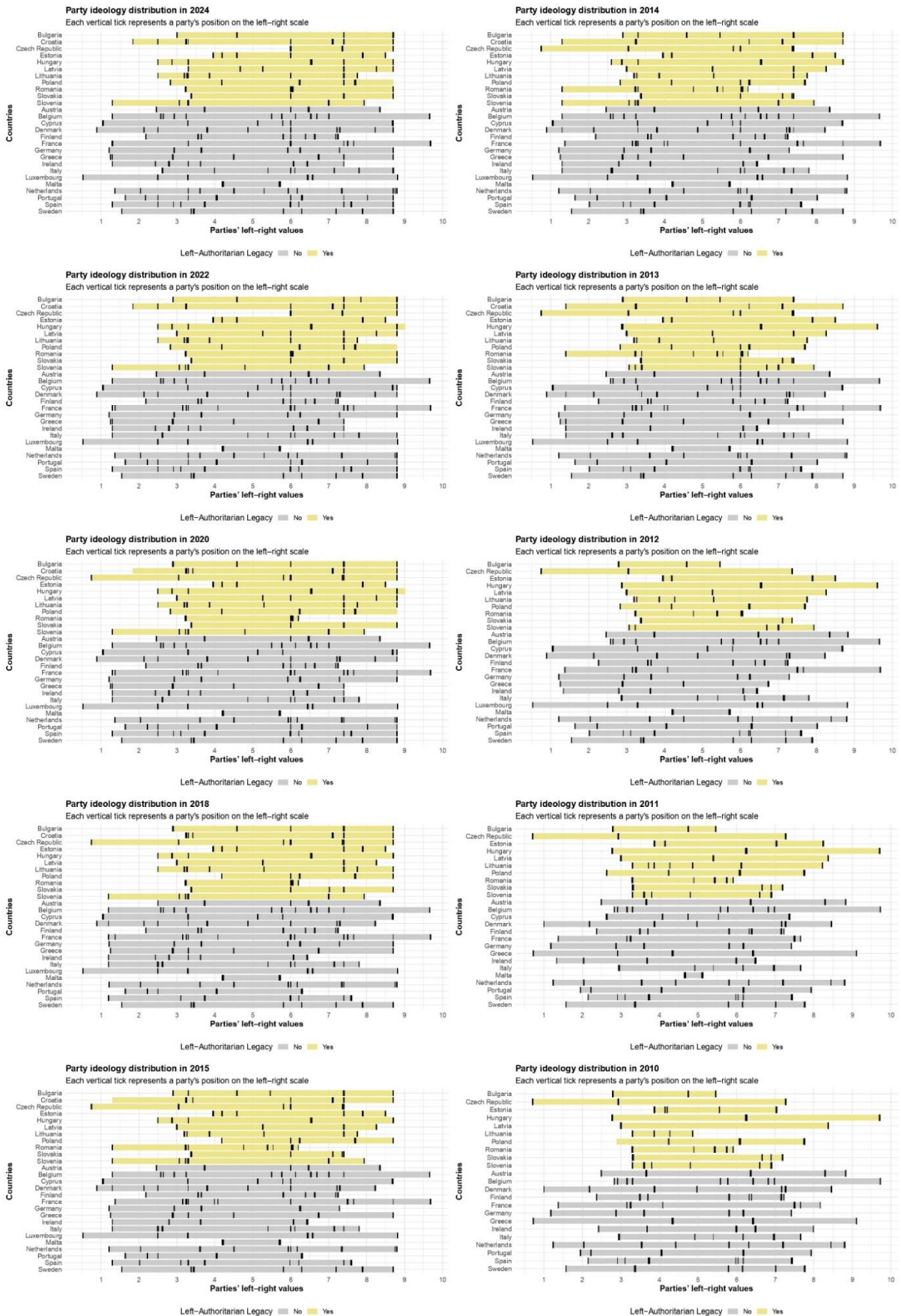
### Appendix 1. Classification of EU Countries by Left-Authoritarian Legacy

	country_name	Left_Auth_Leg
1	Austria	0
2	Belgium	0
3	Bulgaria	1
4	Cyprus	0
5	Czech Republic	1
6	Germany	0
7	Denmark	0
8	Spain	0
9	Estonia	1
10	Finland	0
11	France	0
12	Greece	0
13	Croatia	1
14	Hungary	1
15	Ireland	0
16	Italy	0
17	Lithuania	1
18	Luxembourg	0
19	Latvia	1
20	Malta	0
21	Netherlands	0
22	Poland	1
23	Portugal	0
24	Romania	1
25	Slovakia	1
26	Slovenia	1
27	Sweden	0

# Appendix 2. The set of Country Indices for 2010-2024

Country Indices for 2024				Country Indices for 2022				Country Indices for 2020				Country Indices for 2018				Country Indices for 2016				Country Indices for 2015				
Country name	Country Ideology	Dalton Polarization	RMC	Country name	Country Ideology	Dalton Polarization	RMC	Country name	Country Ideology	Dalton Polarization	RMC	Country name	Country Ideology	Dalton Polarization	RMC	Country name	Country Ideology	Dalton Polarization	RMC	Country name	Country Ideology	Dalton Polarization	RMC	
1	Austria	5.520533	3.359270	1	Austria	5.520533	3.359270	1	Austria	5.520533	3.359270	1	Austria	5.520533	3.359270	1	Austria	5.520533	3.359270	1	Austria	5.520533	3.359270	1
2	Belgium	5.281271	3.151977	2	Belgium	5.281271	3.151977	2	Belgium	5.281271	3.151977	2	Belgium	5.281271	3.151977	2	Belgium	5.281271	3.151977	2	Belgium	5.281271	3.151977	2
3	Cyprus	4.895189	6.340181	3	Cyprus	4.895189	6.340181	3	Cyprus	4.895189	6.340181	3	Cyprus	4.895189	6.340181	3	Cyprus	4.895189	6.340181	3	Cyprus	4.895189	6.340181	3
4	Czech Republic	4.820344	4.595844	4	Czech Republic	4.820344	4.595844	4	Czech Republic	4.820344	4.595844	4	Czech Republic	4.820344	4.595844	4	Czech Republic	4.820344	4.595844	4	Czech Republic	4.820344	4.595844	4
5	Germany	4.700811	3.410657	5	Germany	4.700811	3.410657	5	Germany	4.700811	3.410657	5	Germany	4.700811	3.410657	5	Germany	4.700811	3.410657	5	Germany	4.700811	3.410657	5
6	Denmark	5.307128	2.906221	6	Denmark	5.307128	2.906221	6	Denmark	5.307128	2.906221	6	Denmark	5.307128	2.906221	6	Denmark	5.307128	2.906221	6	Denmark	5.307128	2.906221	6
7	Spain	5.142188	3.877272	7	Spain	5.142188	3.877272	7	Spain	5.142188	3.877272	7	Spain	5.142188	3.877272	7	Spain	5.142188	3.877272	7	Spain	5.142188	3.877272	7
8	Estonia	6.200388	3.877272	8	Estonia	6.200388	3.877272	8	Estonia	6.200388	3.877272	8	Estonia	6.200388	3.877272	8	Estonia	6.200388	3.877272	8	Estonia	6.200388	3.877272	8
9	Finland	5.450030	3.398381	9	Finland	5.450030	3.398381	9	Finland	5.450030	3.398381	9	Finland	5.450030	3.398381	9	Finland	5.450030	3.398381	9	Finland	5.450030	3.398381	9
10	France	5.254479	2.632086	10	France	5.254479	2.632086	10	France	5.254479	2.632086	10	France	5.254479	2.632086	10	France	5.254479	2.632086	10	France	5.254479	2.632086	10
11	Greece	5.153030	4.419420	11	Greece	5.153030	4.419420	11	Greece	5.153030	4.419420	11	Greece	5.153030	4.419420	11	Greece	5.153030	4.419420	11	Greece	5.153030	4.419420	11
12	Croatia	4.671371	3.634970	12	Croatia	4.671371	3.634970	12	Croatia	4.671371	3.634970	12	Croatia	4.671371	3.634970	12	Croatia	4.671371	3.634970	12	Croatia	4.671371	3.634970	12
13	Hungary	5.820062	4.281423	13	Hungary	5.820062	4.281423	13	Hungary	5.820062	4.281423	13	Hungary	5.820062	4.281423	13	Hungary	5.820062	4.281423	13	Hungary	5.820062	4.281423	13
14	Ireland	5.162576	2.978888	14	Ireland	5.162576	2.978888	14	Ireland	5.162576	2.978888	14	Ireland	5.162576	2.978888	14	Ireland	5.162576	2.978888	14	Ireland	5.162576	2.978888	14
15	Italy	4.346027	3.208513	15	Italy	4.346027	3.208513	15	Italy	4.346027	3.208513	15	Italy	4.346027	3.208513	15	Italy	4.346027	3.208513	15	Italy	4.346027	3.208513	15
16	Lithuania	4.910373	4.145808	16	Lithuania	4.910373	4.145808	16	Lithuania	4.910373	4.145808	16	Lithuania	4.910373	4.145808	16	Lithuania	4.910373	4.145808	16	Lithuania	4.910373	4.145808	16
17	Luxembourg	5.221319	3.372133	17	Luxembourg	5.221319	3.372133	17	Luxembourg	5.221319	3.372133	17	Luxembourg	5.221319	3.372133	17	Luxembourg	5.221319	3.372133	17	Luxembourg	5.221319	3.372133	17
18	Latvia	6.082732	3.855138	18	Latvia	6.082732	3.855138	18	Latvia	6.082732	3.855138	18	Latvia	6.082732	3.855138	18	Latvia	6.082732	3.855138	18	Latvia	6.082732	3.855138	18
19	Malta	4.673286	1.679736	19	Malta	4.673286	1.679736	19	Malta	4.673286	1.679736	19	Malta	4.673286	1.679736	19	Malta	4.673286	1.679736	19	Malta	4.673286	1.679736	19
20	Netherlands	5.414292	4.891291	20	Netherlands	5.414292	4.891291	20	Netherlands	5.414292	4.891291	20	Netherlands	5.414292	4.891291	20	Netherlands	5.414292	4.891291	20	Netherlands	5.414292	4.891291	20
21	Poland	6.165650	2.794164	21	Poland	6.165650	2.794164	21	Poland	6.165650	2.794164	21	Poland	6.165650	2.794164	21	Poland	6.165650	2.794164	21	Poland	6.165650	2.794164	21
22	Portugal	5.213335	3.392478	22	Portugal	5.213335	3.392478	22	Portugal	5.213335	3.392478	22	Portugal	5.213335	3.392478	22	Portugal	5.213335	3.392478	22	Portugal	5.213335	3.392478	22
23	Romania	4.172983	3.296723	23	Romania	4.172983	3.296723	23	Romania	4.172983	3.296723	23	Romania	4.172983	3.296723	23	Romania	4.172983	3.296723	23	Romania	4.172983	3.296723	23
24	Slovakia	5.04068	3.32713	24	Slovakia	5.04068	3.32713	24	Slovakia	5.04068	3.32713	24	Slovakia	5.04068	3.32713	24	Slovakia	5.04068	3.32713	24	Slovakia	5.04068	3.32713	24
25	Slovenia	5.04068	3.32713	25	Slovenia	5.04068	3.32713	25	Slovenia	5.04068	3.32713	25	Slovenia	5.04068	3.32713	25	Slovenia	5.04068	3.32713	25	Slovenia	5.04068	3.32713	25
26	Slovenia	4.313193	3.673831	26	Slovenia	4.313193	3.673831	26	Slovenia	4.313193	3.673831	26	Slovenia	4.313193	3.673831	26	Slovenia	4.313193	3.673831	26	Slovenia	4.313193	3.673831	26
27	Sweden	5.030300	4.615239	27	Sweden	5.030300	4.615239	27	Sweden	5.030300	4.615239	27	Sweden	5.030300	4.615239	27	Sweden	5.030300	4.615239	27	Sweden	5.030300	4.615239	27

### Appendix 3. The set of Ideological ranges by country for 2010-2024



## Appendix 4. The set of Group Means for 2010-2024

Group Means and t-tests for 2024						Group Means and t-tests for 2014					
Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value	Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value
Country Ideology	5.36	6.02	0.66	-2.78	0.01	Country Ideology	5.21	5.30	0.09	-0.35	0.73
Dalton Polarization	4.23	3.32	-0.92	2.82	0.01	Dalton Polarization	4.03	3.66	-0.37	1.22	0.23
Right-Wing Concentration	3.08	4.04	0.97	-3.80	0.00	Right-Wing Concentration	3.11	3.36	0.25	-1.16	0.26

Group Means and t-tests for 2022						Group Means and t-tests for 2013					
Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value	Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value
Country Ideology	5.26	5.96	0.70	-2.96	0.01	Country Ideology	5.21	5.32	0.10	-0.46	0.65
Dalton Polarization	4.15	3.53	-0.61	1.94	0.06	Dalton Polarization	4.07	3.66	-0.41	1.35	0.19
Right-Wing Concentration	3.06	3.87	0.81	-3.26	0.00	Right-Wing Concentration	3.09	3.37	0.28	-1.40	0.17

Group Means and t-tests for 2020						Group Means and t-tests for 2012					
Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value	Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value
Country Ideology	5.24	5.70	0.46	-2.10	0.05	Country Ideology	5.27	5.24	-0.03	0.10	0.92
Dalton Polarization	4.20	3.75	-0.45	1.54	0.14	Dalton Polarization	3.96	3.01	-0.94	2.54	0.02
Right-Wing Concentration	3.02	3.56	0.54	-2.97	0.01	Right-Wing Concentration	3.18	3.63	0.45	-2.08	0.05

Group Means and t-tests for 2018						Group Means and t-tests for 2011					
Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value	Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value
Country Ideology	5.20	5.66	0.45	-1.78	0.10	Country Ideology	5.25	5.08	-0.17	0.68	0.51
Dalton Polarization	4.14	3.65	-0.49	1.45	0.16	Dalton Polarization	3.63	2.97	-0.66	1.85	0.08
Right-Wing Concentration	3.04	3.60	0.56	-2.19	0.04	Right-Wing Concentration	3.33	3.54	0.21	-1.23	0.23

Group Means and t-tests for 2015						Group Means and t-tests for 2010					
Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value	Metric	Cons Dems	PostLAR Dems	$\Delta$	t-statistic	p-value
Country Ideology	5.06	5.46	0.40	-1.41	0.18	Country Ideology	5.32	4.91	-0.41	1.41	0.18
Dalton Polarization	4.08	3.62	-0.46	1.37	0.18	Dalton Polarization	3.79	2.53	-1.26	3.47	0.00
Right-Wing Concentration	2.99	3.50	0.51	-1.81	0.09	Right-Wing Concentration	3.30	3.64	0.34	-1.40	0.18

## Appendix 5. The set of Correlation Matrices for 2010-2024

Correlation Matrix for 2024					Correlation Matrix for 2014				
	Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy		Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy
Country Ideology	–	$r = -0.181, p = 0.365$	$r = 0.691, p = 0.000$	$r = 0.52, p = 0.005$	Country Ideology	–	$r = 0.062, p = 0.760$	$r = 0.59, p = 0.001$	$r = 0.079, p = 0.696$
Dalton Polarization	$r = -0.181, p = 0.365$	–	$r = -0.832, p = 0.000$	$r = -0.459, p = 0.016$	Dalton Polarization	$r = 0.062, p = 0.760$	–	$r = -0.787, p = 0.000$	$r = -0.211, p = 0.291$
RWC	$r = 0.691, p = 0.000$	$r = -0.832, p = 0.000$	–	$r = 0.633, p = 0.000$	RWC	$r = 0.59, p = 0.001$	$r = -0.767, p = 0.000$	–	$r = 0.228, p = 0.253$
Left-Authoritarian Legacy	$r = 0.52, p = 0.005$	$r = -0.459, p = 0.016$	$r = 0.633, p = 0.000$	–	Left-Authoritarian Legacy	$r = 0.079, p = 0.696$	$r = -0.211, p = 0.291$	$r = 0.228, p = 0.253$	–

Correlation Matrix for 2022					Correlation Matrix for 2013				
	Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy		Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy
Country Ideology	–	$r = -0.11, p = 0.584$	$r = 0.691, p = 0.000$	$r = 0.543, p = 0.003$	Country Ideology	–	$r = 0.092, p = 0.647$	$r = 0.533, p = 0.004$	$r = 0.102, p = 0.612$
Dalton Polarization	$r = -0.11, p = 0.584$	–	$r = -0.79, p = 0.000$	$r = -0.339, p = 0.083$	Dalton Polarization	$r = 0.092, p = 0.647$	–	$r = -0.79, p = 0.000$	$r = -0.235, p = 0.239$
RWC	$r = 0.691, p = 0.000$	$r = -0.79, p = 0.000$	–	$r = 0.583, p = 0.001$	RWC	$r = 0.533, p = 0.004$	$r = -0.79, p = 0.000$	–	$r = 0.267, p = 0.179$
Left-Authoritarian Legacy	$r = 0.543, p = 0.003$	$r = -0.339, p = 0.083$	$r = 0.583, p = 0.001$	–	Left-Authoritarian Legacy	$r = 0.102, p = 0.612$	$r = -0.235, p = 0.239$	$r = 0.267, p = 0.179$	–

Correlation Matrix for 2020					Correlation Matrix for 2012				
	Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy		Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy
Country Ideology	–	$r = 0.151, p = 0.452$	$r = 0.528, p = 0.005$	$r = 0.418, p = 0.030$	Country Ideology	–	$r = 0.295, p = 0.144$	$r = 0.44, p = 0.024$	$r = -0.025, p = 0.905$
Dalton Polarization	$r = 0.151, p = 0.452$	–	$r = -0.758, p = 0.000$	$r = -0.26, p = 0.191$	Dalton Polarization	$r = 0.295, p = 0.144$	–	$r = -0.723, p = 0.000$	$r = -0.438, p = 0.025$
RWC	$r = 0.528, p = 0.005$	$r = -0.758, p = 0.000$	–	$r = 0.508, p = 0.007$	RWC	$r = 0.44, p = 0.024$	$r = -0.723, p = 0.000$	–	$r = 0.39, p = 0.049$
Left-Authoritarian Legacy	$r = 0.418, p = 0.030$	$r = -0.26, p = 0.191$	$r = 0.508, p = 0.007$	–	Left-Authoritarian Legacy	$r = -0.025, p = 0.905$	$r = -0.438, p = 0.025$	$r = 0.39, p = 0.049$	–

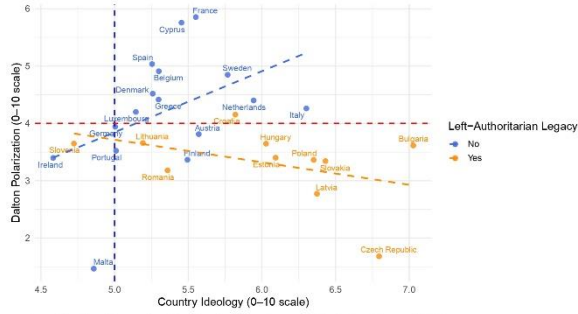
Correlation Matrix for 2018					Correlation Matrix for 2011				
	Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy		Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy
Country Ideology	–	$r = -0.02, p = 0.921$	$r = 0.645, p = 0.000$	$r = 0.364, p = 0.062$	Country Ideology	–	$r = 0.476, p = 0.016$	$r = 0.272, p = 0.188$	$r = -0.161, p = 0.441$
Dalton Polarization	$r = -0.02, p = 0.921$	–	$r = -0.771, p = 0.000$	$r = -0.259, p = 0.192$	Dalton Polarization	$r = 0.476, p = 0.016$	–	$r = -0.712, p = 0.000$	$r = -0.345, p = 0.092$
RWC	$r = 0.645, p = 0.000$	$r = -0.771, p = 0.000$	–	$r = 0.421, p = 0.029$	RWC	$r = 0.272, p = 0.188$	$r = -0.712, p = 0.000$	–	$r = 0.244, p = 0.239$
Left-Authoritarian Legacy	$r = 0.364, p = 0.062$	$r = -0.259, p = 0.192$	$r = 0.421, p = 0.029$	–	Left-Authoritarian Legacy	$r = -0.161, p = 0.441$	$r = -0.345, p = 0.092$	$r = 0.244, p = 0.239$	–

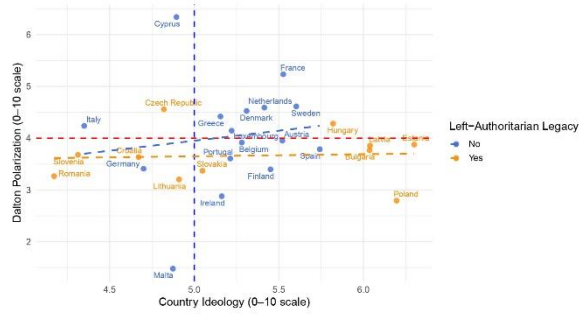
Correlation Matrix for 2015					Correlation Matrix for 2010				
	Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy		Country Ideology	Dalton Polarization	RWC	Left-Authoritarian Legacy
Country Ideology	–	$r = -0.128, p = 0.524$	$r = 0.71, p = 0.000$	$r = 0.302, p = 0.128$	Country Ideology	–	$r = 0.393, p = 0.064$	$r = 0.496, p = 0.016$	$r = -0.322, p = 0.134$
Dalton Polarization	$r = -0.128, p = 0.524$	–	$r = -0.784, p = 0.000$	$r = -0.243, p = 0.222$	Dalton Polarization	$r = 0.393, p = 0.064$	–	$r = -0.594, p = 0.003$	$r = -0.627, p = 0.001$
RWC	$r = 0.71, p = 0.000$	$r = -0.784, p = 0.000$	–	$r = 0.36, p = 0.065$	RWC	$r = 0.496, p = 0.016$	$r = -0.594, p = 0.003$	–	$r = 0.31, p = 0.150$
Left-Authoritarian Legacy	$r = 0.302, p = 0.128$	$r = -0.243, p = 0.222$	$r = 0.36, p = 0.065$	–	Left-Authoritarian Legacy	$r = -0.322, p = 0.134$	$r = -0.627, p = 0.001$	$r = 0.31, p = 0.150$	–

## Appendix 6. The set of plots of Country positions and Trend line for 2010-2024

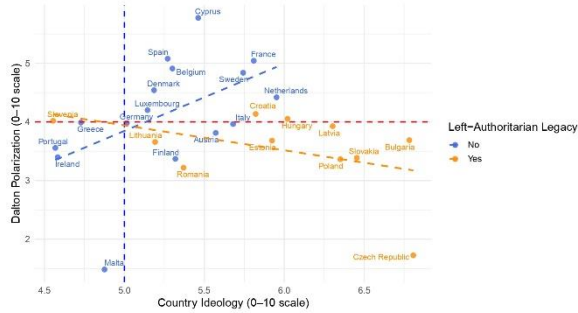
**Country Positions by Ideological Center and Polarization – 2024**  
Based on Parties' Distribution on the Left-Right Scale



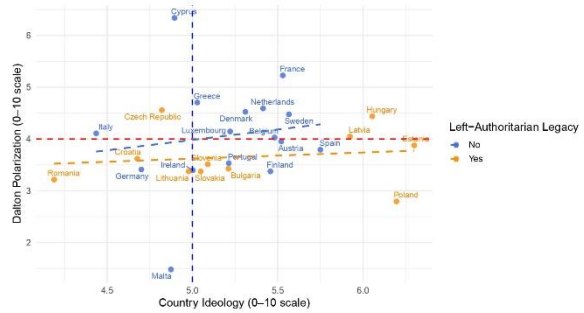
**Country Positions by Ideological Center and Polarization – 2014**  
Based on Parties' Distribution on the Left-Right Scale



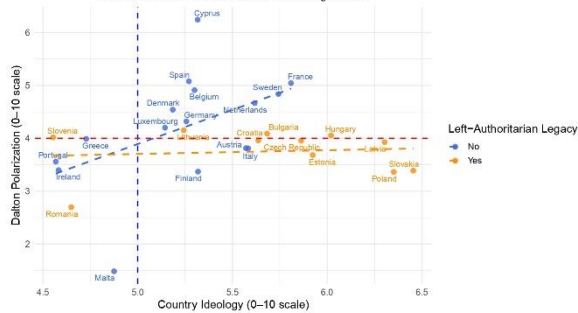
**Country Positions by Ideological Center and Polarization – 2022**  
Based on Parties' Distribution on the Left-Right Scale



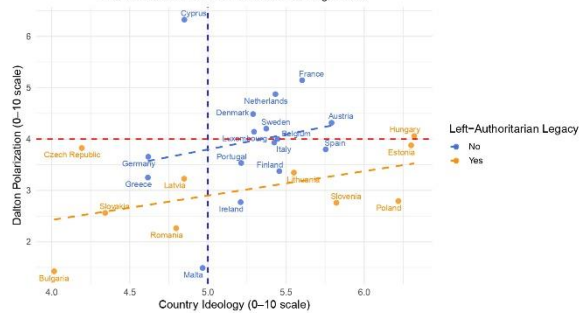
**Country Positions by Ideological Center and Polarization – 2013**  
Based on Parties' Distribution on the Left-Right Scale



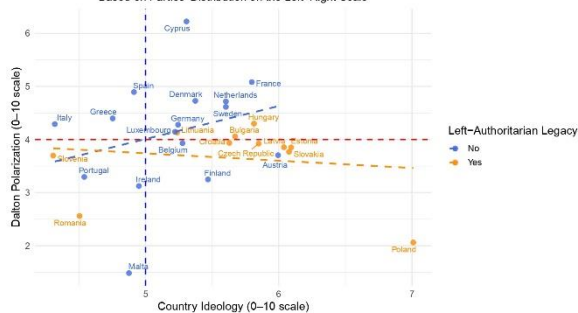
**Country Positions by Ideological Center and Polarization – 2020**  
Based on Parties' Distribution on the Left-Right Scale



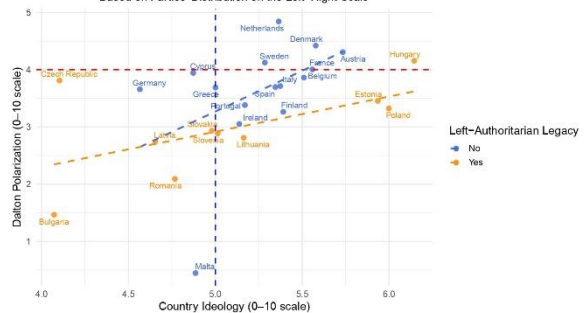
**Country Positions by Ideological Center and Polarization – 2012**  
Based on Parties' Distribution on the Left-Right Scale



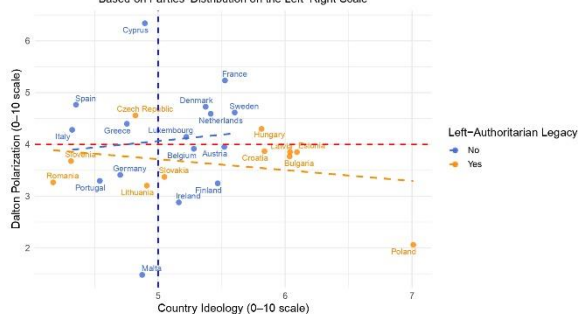
**Country Positions by Ideological Center and Polarization – 2018**  
Based on Parties' Distribution on the Left-Right Scale



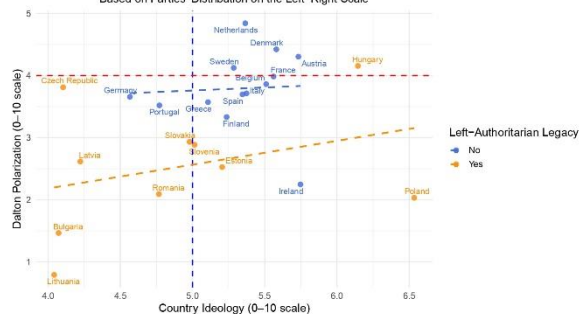
**Country Positions by Ideological Center and Polarization – 2011**  
Based on Parties' Distribution on the Left-Right Scale



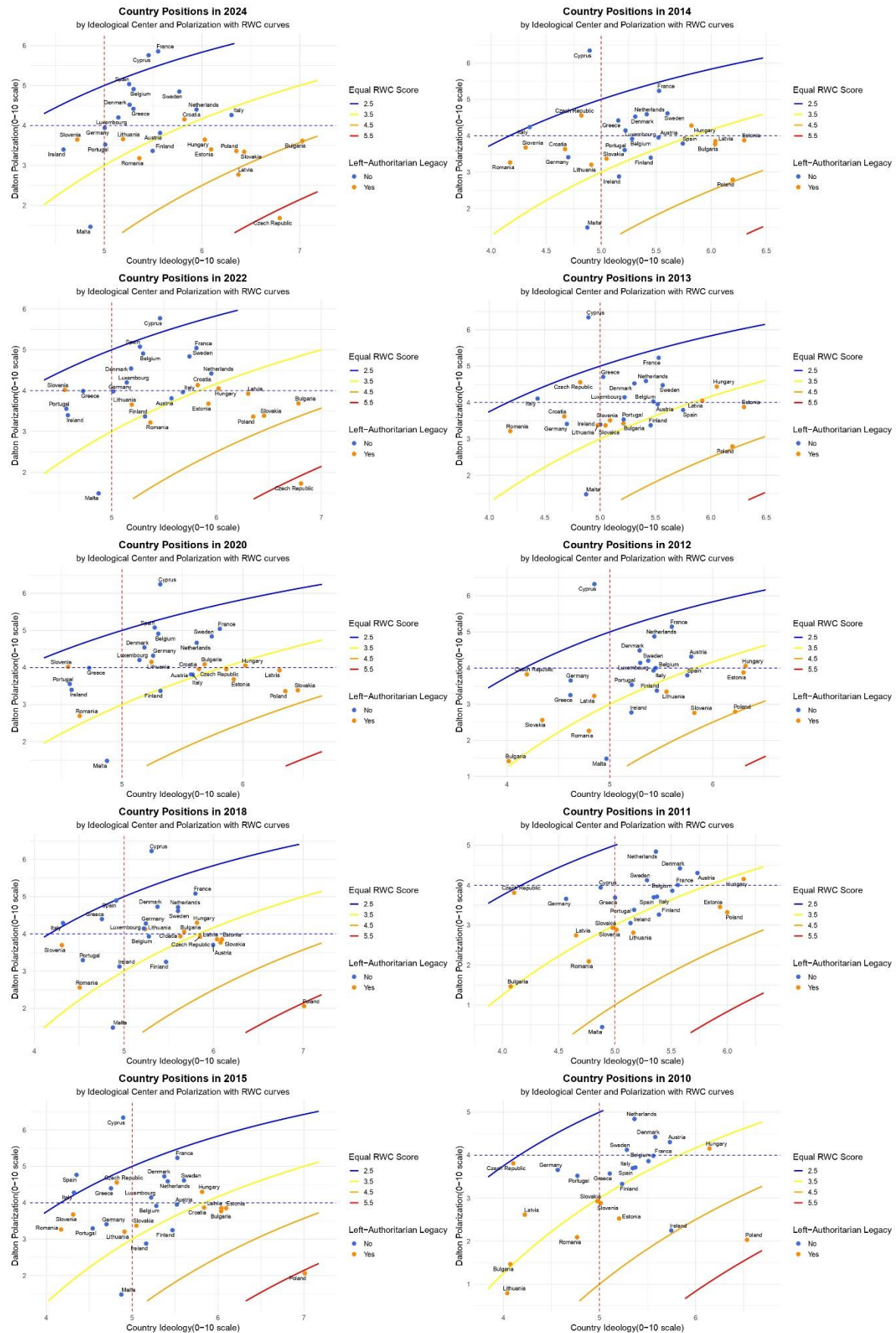
**Country Positions by Ideological Center and Polarization – 2015**  
Based on Parties' Distribution on the Left-Right Scale



**Country Positions by Ideological Center and Polarization – 2010**  
Based on Parties' Distribution on the Left-Right Scale



# Appendix 7. The set of plots of Country positions and RWC curves for 2010-2024



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