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**Abstract**

This research examines impacts of austerity on the political instability in the European Union, defined as elevated levels of electoral volatility and ideological polarization. By analyzing macroeconomic theories that elucidate the effects of austerity on citizens' wealth and the national economic agenda, and, alongside, political theories that explore how voters` economic mindsets and interests are mobilized during national legislative elections, this study formulates hypotheses that assess the political viability of Keynesian versus Neoclassical (taxation- versus spending-based) approaches to austerity.

Statistical analyses were performed to test these hypotheses across various groups of EU Members. The overall findings indicate that political repercussions of austerity are not uniform among European states. In EU Members with Continental European, Social-Democratic and Market-based capitalism, austerity has not emerged as a significant contributor to political instability. Conversely, the situation in South European states raises considerable concern. The dissonance between voters' Neoclassical perspectives and the prevailing Keynesian mainstream has led to increased electoral and populism.

Importantly, this research does not posit that political risks should be regarded as the paramount consideration in the formulation of austerity policies. Rather, the primary objective of this study is to provide insights that can assist policymakers in macro-financial imperatives with political ramifications during austerity implementations.

**JEL codes**: P16, E62, H12

**Key words**: fiscal austerity, political stability, electoral volatility, ideological polarization, ideological dispersions, populism, Keynesian theory, Neoclassical theory, economic voting, European politics.

## Introduction

The sequence of politico-economic shocks of the recent past, from the 2008 Global Crises to the ongoing security, energy, and migration crises prompted by Russia's invasion of Ukraine, has resulted in a wave of bankruptcies and extraordinary pressure on the social system. Traditionally, the main narrative of European political establishments is that the current level of spending is unsustainable and needs to be brought down by reducing expenditures or backed by raising tax revenues. The focus here is generally on the implementation of fiscal austerity measures, embodying a set of political-economic policies aimed at the reduction of government budget deficit through expenditure- and tax-based means in crisis times (Glomm et al., 2018).

On the one hand, austerity is considered as a functional response to growth in budget deficits. High levels of budget deficits, i.e. a situation in which government expenditures significantly exceed revenues, challenge long-term economic developments, increasing rampant inflation risks and uncertainty about future interest rates and tax rates (Ali Salman and Harvie, 2005; Alesina and Giavazzi, 2019). However, the reality is that austerity may not align with objective macro-financial needs. As Blyth (2013) argue, austerity is the product of global neoliberal transformation aimed at the diminution of governments capacities promoting market solutions. Even in situation of socio-economic stability, when the macro-financial context does not warrant fiscal adjustments, governments may invoke 'crisis rhetoric' that pressures policymakers to implement austerity (Stiglitz, 2012). At the same time, globalization has significantly affected national fiscal policies. In the EU, supra-national agreements, namely the Stability and Growth Pack (SGP) and European Fiscal Compact (EFC), were designed to impose stricter caps on government expenditures and borrowings thereby driving austerity implementations.

Considering all these trends, austerity policies have been important factors determining modern polito-economic agendas, especially in the EU. Before the 2008 financial crisis, Neoclassical ideas, stating that austerity refuses passive and costly transfers in favor of more investments in human and physical development while mitigating the problem of growing budget deficits (Haffert and Mertens, 2015) dominated the austerity discourse. It was assumed that austerity programs demonstrate not only a government's fiscal discipline to external creditors, but may also engage long-term economic growth by increasing investments (Alesina et al., 1998), private consumption (Blanchard, 1990; Blanchard and Perotti, 2002), and by creating opportunities for the private sector (Giavazzi and Pogano, 1990).

However, the crisis challenged many of these assumptions. Keynesian 'anti-austerians' (such as Blyth, 2013) argue that spending cuts reduce private demand thereby prolonging economic recessions. Considering the above, austerity can be highly contentious due to its potential negative impact on people's well-being and economic performance of a country. In terms of the political and societal influence, electoral crises and mass protests indicate the disputed nature of the fiscal austerity, which is often perceived by voters as key causes of social inequality and poverty. Politically, austerity is often associated with political pressures on incumbent mainstream political parties. In fact, there appears to be a significant mismatch between government officials trying to sustain public opinion, emphasizing that strict measures are necessary, and voters, disquieted by the prospect of (new) austerity measures.

In the present Security crisis, when expenditures are expected to grow dramatically increasing deficits, debates on the need and desirability of new austerity programs have been reviving in academia, the political sphere, and society.

Everything the above suggests that the implementation of austerity constitutes a political decision, not purely an economic one. There appears to be political factors that have significantly diminished the ability of governments to employ austerity measures effectively, thereby exacerbating the hazard of political instability. The essential premise here is that austerity can lead to political crises, when the electoral losses of ruling parties and polarized ideological political landscape make it difficult to build stable government coalitions and find consensus on sustainable policy solutions. In this context, the core aim of this research is to measure the impact of austerity on political stability, paying attention to the impact of taxation- and expenditure- based, or, in other words, Keynesian and Neoclassical, austerity packages.

Considering all the above, the main research question to be addressed in the study is:

- *How fiscal austerity implementations affect political stability in the EU?*

The research sub-question is:

- *Which types of austerity policies can be associated with lower and higher levels of political stability in the EU?*

## Case selection: the European Union

Conceptualizing political instability as the adverse effect of austerity programs on electoral volatility and ideological polarization, this study analyzes the results of National legislative elections since 1993, when the Maastricht Treaty founding the Union entered into force that required Member States to avoid excessive budgetary deficits. There are three key reasons for focusing on the EU context. Academically, the EU provides a particularly useful case study for cross-national level analysis of links between fiscal austerity and political instability. As was mentioned earlier, most EU countries, traditionally, have moved to fiscal austerity as a tool to manage budget deficit. In addition, among the EU members, there are the countries that have been experiencing permanent budget deficits crises as well as ‘strong’ European economies that have generally managed to recover rapidly after political and financial shocks. Thus, by analyzing the impact of austerity packages on the stability of various Member States, it can be determined how relations between austerity and political instability change depending on the levels of socio-economic and financial developments.

## Research gaps and academic novelty

In the literature, there has strong debate as to the strength and direction of the impact of austerity on political stability. Whereas some scholars argue that ‘costs’ of austerity for governments are not significant (Alesina et al., 1998; Arias and Stasavage, 2016) or austerity strengthens political stability (Giger and Nelson, 2011; Giger and Nelson, 2013; Varoufakis,

2018), others emphasize instead the robust links between fiscal consolidations and political unrest episodes (Blyth, 2013; Wenzelburger, 2014; Ponticelli and Voth, 2017; Hübscher et al., 2020; Jacques and Haffert, 2021). For instance, Armingeon and Giger (2008) conclude that 'there is no strong and systematic punishment for governments' (Armingeon and Giger, 2008, p. 633) during and after the implementation of austerity regimes. At the same time, Blyth (2013), positioned in the second camp, stresses that 'the development of austerity of economic policy brought people riots, political instability, more rather than less debt' (Blyth, 2013, p. 229). The present research contributes to this discussion by testing empirically the link between austerity and political instability. In addition, whereas previous research has paid little attention to the structure of the austerity packages while discussing the links between fiscal consolidations and political instability episodes, this research provides a more fine-grained view by also taking account specifically of the structure of austerity packages

In addition to this, both groups of scholars usually employ a very narrow approach to the concept focusing solely on a leader's or ruling parties' turnover as the main indicator of political instability. The result however is that potential hazards rooted in large ideological polarization of multi- party system are ignored. The proposed study takes a wider approach to political concept that includes two key determinants: electoral volatility of political system, as well as a rise of ideological polarization.

Finally, this study contributes to post-democracy discussion. Nowadays, globalization makes it almost impossible to pursue national macroeconomic policy. As was mentioned earlier, European supra-national institutions promote fiscal integration in the context of the SGP and EFC. While intergovernmental treaties facilitate austerity designed to comply with the SGP's balanced budget and debt break rules, these fiscal policies are very difficult to control with democratic instruments. Considering these, influences of austerity on democratic agenda need to be discussed.

## Research strategy

To address abovementioned research questions, hypothetico-deductive logic was employed, through which hypotheses are generated from general theories and subsequently tested (Hancke, 2009). Through the research process, evidence to support or reject hypotheses are generated. The hypothetico-deductive research strategy looks briefly as follows.

Firstly, concepts that form theories were defined. Then, two blocks of theories were formed. The first block is the 'economic' block. Here, two approaches can be distinguished. The Keynesian approach, which induces the idea that austerity packages reduce the aggregate demand and GDP directly, considers that expenditure-based austerity is much more recessionary than tax rates increases. Non- Keynesian perspectives, on the other hand, attest that austerity measures can stimulate the economy by increasing private consumption and investments, while considering taxation increases as an ineffective tool to shorten budget deficit. In the second, or 'political' block, the focus was put on the theories that explain how the citizens' wealth and citizens' understanding of the national economic agenda, are both heavily affected by austerity programs, and are connected to electoral choice. Then, theories

that explain how these macroeconomic perspectives are mobilized in multi-party systems, were described. Finally, hypotheses were synthesized based the abovementioned arguments.

## Methodological approach: Statistical research

Large-data positivist research methods were employed to test the hypotheses. For this purpose, two concepts, namely instability and austerity, were transformed into quantifiable variables.

To measure political instability as electoral volatility, the Pedersen's (1979) electoral volatility index (EVI), which captures net electoral changes between elections of all agents in the political system, and Bartolini and Mair's (1990) index, which investigates the structure of EVI, were employed. To capture the second dimension, ideological polarization, ideological dispersions were calculated based on Dalton's (2008) strategy. This approach measures polarization as a standard deviation of party position from 'ideological center' weighted by parties' vote share. Secondly, shares for populist (radical left or right) parties, as important measurements of ideological polarization (Roberts, 2021), were calculated. Finally, forms of governments and levels of democratic development were considered as control variables. Input data were taken from Emanuele (2015), Parties and Elections in Europe (2021), and European Election (2020) databases. The data was analyzed since the year of the country's joining of the EU.

Then, an operational measure of the independent variable, namely austerity, was developed. Firstly, fiscal adjustment episodes were identified by using Alesina and Ardagna's (2012) strategy. This approach enables the researcher to 'capture' adjustment episodes of different longevity and influence on budget deficits. After, expenditure- and taxation-based austerity models were researched in relative isolation. Additionally, control variables characterizing the level of economic development, initial state, and type of financial and socio-economic systems, were described.

To overcome the problem of the endogeneity of fiscal variables, cyclically adjusted data, namely cyclical adjustment of general government revenue, expenditure, and budget balances, were used. This RESEARCG is based on Kuhnert et al. (2020) dataset and, supplementary, from The World Bank (2021) data. This research relies on the production function (PF) approach for the estimation of output gaps, and on the Hodrick-Prescott (HP) filter method for the Member States acceded to the EU in 2004, 2007, and 2013.

At the final and most important stage of the analysis, the direction and strength of the connection between political stability (conceptualized as limited levels of electoral volatility and ideological polarization) and the different types of austerity packages at both national and EU levels were estimated by using cross-tabulation and Ordinary Least Squares (OLS) regression methods. Notably, OLS methods allow the researcher to include multiple control variables thereby isolating the effects of austerity on political stability. In contrast, alternative methods, such as structural equation modeling (SEM) or path analyses, may require more complex specifications. Secondly, OLS still provides reliable estimates even when some assumptions (such as homoscedasticity, and normality of residuals) are mildly violated,

especially in large samples. Therefore, this statistical approach produces data-driven conclusions making it accessible for policymakers and practitioners.

## Defining basic categories

The first step in the review of existing theories and literature is the definition of the central concept, namely the 'political stability'. This concept refers to the ability of the political system to sustain its structure while responding to external and internal challenges (Parsons, 1969). Thus, political stability is seen as governmental longevity or resilience, particularly during economic and political shocks, including the implementation of austerity programs. In other words, political stability, thus, refers to a limited degree of electoral volatility.

In this research, a wider approach of political stability is employed, including also the dimension of ideological polarization. Firstly, ideological polarization refers to as political dispersion. Political dispersion embodies the ideological 'distance' between parties. As Sartori (1976) mentioned, 'the term is used to denote an ideological distance, that is, the overall spread of the ideological spectrum of any given polity' (Sartori, 1976, p. 126). Secondly, the category of ideological polarization is associated with the rise of populist ideologies, similarly to Roberts (2021); Bertoa and Rama (2021). The ideational approach, according to which populism is associated with radical right (Mudde, 2007) or left (March, 2011) ideologies, is employed. Additionally, parties are also considered as populist if they have no clear ideological background (Zulianello, 2020). Summarizing the above, political stability refers to the adequate levels of electoral volatility and ideological polarization of incumbent parties that makes it possible to form stable coalitions. Logically, the 'political instability' is a reverse situation, when 'institutional structures and processes fail to resolve conflicts and implement acceptable policies, ceasing to respond to groups and individual demands, the result would be political or social instability' (Indede et al., 2018, p. 5). In a narrow sense, political instability is thus defined as high levels of electoral volatility or high ideological polarization.

The basic 'economic' concept to be defined is 'fiscal austerity'.

In this study, the definition of fiscal austerity used is based on the synthesis of two approaches. Similar to Blyth (2013), fiscal austerity is defined as a macro-discursive set of ideas that impose a dominant policy response to economic shocks. Austerity measures or policies are motivated, as mentioned in Konzelman (2014) and Devries et al. (2014), by the objective of budget deficit reduction. As such, the proposed definition of fiscal austerity, similar to Jacques (2020), excludes retrenchment measures, such as the selling off of non-financial assets or an increase in the retirement age to qualify to public pensions, that do not have a direct budgetary impact in the short-term.

To sum up, fiscal austerity, the core concept to this research, is defined as a set of fiscal measures, namely spending cuts, tax increases, or a combination of both, that are implemented as a response to economic shocks and are expected to have a positive, direct and short- term effect on the budget deficit reduction.

A challenge one faces when engaging in austerity research is that the distinction between terms 'fiscal austerity' and 'fiscal consolidation' is not always clear-cut. Whereas some scholars (e.g. Philippopoulos et al., 2017) state that these terms can be used interchangeably, in this research these categories are differentiated for analytical purposes. Firstly, the term 'fiscal consolidation' relies more on existing jurisdictions and norms. For instance, in the official publications of the OECD, fiscal consolidation is defined as 'concrete policies aimed at reducing government deficits' (OECD, 2011). As such, fiscal austerity is a 'wider' concept that incorporates the concept of 'fiscal consolidation'. Thus, fiscal austerity is defined, in this research, as episodes of fiscal consolidations during economic stagnations periods.

While analyzing fiscal austerity, it is necessary to consider the type and initial state of financial and socio-economic systems. To do so, Amable's (2003; 2009) typology of modern capitalism was employed. By analyzing social protections, wage-labor nexuses, financial-intermediation sectors, and corporate governances, this author differentiates between Market-based, Social-Democratic, Continental European, South European, and Asian models of capitalism.

Market-based (Anglo-Saxon) model is characterized by weak social protection (with an emphasis on poverty alleviation, means-tested benefits, private pension system), low public expenditures (particularly on education), low employment protection (with decentralization of wage bargaining), high sophistication of financial markets, high importance of price competition and non-involvement of governments in product markets. This model is practiced in the UK and Ireland. In contrast to an Anglo-Saxon system, a Social-Democratic model is based on the principles of the 'Welfare State' in public policies with a high level of social protection and public expenditures, employment protection (with coordinated wage bargaining), high importance of quality competition in product markets (with a state involvement) and a high degree of banking concentration. This system works in Denmark, Sweden and Finland. The Continental European model is 'balanced' between contrasting Market-based and Social-Democratic systems. It is characterized by moderate levels of social protection, public expenditures (with moderate expenditures towards poverty alleviation), employment protection (with moderate coordination of wage bargaining), both quality and price competition in product markets (with moderate state involvement), low sophistication of financial markets, and a high banking concentration. This model is employed in most EU Members. South European capitalism is similar to the Continental European model. However, the main differences are higher centralization of wage bargaining with many conflicts in industrial relations, expenditure structure is more oriented toward poverty alleviation and pensions. This system is employed in Italy, Spain, Greece, Portugal, Malta, Cyprus. According to Amable (2003; 2009), there is also the Asian model of capitalism, which is characterized by the importance of both price and quality competition, protectionist trade policies, employment protection within the large corporations, no sophistication of financial markets, low levels of social protection, and public expenditure. However, there is no example of the Asian model in the EU.

It also should be noted that all these models do not exist in pure forms in practice. In this research, the focus is put on the dominant model, whereas the characteristics typical for other, minor, models are ignored while performing large-scale analysis.

## Economic theories

When discussing the economic necessity and consequences of austerity regimes, there has been an ideological 'battle' between two schools of thought over the course of the last century. One camp embraces interventionist (Neo-) Keynesian ideas, according to which austerity is 'the policy perception for the top of the business cycle, to prevent the economy from over-heating' (Kanzelman, 2012, p. 2), while considering austerity measures as extremely recessionary during crisis times. The other camp, by contrast, supports Neoclassical ideas of free markets, assuming that austerity is a policy for the bottom of the business cycle (Kanzelman, 2012). The two schools also induce contrasting views concerning the economic effects of expenditure- and tax- austerity measures.

To understand the Keynesian effects of austerity, firstly, the mechanism of 'automatic stabilizers' need to be explained. Automatic stabilizers, of which examples are income taxes and welfare spending, act to dampen fluctuations in national income or GDP. Thus, budget deficit rises when the economy contracts, and falls when the economy expands. For instance, in a period of economic growth, tax revenues rise while unemployment benefits decline, thereby decreasing deficit (or increasing surplus) 'automatically'. These stabilizers supporting demand and thereby constitute an important tool in a recession, when the private sector is trying to cut spending or decrease consumption (Keynes, 1937 /2012; Keiser, 1956). Considering this, austerity, according to Keynesian theory, is the attempt of governments to counteract the effect of the automatic stabilizers. As such, the Keynesian view perceives austerity as counterproductive measures. Consequently, deficit can rise as a response to the implementation of austerity measures: if the adverse effect of fiscal consolidation is GDP reduction, tax revenues might fall even further while spending on benefits rises. In terms of the strength of the effect of each type of fiscal consolidation on national income, the Keynesian model implies that spending cuts are more recessionary than a tax increase, and the spending multiplier, in absolute value, is higher than the tax multiplier.

Nevertheless, this Keynesian approach to the effects of fiscal consolidation, particularly the assumption on the size of multipliers, has been discussed many times by supporters of contrast, Neoclassical, views. Generally, this latter camp induces the idea that the complex behavior of economic agents can heavily affect the results of fiscal austerity plans, while criticizing Keynesian approach as being very 'technical' and 'empirically weak'. Currently, at least two sets of Neoclassical ('Non-Keynesian') arguments can be distinguished.

The first group of arguments in the Non-Keynesian camp, as developed among others by Feldstein (1982), Blanchard (1990), Giavazzi and Pagano (1990), Bertola and Drazen (1993), McDermott and Wescott (1996), Sutherland (1997), Blanchard and Perotti (2002) and Ramey (2019), explains the effects of fiscal adjustments on national income through the 'consumption' channel. More specifically, these arguments are based on the assumption that a fiscal policy consolidation can lead, under certain conditions, to an increase in private consumption, potentially because of three effects: a pure expectation effect, a wealth effect, and a substitution effect (Carvalho, 2009).

The pure expectation effect, which refers to the Ricardo–de Viti–Barro equivalence principle, arises from the idea that with expenditure-based austerity, households, that behave in a

forward-looking manner (also referred to as 'Ricardian rational actors'), consider the lower path of spending as a sign that the taxes in the future are not tend to rise as much as previously expected, or may even fall. In other words, spending cuts reduce uncertainty about future tax liabilities. These expectations raise present discounted value of disposable income, which eventually increases private consumption. In other words, if the permanent expected income of consumers increases — the level of private consumption rises thereby affecting national income. Similar to households, investors perceive their future tax burden as potentially reduced, or at least lower in comparison with tax-based austerity. These effects are stronger the more credible and long-lasting the expenditure cuts are expected to be. In terms of tax-based austerity programs, they generate expectations of additional taxes in the future, thereby being much more recessionary (Feldstein, 1982; Blanchard, 1990; Blanchard and Perotti, 2002; Bertola and Drazen, 1993; Sutherland, 1997; Ramey, 2018).

A wealthy effect, described in McDermott and Wescott (1996), relates to the growth in wealth, generated by a decrease in interest rates resulting from the government spending cuts. This raises the market value of assets, held by consumers, and also increases the opportunity cost of savings, thereby increasing the current household's consumption. Thus, the decrease in spending, to a particular degree, can 'activate' consumption, thereby having a positive effect on national income.

Finally, the substantial effect, which is based on the idea that public consumption can be substituted by private consumption. More specifically, social services supplied by the public sector, such as healthcare, education and culture, can be 'absorbed' by private institutions. Therefore, in the case of expenditure-based austerity, the reduction of government expenditures creates opportunities for the private sector to expand driving the growth of national income (Giavazzi and Pagano, 1990).

The second set of arguments, presented in Alesina et al. (1998), Alesina and Perotti (1995), Alesina et al. (2002), Alesina and Argdana (1998), and Argdana (2007), is derived from the assumption that the effective fiscal consolidation induces an increase in private investments thereby raising national income. This 'investment' mechanism can be explained by a demand-side 'credibility' effect and by a supply-side labor market effect.

The 'credibility' effect occurs when the tax, as well as investment, risks are mitigated when the investors are certain about long-term tax dynamics. That is to say, fiscal consolidation policies are implemented in a situation of economic instability and exploding public debt, when investors (and consumers) are uncertain about the future. The longer an unsustainable economy waits before a launching stabilization mechanism, the bigger the future austerity package is needed, increasing the uncertainty about long-term tax expectations. When austerity eventually occurs, it removes uncertainty about further delays 'boosting entrepreneurs' confidence and supporting investment spending…' (Alesina and Giavazzi, 2019, p. 144). In addition to this, this certainty about future tax patterns decreases the risk default premium, thereby affecting the interest rates. At the same time, fiscal consolidation is usually associated with the reduction of government borrowing requirements. Eventually, all this results in the stimulation of aggregate demand increasing the national income level (Alesina et al., 1998; Alesina and Argdana, 1998).

The labor market effect, then, is the increase of private investments through the enhancement of labor market efficiency. A reduction of public spending cuts, especially government wage bills and welfare payments, has a direct effect on the labor market. Such austerity measures thus induce market adjustments that, to a particular degree, stimulate employment, labor productivity thereby increasing profits and eventually driving investment growth (Alesina and Perotti, 1995; Argdana, 2004).

To sum up, supporters of Keynesian and Neoclassical views proposing contrasting views on fiscal austerity, stressing that the effects of expenditure- and taxation- based austerity plans are different.

## Political theories

Having discussed possible economic outcomes of the implementation of different kinds of fiscal austerity measures, the mechanism of how these macroeconomic patterns are transformed to political leverage now needs to be explained. To do so, two groups of 'political' theories are analyzed. First, there are the 'economic voting' theories, explaining the influence of voter macroeconomic considerations on political support. Second, theories are discussed describing how voter's perceptions are 'mobilized' and represented in a multi-party system.

The 'economic voting' theory argues that changing economic conditions, particularly driven by the implementation of the fiscal austerity regimes, are vital factors affecting individual voting preferences. As such, these considerations are central to election outcomes. The economic voting theory is based on the 'classic' reward-punishment paradigm, according to which voters tend to support an incumbent candidate and party with successful economic performance, whereas the public would withdraw electoral support in the case of unsuccessful economic policies (Lewis-Beck and Paldam, 2000; Dorussen and Taylor, 2003).

Regarding types of voting behavior, two models can be distinguished. According to the first, rational (Alesina et al., 1997; Wolfers, 2002; Drussen and Taylor, 2003), model, most voters behave in a rational manner, demonstrating awareness of their own as well as national interests during the elections, of which the most principal are economic ones. Rational voters are able to understand observed information, particularly about macroeconomic patterns. As such, responsible and goal-seeking voters 'exchange' their votes for economic benefits, such as high GDP growth, low unemployment, or inflation. At the same time, rational voters distinguish endogenous from exogenous shocks, thereby being able to evaluate governmental policies adequately. According to the second, irrational or 'naïve' (Caplan, 2008), model, a rational profile of voters is unrealistic while voting behavior is very sophisticated. Thus, voters can be 'fooled' by, for example, expenditure booms during electoral periods. This study does not focus on the discussion on models of voting behavior. Instead, this research assumes that both types of voting behavior, to a certain degree, explain economic voting behavior. To mitigate this bias that come from the voter rationality paradigm, the proposed research considers the dramatic growth of ideological polarization (particularly driven by extreme right- and left- populist parties) as an indicator of political instability and irrational behavior of voters, thus, 'capturing' and 'measuring', to a particular extent, voters' irrationality.

Considering the above, austerity policies need to meet the interests of voters, who are able, at least to certain extent, to evaluate fiscal austerity packages. As austerity packages (expenditure- and tax- based) do affect economic performance, and thereby well-being of citizens, these measures can be expected to be perceived negatively or positively by voters affecting electoral choices, economic voting theory states.

As a next step, it is important to examine how economic perception and interests of voters are mobilized during the elections. Generally, elections are assumed to function as a 'market' in which voters and politicians exchange interests. In explaining this process, the cleavage theory proposed by Lipset and Rokkan (1967) is particularly useful. Political parties, according to this theory, are 'agents of conflict and instruments of integration' (Lipset and Rokkan, 1967, p.3). Political parties are seen as 'agents of conflict' because they compete against each other by offering distinct solutions on a wide range of policies to voters, particularly those aimed at the reduction of a budget deficit. They may act as 'instruments of integration', however, when the parties collide. As a result of this 'conflict', voters mobilize ideas, thereby forming 'clusters', that are in opposition to the ideas of other groups of voters. This study puts the concept of 'agents of conflict in political competition' within the context of democratic system, where voters are free to choose the parties that meet their interests the best. Considering this, economic developments, such as growing budget deficits, have the potential to divide society and result in cleavage. The mismatch between voters' interests and ruling parties' positions may lead to a rapid electoral turnover as well as the occurrence of new, and (or) the rise of existing non-mainstream, parties aimed at the satisfying of changing voters' interests. These processes may make it difficult to save the appropriate level of political support of incumbent authorities, as such, potentially leading to political instability.

In 'traditional' models of democratic politics, center-left and center-right parties play a crucial role in the political competition, representing different views, particularly concerning austerity programs. As a central aspect of left-wing ideological background is the reduction of inequality in income distribution, which is associated with fiscal profligacy (Herwartz and Theilen, 2017), left-wing political actors are prone to oppose austerity, especially expenditure-based one. By contrast, right-wing politics are based on the idea that social hierarchies and inequality are natural and rooted in market economies (Gidron and Ziblatt, 2019). As such, right governments are not prone to support taxation-based austerity programs that lead to the increase in state control over the free markets. Thus, implementations of austerity programs are important factors that affect this left-right ideological split between incumbent parties. Excessive between-parties' ideological dispersion leads to an explosion of hostility between political actors, thereby sharply increasing political instability risks (Bjedov et al., 2014).

Nowadays, the reality is that both types of mainstream parties, especially in the EU, are perceived as embracing austerity policies at least to certain extent, even if many voters object against austerity regimes (Hubscher et al., 2020; Baccini and Sattler, 2021). The main reasons for this are: strong constraints on fiscal policy, particularly on a public deficit and debt, imposed by international financial markets (Ezrow et al., 2014), domestic and international rules (e.g. 'debt brakes'), the Maastricht criteria or International Monetary Fund (IMF) bail-

out conditions (Copelovitch et al, 2016), and the prevalence of monetarist views among European policy-makers (Best, 2004).

The main problem here is the rise of anti-establishment radical left or right parties, which heavily affect the ideological polarization in the EU benefiting from macroeconomic instabilities. These political actors often offer populist macroeconomic policies, which may in the worst-case result in the collapse of an economic system and, in most cases, eventually lead to the discretization of governmental institutions (Hubscher et al., 2019; Hubscher et al., 2020).

Summarizing the above, incumbent parties that support particular austerity measures perceived by voters as less costly and necessary for economic stabilization and performance, are less likely to face electoral turnover. If there is a mismatch between party and voters' position concerning austerity, however, political instability, in the forms of electoral volatility and the rise of ideological dispersion, can be expected to occur.

## Synthesizing Hypotheses from 'Economic' and 'Political' Blocks of Theories

To sum up, there are two approaches, namely Keynesian and Neoclassical (non-Keynesian) ones, to explain the macroeconomic consequences of fiscal austerity. Both approaches state that austerity does affect citizens' wealth level as well as the national economic agenda. As such, voters, who are assumed to behave mostly in a rational manner, can be expected to transform their perspectives concerning implemented austerity measures into electoral preferences. Voters' perspectives are mobilized during the elections through the multi- party system in which citizens choose between parties that are 'closer' to their perspectives, particularly concerning the structure of austerity packages. These parties compete against each other by offering distinct solutions on a wide range of policies to voters, particularly those aimed at the reduction of a budget deficit. The situation when voters' interests and ruling parties' positions are mismatched may lead to rapid electoral turnover from incumbent agents of the political system increasing the electoral volatility. At the same time, the implementation of austerity regimes is a factor of excessive between-parties ideological dispersion, resulting in an explosion of hostility between left- and right- wing political actors. The interests of non-rational, or 'naïve', voters can be mobilized by non-mainstream parties, which usually support populist macroeconomic programs, thereby increasing ideological polarization. Both high levels of electoral volatility and ideological polarization of incumbent parties result in political instability.

Given this theoretical framework, two sets of hypotheses that synthesize the abovementioned arguments were designed:

$H(1)_{main}$: *Expenditure-based fiscal austerity is associated with political instability in the EU, expressed in electoral volatility as well as ideological polarization of incumbent parties.*

$H(1)_{alternative}$: *Expenditure-based fiscal austerity is not associated with political instability in the EU, expressed in electoral volatility as well as ideological polarization of incumbent parties.*

$H(2)_{main}$: *Taxation-based fiscal austerity is associated with political instability in the EU, expressed in electoral volatility as well as ideological polarization of incumbent parties.*

$H(2)_{alternative}$: *Taxation-based fiscal austerity is associated with political instability in the EU, expressed in electoral volatility as well as ideological polarization of incumbent parties.*

## Approaching political instability

As was mentioned earlier, there are two dimensions of political instability, namely electoral volatility and ideological polarization.

For operational measurement of political stability as electoral volatility, a set of indexes were employed. Firstly, Pedersen's (1979) Electoral Volatility Index (EVI) shows net electoral changes for all political agents in a polyarchic system between elections.

EVI is calculated as follows:

$$EVI = \sum_{i=1}^{I} \frac{|S_{i,t} - S_{i,t-1}|}{2} \qquad (1.0)$$

where S – electoral share of party i in election t, I – number of parties participating on either election t or t-1.

EVI ranges from 0 (static electoral situation: no parties gained, and thus no parties lost either) to 1 (all the parties from the last election were reduced to zero votes).

Secondly, Bartolini and Mair`s (1990) index. This index, 'modification' of EVI, employs a fine-grained perspective to the electoral volatility by separating volatility caused by vote switching between different types of political parties.

According to Bartolini and Mair (1990), EVI is calculated as follows:

$$EVI = RegV + AltV + OthV \qquad (3.2)$$

where *RegV* – electoral volatility caused by vote switching between parties that enter or exit political system in both elections *t* or *t+1*, *AltV* – electoral volatility due to vote switching between existing (incumbent) parties, *OthV* – electoral volatility for parties with small electoral shares not enabling them to enter a political system. It is also worth mentioning that all components of this index are calculated by 'traditional' Pedersen's (1979) scheme. While *AltV* affects the political stability as (usually) the largest component of electoral volatility measured in EVI, high levels of *RegV* show enormous social and political cleavages that cannot be 'captured' by incumbent political actors, thereby indicating political instability. Situations, when *RegV* exceeds *AltV,* indicate political crises. EVIs with their structural components were calculated based on Parties and Elections in Europe (2021) and European Election (2020) databases. Results are in *Table 1* in *Appendices*.

The second dimension of political stability, namely ideological polarization, is measured as ideological dispersion and the spread of populism. To measure ideological dispersions, the approach described in Dalton (2008) and Sigelman and Yough (1978) is employed. According

to this method, ideological dispersion (*P*) in a polyarchic political system is calculated as follows:

$$P = \sqrt{\sum(w_i * (p_i - \bar{p})^2)} \quad (3.3)$$

where $w_i$ – weighting based on parties seat-share, $p_i$ – parties' ideological position[1] on the scale from 0 (extreme left) to 1 (extreme right) on , $\bar{p}$ – ideological center of gravity, which is calculated as:

$$\bar{p} = \sum(w_i * p_i) \quad (3.4)$$

This approach to ideological dispersion is based on seat-share weighting. This method enables the researcher to overcome biases due to the disproportional effect of minor parties on the degree of polarization (Schmidt, 2016). In other words, it mitigates the influence of parties that are neither relevant for coalition bargaining nor the dynamics within electoral competition while being ideologically distant from mainstream political players.

To evaluate ideological dispersion, firstly, ideological centers of gravity were calculated. To do so, parties' ideological positions were ranged from 0 (extreme left) to 1 (extreme right) based on information in Parties and Elections in Europe (2021). ***Table 2*** **in** ***Appendices*** shows ideological centers for each election since EU's accession. Then, ideological dispersions for each election in each EU country were calculated based on Dalton`s (2008) method described earlier. The results are in ***Table 3*** in *Appendices.*

In terms of the spread of populism, main criteria to define a party as populist are: radical left or right ideological orientation (Rooduijn and Akkerman, 2015), the absence of a 'robust' ideological background (Zulianello, 2020). Populist parties were identified based on information provided by the Parties and Elections in Europe (2021) and Rooduijn et al. (2019) databases. It is worth mentioning that there is a high degree of subjectivity while defining parties as populist. The list of populist parties is presented in *Table 4* in *Appendices, while Table 5* in *Appendices* contains information on the shares of seats occupied by populist parties.

For a better understanding of links between political stability and fiscal austerity, factors that characterize institutional political background, need to be taken into account. At least three variables that characterize specific features of polyarchic systems need to be controled. Firstly, the variable which indicates a form of government: presidential republic, semi-presidential republic, parliamentary republic. According to Tayler and Herman (2014), a form of government affects ideological dispersions of parties and the proportion of seats held by 'anti-system', or radical, parties. Data for this variable were taken from Bormann and Golder's (2013) dataset. Secondly, the variable which characterizes the level of democratic development. In this research, EU Membership is an indicator of democratic development. 'Old' EU Members, with EU's accession year before 2004, are 'established' democracies, whereas 'new' and 'newest' Members are usually in the democratic transformation stage.

[1] This study is based on Bobbio's (1996) 'classic' distinction between left-wing parties (ideology) that support egalitarian policies designed to reduce social inequalities, and right-wing parties (ideology) that regard social inequality, or hierarchical order, as inevitable. Bobbio (1996) distinguishes four types of political actors: extreme left or authoritarian egalitarians (0), the moderate left or liberal egalitarians (0,35 – 0,4), the moderate right or liberal inegalitarians (0,6 – 0,75), extreme right or authoritarian inegalitarians.

Third control variable is a migration. As Ruzza (2018) emphasized, immigration, particularly driven by European integration, can lead to the spread of radical, in other word populist, ideologies thereby increasing political instability. Data on migration was taken from World Population Review (2022).

## Approaching fiscal austerity

When analyzing austerity measures, most researchers face at least two issues. The first issue is the endogeneity of fiscal variables (Alesina and Giavazzi, 2019). This issue arises from the two-way interaction between fiscal policies and output growth: the reduction of budget deficits over GDP ratio may be due to an increase in the denominator, not being rooted in the implementation of discretionary policies. In other words, changes in tax revenues or budget spending are dependent on business cycles and may have nothing to do with austerity policies. To overcome this, cyclically adjusted fiscal variables, namely cyclical adjustment of general government revenues, expenditures, and budget balances (CABs), were used while analyzing fiscal adjustment episodes. In terms of the methodological background and data sources, this research is based on Kuhnert's et al. (2020) database, which relies on the production function (PF) approach for the estimation of output gaps, and on the Hodrick-Prescott (HP) filter method for Member States acceded to the EU in 2004, 2007 and 2013. Secondly, the multi-year nature of fiscal adjustments (Perotti, 2012). Austerity programs are multi-year plans that are revised along the way.

To identify fiscal austerity periods, this study adopts Alesina and Ardagna's (2012) strategy, which analyzes changes in CABs over different time periods. A specific definition of fiscal adjustment to be used for further analysis is the following. 'Fiscal adjustment is either: a two-year period in which the CAB over GDP improves in each year and the cumulative improvement is at least two points of the balance / GDP ratio; a three or more-year period in which CAB over GDP improves in each year and the cumulative improvement is at least three points of the balance/GDP ratio' (Alesina and Ardagna, 2012, p.5).

In this study, Alesina and Ardagna`s (2012) strategy was enhanced by incorporating analyses of changes in CA revenues and spending while identifying fiscal austerity periods. This comprehensive approach not only examines the duration of austerity measures but also captures even minor and short-term fluctuations in CABs. This allows for the identification of fiscal adjustments that may have varying impacts on budget deficits. Additionaly, this strategy facilitates an exploration of the mechanism behind changes in CABs, even when these changes are minimal.

To identify austerity episodes, data on CABs for each EU Member was sourced from Kuhnert et al. (2020) dataset and supplemented with data from The World Bank (2021) data. Using Alesina and Ardagna's (2012) strategy, fiscal adjustment episodes and, thus fiscal austerity periods, were identified as detailed in *Table 6* in *Appendices*. The next stage is the analysis of data on Cyclically Adjusted Total Revenues (CATR) and Cyclically Adjusted Total Expenditures (CATE), collected from Kuhnert et al. (2020) and The World Bank (2021). Fiscal austerity periods were identified as those in which CATR over GDP increases during at least two consecutive years (CATE over GDP decreases during at least two consecutive years) and the

cumulative growth is at least one point. Results are in *Table 7* and Table 8 in *Appendices*. Dominant austerity types in EU Members are summarized in *Table 9* in *Appendices*.

## Testing hypotheses

At the first stage, correlation analyses (results in *Table 10 in Appendices*) show that links between electoral volatility and fiscal are not the same in different groups of EU Members. Correlations show that there are vulnerable groups with stronger links between austerity and dimensions of political instability. More advanced research methods were employed to investigate the influence of austerity on political risks in EU Members with Market-based, Social-Democratic, Continental European and South European groups.

### *Testing hypotheses: investigating links between structures of fiscal austerity and political stability in EU Members with Market-based capitalism*

In countries with Market-based capitalism (the UK and Ireland), austerity has, generally, decreased aggregated electoral volatility, as regression analyses (results are in Table 11 in Appendices) shows. However, if other factors, such as inflation, unemployment, and regime type are fixed, CAB to GDP ratios was found to be the non-significant factor affecting electoral volatility. Considering these arguments, austerity may decrease electoral volatility in this group of states, albeit this influence has been weak.

It is worth mentioning that populism and *RegV* levels in this group of states have been very low. As such, the influence of austerity structure on these dimensions of political stability was ignored. Regarding ideological dispersions and populism, regression analyses (results are in *Table 13* and Table 14 in *Appendices*) produced no statistically significant evidence that increases in CAB to GDP ratios significantly affect this dimension of political instability.

According to *Table 9* in Appendices, taxation-based austerity regimes have been usually implemented in the UK. In Ireland, by contrast, an expenditure-based approach has been employed. To investigate the influence of fiscal austerity structure on political stability, correlation analyses (results are in the following *Table 1*) were perpetrated.

In Ireland, increases in CA revenues (necessary for stable or increasing spending levels) result in electoral volatility decreases. It can be assumed that the Keynesian approach, stating that higher (or at least stable) expenditures are necessary to stimulate aggregated demand thereby prompting national income, is closer to Irish voters' perspectives. So, voters appreciate stable levels of expenditures while paying less attention to changes in taxation policies. Moreover, rises in revenues are associated with decreases in ideological dispersions, showing that voters tend to consolidate over governments implementing Keynesian-based austerity regimes. In the UK, the influence of austerity measures on electoral volatility is weak. At the same time, decreases in revenues and spending shorten ideological distances between incumbent parties. As such, a spending-based, or Neoclassical approach, consolidates government. Considering the above, governments in both countries tend to choose austerity models that do not meet voters` interests the best, that, potentially, can lead to political crises in these states.

| | *EVI / Cyclically Adjusted Revenues to GDP* | *EVI / Cyclically Adjusted Spendings to GDP* |
|---|---|---|
| *Ireland* | -0,480 (-48,0%) | 0,125 (12,5%) |
| *The UK* | -0,085 (-8,5%) | 0,045 (4,5%) |
| | *Ideological dispersions / Cyclically Adjusted Revenues to GDP* | *Ideological dispersions / Cyclically Adjusted Spendings to GDP* |
| *Ireland* | -0,962 (-96,2%) | -0,796 (-79,6%) |
| *The UK* | 0,885 (88,5%) | 0,909 (90,9%) |
| *Countries* | *Changes in CA Revenue / Spending and Effects on Political Stability* | |
| *Ireland* | ·Revenue ↑ — EVI ↓ + Ideological dispersions↓<br>·Spending ↓ — EVI (-) + Ideological dispersions ↑ | |
| *The UK* | ·Revenue ↑ — EVI (-) + Ideological dispersions ↑<br>·Spending ↓ — EVI (-) + Ideological dispersions ↓ | |
| | *Politically 'Safe' Austerity Model* | *Implemented Austerity Model* |
| *Ireland* | *Keynesian* | *Neoclassical* |
| *The UK* | *Neoclassical* | *Keynesian* |

*Schematic: ↑ — growth; ↓ — decline.

*Table 1*. Correlations between electoral volatility (as well as ideological dispersions) and Cyclically Adjusted revenues and spending in countries with Market-based capitalism. 'Political safety' of austerity models. Calculated by author. Data from *Table 1, Table 3* and *Table 6* in *Appendices.*

As was mentioned earlier, the influence of austerity on political stability, generally, has been positive, albeit low. This means that voters in this group of states, generally, have tolerated austerity (while not supporting implemented austerity models), paying more attention to actual results of austerity, namely, deficit shortens. However, these countries are in a risky group, as this mismatch between voters' perspectives and chosen austerity strategy can (potentially) grow, leading to political shocks.

***Testing hypotheses: investigating links between structures of fiscal austerity and political stability in EU Members with Social Democratic capitalist models***

Correlation (Results in Table 10 in Appendices) and regression (results are in *Table 11*, Table 12 and Table 13 in *Appendices*) show that austerity has not affected political stability in EU Members with Social Democratic capitalist models. To shed light on the mechanism which makes austerity 'politically' safe in these countries, *Table 2,* explaining the influence of austerity structure on political stability, was calculated.

| | |
|---|---|
| *EVI / Cyclically Adjusted Revenues to GDP* | *EVI / Cyclically Adjusted Spending to GDP* |
| 0,162 (16,2%) | 0,154 (15,4%) |
| *RegV / Cyclically Adjusted Revenues to GDP* | *RegV / Cyclically Adjusted Spending to GDP* |
| 0,114 (11,4%) | 0,049 (4,9%) |
| *Populism / Cyclically Adjusted Revenues to GDP* | *Populism / Cyclically Adjusted Spending to GDP* |
| -0,238 (-23,8%) | -0,247 (-24,7%) |
| *Ideological dispersions / Cyclically Adjusted Revenues to GDP* | *Ideological dispersions / Cyclically Adjusted Spending to GDP* |
| -0,110 (-11,0%) | -0,226 (-22,6%) |
| *Changes in CA Revenue / Spending and Effects on Political Stability* | |
| ·Revenue ↑ — EVI (↑) + RegV (↑) + Populism ↓ + Ideological dispersions (-)<br>·Spending ↓ — EVI (↓) + RegV (-) + Populism ↑ + Ideological dispersions ↑ | |
| *Politically 'Safe' Austerity Model: Keynesian (nuanced).*<br>*Implemented Austerity Model: Keynesian* | |

*Schematic: ↑ — growth; ↓ — decline.

*Table 2*. Correlations between EVI, *RegV* populism, ideological dispersions and Cyclically Adjusted revenues and spending in Social-Democratic countries. Calculated by author. 'Political safety' of austerity models. Calculated by author. Data from *Table 1, Table 3, Table 5* and *Table 6* in *Appendices.*

According to *Table 2*, there is a positive connection between electoral volatility (as well as *RegV*) and CA revenues and spending. In other words, decreases in CA revenues and in CA spending are associated with lower electoral volatility. This shows that spending-based austerity can be less risky from an electoral perspective. Regarding ideological polarization, increases in spending and revenues result in decreases in populism and ideological dispersions levels.

Considering research findings that indicate stronger correlations between changes in CA revenues and spending and dimensions of ideological polarization compared to electoral volatility, it can be inferred that the Keynesian approach to austerity, based on the maintenance of relatively high spending through increases in taxation revenues, tends to be politically safer. As shown in *Table 1, Table 3 and Table 5* in *Appendices*, there are no countries in this group exhibiting high levels of political instability. *Table 9 in Appendices* highlights that taxation-based austerity programs have been implemented in these states, thereby mitigating populism and, potentially, increasing electoral risks. It is also important to note that the unique characteristics of Social-Democratic countries, including strong welfare system,

consensus politics and effective communication increase governments` abilities to avoid political risks while implementing austerity.

***Testing meso-hypotheses: investigating links between structures of fiscal austerity and political stability in EU Members with Continental European capitalist models***

To mitigate the bias related to inequalities in levels of socio-economic development in the Continental European states, analyses for old, new (and newest) EU states were performed in relative isolation. Analyses (results in Table 11 and Table 12 in Appendices) show that austerity implementations have resulted in significant decreases in both aggregated electoral volatility and *RegV*, At the same time, regression and correlation analyses (results in *Table 10, Table 13* and *Table 14* in Appendices) produced no statistically significant evidence that increases in CAB to GDP ratios significantly affect ideological dispersions and populism. To measure the influence of austerity structure on political stability, following ***Table 3*** was calculated.

According to *Table 3*, austerity measures affect political stability differently in 'old' and 'new' EU Members. In 'old' EU Members with Continental European capitalism, rises in CA revenues are associated with increases in electoral volatility. By contrast, in new and newest EU Members, a correlation between electoral volatility and CA revenues is strong and negative. Regarding CA spending: increases in expenditures are associated with decreases in electoral volatility in new EU Members, while spending cuts in old EU states decrease political instability. In ‘old’ EU Members, rises in spending (and revenues) result in decreases in populism. In 'new' and 'newest' EU states situation is different: decreases in revenues and spending are associated decreases in populism. Increases in revenues and spending rise ideological dispersions in 'old' EU Members, while in 'new' and 'newest' EU Members these links are not significant.

Considering these results, the Keynesian approach, according to which increasing (or at least stable) level of spending drives economic growth, is ‘politically safe’ in 'new' and 'newest' EU Members with Continental European capitalism. Nevertheless, while Keynesian strategy leads to decreases in electoral volatility, it, albeit insignificantly, can rise populism. In established democracies, voters punish governments for tax increases and exceeding levels of spending. So, the Neoclassical view on austerity, stating that fiscal consolidations can stimulate the economy with an increase in private consumption and investment even in the short-term, is ‘politically safe’ in 'old' EU Members. While Neoclassical austerity programs decrease electoral volatility, this approach is risky in terms of populism. However, implementations of Neoclassical austerity models can make governments of 'old' EU Members more ideologically consolidated. As was mentioned earlier, implementations of fiscal austerity, generally, decrease electoral volatility in EU Members with Continental European capitalism. This means that governments in most of these countries tend to choose ‘politically safe’ models of austerity to meet voters’ interests.

| | *EVI / Cyclically Adjusted Revenues to GDP* | *EVI / Cyclically Adjusted Spending to GDP* | *RegV / Cyclically Adjusted Revenues to GDP* | *RegV / Cyclically Adjusted Spending to GDP* |
|---|---|---|---|---|
| *EU Members* | -0,550 (-55,0%) | -0,453 (-45,3%) | -0,540 (-54,0%) | -0,437 (-43,7%) |
| *Old Members* | 0,136 (13,6%) | 0,202 (20,2%) | 0,141 (14,1%) | 0,182 (18,2%) |
| *New, Newest Members* | -0,434 (-43,4%) | -0,397 (-39,7%) | -0,403 (-40,3%) | -0,323 (-32,3%) |
| | *Populism / Cyclically Adjusted Revenues to GDP* | *Populism / Cyclically Adjusted Spending to GDP* | *Ideological dispersions / Cyclically Adjusted Revenues to GDP* | *Ideological dispersions / Cyclically Adjusted Spending to GDP* |
| *EU Members* | -0,049 (-4,9%) | -0,047 (-4,7%) | 0,318 (31,8%) | 0,329 (32,9%) |
| *Old Members* | -0,178 (-17,8%) | -0,212 (-21,2%) | 0,438 (43,8%) | 0,449 (44,9%) |
| *New, Newest Members* | 0,242 (24,2%) | 0,215 (21,5%) | 0,093 (9,3%) | 0,092 (9,2%) |
| | *Changes in CA Revenue / Spending and Effects on Political Stability* | | | |
| *Old Members* | ·Revenue ↑ — EVI (-) + RegV (-) + Populism (-) + Ideological disp. ↑<br>·Spending ↓ — EVI ↓ + RegV ↓ + Populism ↑ + Ideological disp. ↓ | | | |
| *New Members* | ·Revenue ↑ — EVI ↓ + RegV ↓ + Populism ↑ + Ideological disp. (-)<br>·Spending ↓ — EVI ↑ + RegV ↑ + Poulism (-) + Ideological disp. (-) | | | |
| | *Politically 'Safe' Austerity Model* | | *Implemented Austerity Model* | |
| *'Old'* | *Neoclassical (nuanced)* | | *Neoclassical* | |
| *'New'* | *Keynesian (nuanced)* | | *Keynesian* | |

*Schematic: ↑ — growth; ↓ — decline.

*Table 3*. Correlations between aggregated electoral volatility (as well as *RegV*) and Cyclically Adjusted revenues and spending in countries with Continental European capitalism. 'Political safety' of austerity models. Calculated by author. Data from *Table 1, Table 3, Table 5* and *Table 6* in *Appendices.*

***Testing meso-hypotheses: investigating links between structures of fiscal austerity and political stability in EU Members with South European capitalist models***

While regression analyses (**results are in Table 11 in Appendices)** produce no evidence that austerity has significantly increased electoral volatility in the South European group, the situation with *RegV* is different. ***Table 12*** **in Appendices** investigates links between austerity and the riskiest type of volatility. The analysis shows that austerity implementations in South European states significantly affect *RegV*. An increase in CABs to GDP ratio by 1% leads to approximately 0,389 pp increase in *RegV*. Importantly, CAB to GDP ratio is a significant factor affecting this component of electoral volatility when all other factors, such as inflation, unemployment, regime type, and GDP, are fixed. Thus, econometric analysis shows that decreases in CABs to GDP ratios significantly increase *RegV*.

Regarding ideological dispersions, regression analyses (results are ***in Table 13 in Appendices***) show no significant links between austerity and this type of political instability. At the same time, as regression analysis showed in **Table 10 and Table 14 in Appendices**, austerity can seriously affect populism in the South European group.

Specifically, CAB to GDP ratio is a significant factor explaining approximately 9% of variations in populism levels. If an austerity regime is implemented, which resulted in a decrease in CAB to GDP ratios by at least 1%, populism is expected to rise by approximately 1,3 p.p. However, fiscal austerity does not significantly affect populism if other factors, such as unemployment and inflation, are controlled. Generally, regression analysis showed positive linear links between fiscal austerity and populism in South European states.

Further analyses of austerity structures are needed to explain why austerity is associated with political risks in South Europe. Firstly, the following correlation *Table 4* was calculated.

| *EVI / Cyclically Adjusted Revenues to GDP* | *EVI / Cyclically Adjusted Spending to GDP* |
|---|---|
| 0,439 (43,9%) | 0,154 (15,4%) |
| *RegV / Cyclically Adjusted Revenues to GDP* | *RegV / Cyclically Adjusted Revenues to GDP* |
| 0,502 (50,2%) | 0,173 (17,3%) |
| *Populism / Cyclically Adjusted Revenues to GDP* | *Populism / Cyclically Adjusted Spending to GDP* |
| 0,623 (62,3%) | 0,276 (27,6%) |
| *Ideological dispersions / Cyclically Adjusted Revenues to GDP* | *Ideological dispersions / Cyclically Adjusted Spending to GDP* |
| 0,279 (27,9%) | 0,108 (10,8%) |
| *Changes in CA Revenue / Spending and Effects on Political Stability* | |
| ·Revenue ↑ — EVI ↑ + RegV ↑ + Populism ↑ + Ideological disp. ↑<br>·Spending ↓ — EVI ↓ + RegV ↓ + Populism ↓ + Ideological disp. ↓ | |

| *Politically 'Safe' Austerity Model* | *Implemented Austerity Model* |
|---|---|
| Neoclassical | Keynesian |

*Schematic: ↑ — growth; ↓ — decline.

*Table 4*. Correlations between EVI, *RegV*, populism as well as ideological polarization and Cyclically Adjusted revenues as well as spending in countries with South European capitalism. 'Political safety' of austerity models. Calculated by author. Data from *Table 1, Table 3, Table 5* and *Table 6* in *Appendices.*

According to *Table 4*, increases in revenues and spending are associated with the growth in electoral volatility, populism, and ideological dispersions (albeit links are weak) levels. As the 'risky' South European group is at the special focus of this research, further regression analyses were perpetrated to investigate links between austerity structures and RegV as well as populism (*Table 4* shows the strongest correlation between austerity and these dimensions of political instability). Results in the following *Table 5*.

| | ***Model 1*** | ***Model 2*** | ***Model 3*** | ***Model 4*** |
|---|---|---|---|---|
| *Cyclically Adjusted Revenues to GDP, %* | 0,764***<br>(0,223) | 0,420*<br>(0,225) | 2,818***<br>(0,638) | 1,707**<br>(0,640) |
| *Cyclically Adjusted Spending to GDP, %* | -0,108<br>(0,198) | 0,092<br>(0,231) | -0,109<br>(0,566) | 1,065<br>(0,656) |
| *Regime type (0 - Parliamentary, 1 - Semi-Presidential)* | | -0,086<br>(1,271) | | 0,971<br>(3,613) |
| *EU Membership (0 – old Members, 1 – new and newest Members)* | | 1,265<br>(2,539) | | 10,738*<br>(7,215) |
| *Inflation, %* | | -0,320<br>(0,419) | | -1,589<br>(1,190) |
| *Unemployment, % of total labor force* | | 0,447***<br>(0,146) | | 1,544***<br>(0,415) |
| *GDP, trillion dollars* | | 1,356<br>(1,113) | | 4,093<br>(3,162) |
| *Years between elections* | | 1,437**<br>(0,747) | | 1,337<br>(2,124) |
| *Intercept* | -23,240*** | -29,344 | -94,188*** | -126,729*** |

| | | | | |
|---|---|---|---|---|
| | (9,303) | (12,731) | (26,575) | (36,176) |
| *N* | 41 | 41 | 41 | 41 |
| $R^2$ | 0,258 | 0,550 | 0,390 | 0,671 |
| *Adjusted* $R^2$ | 0,219 | 0,411 | 0,358 | 0,570 |
| *Residual Std. Error* | 4,497 | 3,829 | 12,847 | 10,881 |
| *F-Statistic* | 6,621*** | 3,965*** | 12,138*** | 6,632*** |
| *Note* | Standard errors in parentheses<br>$*p < 0.1; **p < 0.05; ***p < 0.01$ | | | |

*Table 5.* Linear simple and multiple models explaining *RegV* (Model 1-2) and populism (Model 3-4) in EU Members with South European capitalist models. Calculated by author. Data from *Table 1, Table 5, Table 6 and Table 7* in *Appendices.*

Regression analyses show that CA revenue is a statistically significant factor affecting *RegV*. *Model 2* shows that CA revenue affects (statistically significantly) this component of electoral volatility if control variables are fixed. The strength of these connections, as *Model 1* and *Model 2* show, is relatively high. For instance, a sharp increase in CA revenues by 5 p.p. is expected to result in approximately 2,1 p.p. increase in RegV, if other factors are fixed. In terms of CA spending, this analysis showed that the influence of this factor is modest and statistically insignificant. *Model 3* and *Model 4* produce evidence that CA revenue level is a statistically significant factor rising populism. A sharp increase in CA revenues by 5 p.p. is expected to result in approximately 8,5 p.p. increase in *RegV*. At the same time, CA spending was found to be a statistically insignificant factor.

Summarizing the above, cuts in tax revenues decrease electoral volatility as well as populism, while spending cuts were found not to significantly affect political stability in South European EU Members. This shows that the Neoclassical approach to austerity, stating that decreases in taxation rates are necessary to increase private consumption and investments, is 'politically safe' in these states. However, as taxation-based, or Keynesian, austerity packages have been widely implemented in EU Members with South European capitalism, austerity has contributed to high political instability in these states.

## Research results: links between fiscal austerity and political stability

In this research, links between fiscal austerity and political stability, measured as electoral volatility and ideological polarization, were investigated at different groups of EU Members.

In Market-based capitalist systems, where levels of expenditures to GDP are relatively low and governments are weakly involved in market regulation, austerity implementations have slightly reduced aggregated electoral volatility. Further analysis showed that increases in CA revenues are associated with decreases in electoral volatility in Ireland. At the same time, rises in revenues reduce ideological dispersions. Therefore, the Keynesian approach, according to which higher (or at least stable) expenditures are necessary to stimulate aggregated demand

thereby prompting national income, has been closer to Irish voters' perspectives. In the UK, the influence of austerity measures on electoral volatility is weak, while decreases in revenues and spending shorten ideological distances between incumbent parties. As such, a spending-based, or Neoclassical approach, consolidates the British government. Considering the above, governments in both countries tend to choose 'politically unsafe' austerity models. However, the influence of austerity on political stability, generally, has been positive, albeit low. This means that voters in these states, generally, have tolerated austerity (while not supporting implemented austerity models), paying more attention to the actual results of austerity, namely, deficit shortens. However, these countries are in a risky group, as this mismatch between voters' perspectives and chosen austerity strategy can (potentially) grow, leading to political shocks.

In EU states with Social-Democratic capitalist systems, that are characterized by very high levels of social protection and involvement of state institutions in markets, austerity has not affected political stability. To explain this phenomenon, further analysis focused on influences of austerity structures. Analysis showed a weak positive connection between electoral volatility and CA revenues and spending. At the same time, increases in spending and revenues are associated with decreases in populism and ideological dispersions. Thus, the Keynesian approach to austerity, based on the maintenance of relatively high spending through increases in taxation revenues, has been 'politically safe' in this group of states. As governments in these states have employed taxation-based austerity packages, doing so with medium frequencies, political risks have been mitigated.

In EU countries with Continental European capitalism, with relatively high levels of public expenditures and involvement of public authorities, austerity policies have reduced both aggregated electoral volatility and *RegV*. As there are countries with very different levels of socio-economic development in this group, analyses of the influence of austerity structure on political stability for 'old' and 'new' (and 'newest') EU states were perpetrated in relative isolation. In 'old' EU Members, increases in CA revenues rise electoral volatility, while spending cuts, albeit insignificantly, increase electoral volatility. In these states, increases in revenues and spending rise ideological dispersions. That is to say, voters 'punish' governments for tax increases and exceeding levels of spending. As such, the Neoclassical approach has been 'politically safe' in 'old' Continental EU Members. In 'new' EU states situation is different: there is a strong negative correlation between electoral volatility and CA revenues and spending. No links between ideological dispersions and revenues or spending were found in this group. Therefore, the Keynesian approach is closer to voters' perspectives in 'new' and 'newest' EU States. Generally, governments in both groups have chosen 'politically' safe models, thereby strengthening political stability. It is also worth mentioning that implementations of these 'electorally' safe approaches would potentially increase, albeit insignificantly, populism.

In EU Members with South European capitalism, with high levels of expenditures oriented towards poverty alleviation and pensions, austerity has sharply increased *RegV* as well as populism. Further correlation analyses of austerity structures showed that increases in revenues and spending are associated with the growth in electoral volatility and populism, while not affecting ideological dispersions. Regression analyses produced evidence that CA

revenue is a statistically significant factor in increasing *RegV* and populism. At the same time, CA spending has no significant effects on political stability. Considering these, the Neoclassical approach, according to which decreases in taxation rates and thereby in spending cuts increase private consumption and investments through pure expectation, wealth, substitutional, credibility, and labor-market effects, has been 'politically safe' in these EU Members. However, taxation-based (Keynesian) austerity packages have been widely implemented in these states in the past, which negatively affected political stability in South European states. Furthermore, these countries are characterized by higher levels of electoral volatility (usually higher than 12%) and populism (higher than 20%). Thus, fiscal austerity has been a serious hazard to political stability in this group.

*Table 6* summarizes information on the 'political safety' of Keynesian and Neoclassical approaches to austerity. It also shows mismatches between 'politically safe' and implemented austerity approaches, thereby indicating 'risky' groups.

| *Groups of European states* | | *'Politically' Safe Austerity Model* | *Implemented Austerity Model* |
|---|---|---|---|
| *Market-based* | *Ireland* | Keynesian | Neoclassical |
| | *the UK* | Neoclassical | Keynesian |
| *Social-Democratic* | | Keynesian (nuanced) | Keynesian (nuanced) |
| *Continental European* | *Old* | Neoclassical (nuanced) | Neoclassical |
| | *New* | Keynesian (nuanced) | Keynesian |
| *South European* | | Neoclassical | Keynesian |

*Table 6*. 'Political safety' of Keynesian and Neoclassical austerity models during national legislative elections in different groups of European states.

To conclude, there have been no common European trends in fiscal austerity and electoral volatility links. In other words, voters have perceived austerity measures differently in EU Members with different types of capitalist models. The hypotheses that expenditure-based (Neoclassical) austerity strategies are associated with higher political instability in the EU, expressed in electoral volatility as well as ideological polarization of incumbent parties, cannot be rejected for Members with South European and Continental European ('old' EU Members) capitalism. For EU Members with Market based, Social Democratic, Continental European ('new' and 'newest' EU Members) capitalist systems, the hypothesis that taxation-based (Keynesian) fiscal austerity strategies are associated with higher political instability, cannot be rejected.

These findings challenge popular views (Blyth, 2013; Wenzelburger, 2014; Ponticelli and Voth, 2017; Jacques and Haffert, 2021; Klein et al., 2022) that there have been robust links between austerity and political instability in most EU Members. By contrast, the research shows that adverse effects of austerity have not been the shared phenomena in EU states. Analyses show that austerity is not the factor seriously sharpening ideological polarization and electoral volatility in all EU Members except ones with South European capitalism.

These states have been in the scope of research explaining the political effects of austerity (Maesse, 2017; Prodromidou, 2018; Gabriel et al., 2023). However, the results of this research challenge the academic 'mainstream' in these states, where a strong presence of Keynesian economists (e.g. Varoufakis, 2018), who advocate for a growth-oriented economic policy with financial regulation, rising wages, and social expenditures, has affected a decision-making process (Maesse, 2017). By contrast, research results show that most voters in South Europe have a 'neoclassical mindset'. That is to say, the Neoclassical approach to austerity, forced by the so-called 'Troika' [2] is closer to most voters' perspectives. While expenditure-based austerity implementations as a response to the European debt crisis led to political instability (expressed in the rapid electoral turnover and the rise of populism) in these states from 2009 to the mid-2010s, these political shocks were mitigated rapidly. For example, the political shares of populist parties, namely Syriza in Greece and Podemos in Spain, decreased by two and three times respectively since 2015. Considering the research results, it can be assumed that if taxation-based austerity strategies were implemented in South European states, this would have much more serious political adverse effects.

There is a need for further research explaining the dominance of Neoclassical views among South European voters. It can be assumed that the roots of this phenomena is on authoritarian past of South European states. The drift to Neoclassical agenda is the result the erosion of corporatism models, in which 'governments preemptively organize social members into exclusive associations claiming to be their sole legitimate representative' (Ming-Sho Ho, 2015) increasing governments' authoritarian control. In other words, while corporatism models were widely employed in South European countries during the 20th century, with these models being associated with authoritarianism and negative historical experience (Pinto, 2012), South European voters have been seeking alternative politico-economic ideology during democratization in the 1980s-90s. Neoclassical ideas, with presuppositions of free competition and the absence of state interventionism, were alternatives to corporatism. These mismatches between decision-makers' views on austerity and voters' perspectives have resulted in higher levels of political instability in South European states.

## Conclusion

This research investigates fiscal austerity, a predominant response to the challenge of growing budget deficits, as a factor of political instability (conceptualized as limited degrees of electoral volatility and ideological polarization) in the EU Members. The discussion on the political effects of austerity gains special significance considering the sequence of hazards to European politico-economic stability, from the 2008 Global Crises to the ongoing security crises resulting from the Kremlin's aggression against Ukraine. Generally, this study shows that political effects of austerity differ among groups of European states.

After theoretical backgrounds were reviewed, explaining how macroeconomic austerity consequences affect voters' perspectives and thereby influence the stabilities of European multi-party systems, hypotheses were formulated and subsequently tested. Links between

[2] The single decision group created by three entities, the European Commission (EC), the European Central Bank (ECB) and the International Monetary Fund (IMF).

austerity and political instability were investigated in EU Members with Market-based, Continental European, South European, and Social-Democratic models of capitalism (Amable, 2003; 2009). In Market-based, Social Democratic, Continental European EU Members Neoclassical austerity strategies were found to be 'politically safe', while governments in these groups, in most cases, tend to implement austerity models that meet voters' interests the best. The most concerning situation was in South European states, where most voters are with 'Neoclassical mindset'. However, a strong presence of Keynesian economists (e.g. Varoufakis, 2018), who support a growth-oriented economic policy with financial regulation, rising wages, and social expenditures, has affected a macroeconomic policy in South Europe (Maesse, 2017).

It is worth mentioning that political risks should not be regarded as the most crucial factors in designing austerity policies; rather, macro-financial considerations should take precedence while implementing austerity. Nevertheless, the reality is that austerity is often a political decision, not purely an economic one. In this context, research findings can aid policymakers in balancing macro-financial necessities with political costs. Thus, this research offers insights that help decision-makers to find optimal, politically viable, austerity models that address growing deficits while mitigating adverse political effects.

When evaluating the validity of this research, it is crucial to recognize that this research does not test whether austerity measures, implemented in a particular European country, affect the political stability at the supranational, or European Parliament (EP), level. The EP, being the 'democratic watchdog of EU economic governance' (Crespy and Shmidt, 2017, p. 110), provides European politics with a platform where ideas about austerity and its alternatives are debated and legitimized (Elomäki, 2023). Thus, there is a need for further research testing whether voters in different EU states respond similarly or differently to fiscal austerity measures in terms of their electoral behavior during both national legislative and EP elections. Secondly, Further studies are necessary to explore links between austerity and political stability in other regions, such as South America or the USA. This perspective becomes particularly relevant because of ongoing integrational trends, especially within Mercosur (South American trade block evolving into a significant supra-national economic and political union). Secondly, this study does not differentiate among various groups of voters when analyzing the adverse political effects of austerity. Therefore, future research should investigate how voters from diverse backgrounds — such as income levels, education, and age — respond to austerity. Employing a wide scope of research methods, including qualitative approaches, will be crucial for illuminating links between austerity and voters' perspectives. Thirdly, this research does not distinguish between spending structures and types of taxes. More research is needed to investigate effects of changes in different types of taxes (e.g. income, corporate and sales taxes) and spending (e.g. social welfare, infrastructure, security, education) on political stability. Fourthly, Amable's (2003; 2009) grouping EU states may introduce bias. Consequently, research results could vary if alternative approaches to grouping of EU states are applied. Finally, this research does not analyze the effects of austerity on the individual country level. Further research examining the effects of austerity in individual countries, particularly those in the 'risky' South European group, needs to be conducted. Despite these limitations, this study contributes to the existing discussions on responses to the issue of growing deficits and lays the background for future research.

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Appendices

*Table 1.* Electoral volatility in the EU. Based on Emanuele (2015) and Parties and Elections in Europe (2021). Countries A-F.

*RegV – electoral volatility caused by vote switching between parties that enter or exit political system in both elections t or t+1, AltV – electoral volatility due to vote switching between incumbent parties, OthV – electoral volatility for parties with small electoral shares not enabling them to enter a political system, TV – total electoral volatility.

| ***Country*** | ***Election*** | ***RegV*** | ***AltV*** | ***OthV*** | ***TV*** | | ***Country*** | ***Election*** | ***RegV*** | ***AltV*** | ***OthV*** | ***TV*** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | 1995 | 0,10 | 3,70 | 0,20 | 4,00 | | Cyprus | 2021 | 4,70 | 10,15 | 0,80 | 15,65 |
| Austria | 1999 | 0,50 | 7,90 | 0,50 | 8,90 | | Czechia | 2006 | 2,10 | 12,90 | 2,20 | 17,20 |
| Austria | 2002 | 0,50 | 20,15 | 0,40 | 21,05 | | Czechia | 2010 | 19,30 | 13,45 | 1,15 | 33,90 |
| Austria | 2006 | 2,10 | 7,85 | 0,15 | 10,10 | | Czechia | 2013 | 22,00 | 12,40 | 1,30 | 35,70 |
| Austria | 2008 | 3,45 | 14,00 | 0,85 | 18,30 | | Czechia | 2017 | 14,20 | 22,50 | 0,35 | 37,05 |
| Austria | 2013 | 3,90 | 9,80 | 2,00 | 15,70 | | Czechia | 2021 | 3,40 | 4,65 | 2,65 | 10,70 |
| Austria | 2017 | 4,75 | 9,65 | 1,20 | 15,60 | | Denmark | 1994 | 0,90 | 8,75 | 1,05 | 10,70 |
| Austria | 2019 | 0,00 | 18,45 | 1,10 | 19,55 | | Denmark | 1998 | 0,00 | 7,50 | 0,60 | 8,10 |
| Belgium | 1995 | 1,60 | 4,80 | 1,60 | 8,00 | | Denmark | 2001 | 0,95 | 12,15 | 0,20 | 13,30 |
| Belgium | 1999 | 1,05 | 10,35 | 0,75 | 12,15 | | Denmark | 2005 | 0,00 | 7,40 | 0,40 | 7,80 |
| Belgium | 2003 | 0,00 | 12,60 | 0,30 | 12,90 | | Denmark | 2007 | 2,30 | 8,05 | 0,15 | 10,50 |
| Belgium | 2007 | 2,00 | 9,95 | 0,15 | 12,10 | | Denmark | 2011 | 0,00 | 11,60 | 0,10 | 11,70 |
| Belgium | 2010 | 1,75 | 13,60 | 0,20 | 15,55 | | Denmark | 2015 | 2,40 | 16,25 | 0,05 | 18,70 |
| Belgium | 2014 | 0,95 | 9,40 | 0,10 | 10,45 | | Denmark | 2019 | 2,55 | 17,65 | 0,40 | 20,60 |
| Belgium | 2019 | 0,00 | 16,75 | 2,45 | 19,20 | | Estonia | 2007 | 16,45 | 15,45 | 0,40 | 32,30 |
| Bulgaria | 2009 | 32,95 | 23,60 | 2,05 | 58,60 | | Estonia | 2011 | 4,15 | 6,35 | 1,70 | 12,20 |
| Bulgaria | 2013 | 8,85 | 11,70 | 3,15 | 23,70 | | Estonia | 2015 | 8,80 | 5,55 | 1,95 | 16,30 |
| Bulgaria | 2014 | 19,55 | 9,85 | 2,40 | 31,80 | | Estonia | 2019 | 0,00 | 13,85 | 3,05 | 16,90 |
| Bulgaria | 2017 | 7,95 | 23,90 | 3,40 | 35,25 | | Finland | 1999 | 2,00 | 9,65 | 1,30 | 12,95 |
| Bulgaria | 2021 | 24,55 | 10,20 | 1,75 | 36,50 | | Finland | 2003 | 1,05 | 5,10 | 1,25 | 7,40 |
| Croatia | 2015 | 15,45 | 12,10 | 5,90 | 33,45 | | Finland | 2007 | 0,00 | 6,80 | 1,15 | 7,95 |
| Croatia | 2016 | 0,15 | 5,20 | 1,00 | 6,35 | | Finland | 2011 | 0,00 | 14,80 | 0,15 | 14,95 |
| Croatia | 2020 | 12,05 | 9,15 | 0,50 | 21,70 | | Finland | 2015 | 0,00 | 7,45 | 0,55 | 8,00 |
| Cyprus | 2006 | 1,70 | 8,30 | 0,50 | 10,50 | | Finland | 2019 | 1,15 | 7,70 | 1,20 | 10,05 |
| Cyprus | 2016 | 3,60 | 10,55 | 1,20 | 15,35 | | France | 1997 | 3,45 | 12,90 | 0,55 | 16,90 |

Appendices

*Table 1.* Electoral volatility in the EU. Based on Emanuele (2015) and Parties and Elections in Europe (2021). Countries F-N.

| *Country* | *Election* | *RegV* | *AltV* | *OthV* | *TV* | *Country* | *Election* | *RegV* | *AltV* | *OthV* | *TV* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| France | 2002 | 5,00 | 21,55 | 1,20 | 27,75 | Ireland | 2007 | 0,00 | 4,10 | 2,80 | 6,90 |
| France | 2007 | 2,00 | 11,75 | 0,70 | 14,45 | Ireland | 2011 | 1,90 | 24,10 | 3,60 | 29,60 |
| France | 2012 | 0,70 | 21,80 | 1,10 | 23,60 | Ireland | 2016 | 5,45 | 18,40 | 0,90 | 24,75 |
| France | 2017 | 15,30 | 23,15 | 2,25 | 40,70 | Ireland | 2020 | 4,55 | 12,80 | 0,85 | 18,20 |
| Germany | 1994 | 0,00 | 6,90 | 0,65 | 7,55 | Italy | 1994 | 15,85 | 20,45 | 2,95 | 39,25 |
| Germany | 1998 | 0,60 | 6,45 | 1,25 | 8,30 | Italy | 1996 | 6,35 | 5,20 | 0,75 | 12,30 |
| Germany | 2002 | 0,60 | 4,90 | 1,30 | 6,80 | Italy | 2001 | 3,45 | 16,10 | 0,80 | 20,35 |
| Germany | 2005 | 0,60 | 7,65 | 0,95 | 9,20 | Italy | 2006 | 0,00 | 7,25 | 0,95 | 8,20 |
| Germany | 2009 | 1,00 | 11,65 | 1,05 | 13,70 | Italy | 2008 | 1,00 | 8,75 | 1,55 | 11,30 |
| Germany | 2013 | 2,85 | 13,15 | 0,75 | 16,75 | Italy | 2013 | 18,70 | 16,05 | 1,90 | 36,65 |
| Germany | 2017 | 1,75 | 14,30 | 0,80 | 16,85 | Italy | 2018 | 5,65 | 18,85 | 2,20 | 26,70 |
| Germany | 2021 | 1,05 | 14,40 | 1,25 | 16,70 | Latvia | 2006 | 15,55 | 12,35 | 1,05 | 28,95 |
| Greece | 1993 | 0,00 | 7,05 | 1,85 | 8,90 | Latvia | 2010 | 43,15 | 10,05 | 1,60 | 54,80 |
| Greece | 1996 | 0,00 | 4,35 | 1,35 | 5,70 | Latvia | 2011 | 11,90 | 28,50 | 3,60 | 44,00 |
| Greece | 2000 | 0,00 | 3,85 | 1,65 | 5,50 | Latvia | 2014 | 7,20 | 9,25 | 0,70 | 17,15 |
| Greece | 2004 | 1,10 | 3,70 | 0,85 | 5,65 | Latvia | 2018 | 23,45 | 16,80 | 1,95 | 42,20 |
| Greece | 2007 | 1,45 | 5,75 | 0,55 | 7,75 | Lithuania | 2004 | 71,15 | 5,20 | 4,25 | 80,60 |
| Greece | 2009 | 0,00 | 9,25 | 0,70 | 9,95 | Lithuania | 2008 | 12,95 | 21,15 | 2,40 | 36,50 |
| Greece | 2012 | 12,85 | 33,80 | 1,85 | 48,50 | Lithuania | 2012 | 15,00 | 15,70 | 1,70 | 32,40 |
| Greece | 2012 | 2,00 | 15,10 | 1,60 | 18,70 | Lithuania | 2016 | 6,55 | 23,05 | 0,35 | 29,95 |
| Greece | 2015 | 8,85 | 10,70 | 0,95 | 20,50 | Lithuania | 2020 | 9,00 | 12,90 | 1,80 | 23,70 |
| Greece | 2019 | 9,60 | 11,10 | 1,05 | 21,75 | Luxembourg | 1994 | 0,00 | 5,20 | 1,30 | 6,50 |
| Hungary | 2006 | 3,90 | 5,05 | 1,00 | 9,95 | Luxembourg | 1999 | 1,85 | 5,20 | 0,80 | 7,85 |
| Hungary | 2010 | 17,55 | 17,30 | 0,05 | 34,90 | Luxembourg | 2004 | 0,00 | 8,85 | 0,30 | 9,15 |
| Hungary | 2014 | 2,75 | 9,90 | 0,15 | 12,80 | Luxembourg | 2009 | 0,25 | 4,10 | 0,45 | 4,80 |
| Hungary | 2018 | 2,70 | 10,50 | 1,60 | 14,80 | Luxembourg | 2013 | 2,20 | 7,00 | 0,40 | 9,60 |
| Ireland | 1997 | 0,55 | 7,55 | 1,55 | 9,65 | Luxembourg | 2018 | 0,00 | 9,50 | 0,30 | 9,80 |
| Ireland | 2002 | 0,55 | 7,70 | 1,75 | 10,00 | Malta | 2003 | 0,25 | 0,25 | 0,00 | 0,50 |

Appendices

*Table 1.* Electoral volatility in the EU. Based on Emanuele (2015) and Parties and Elections in Europe (2021). Countries N-Z.

| *Country* | *Election* | *RegV* | *AltV* | *OthV* | *TV* | *Country* | *Election* | *RegV* | *AltV* | *OthV* | *TV* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Malta | 2008 | 0,30 | 1,90 | 0,30 | 2,50 | Slovakia | 2004 | 9,40 | 15,20 | 3,35 | 27,95 |
| Malta | 2013 | 0,00 | 6,25 | 0,25 | 6,50 | Slovakia | 2010 | 19,05 | 7,65 | 0,70 | 27,40 |
| Malta | 2017 | 0,50 | 0,30 | 0,25 | 1,05 | Slovakia | 2016 | 16,30 | 12,55 | 2,35 | 31,20 |
| Netherlands | 1994 | 3,05 | 17,85 | 1,30 | 22,20 | Slovakia | 2020 | 17,05 | 12,90 | 1,55 | 31,50 |
| Netherlands | 1998 | 2,30 | 13,15 | 1,45 | 16,90 | Slovenia | 2004 | 1,10 | 17,50 | 3,00 | 21,60 |
| Netherlands | 2002 | 9,30 | 20,10 | 1,90 | 31,30 | Slovenia | 2008 | 8,60 | 21,60 | 2,70 | 32,90 |
| Netherlands | 2003 | 0,60 | 15,35 | 0,60 | 16,55 | Slovenia | 2011 | 28,00 | 11,75 | 1,20 | 40,95 |
| Netherlands | 2006 | 6,30 | 13,05 | 0,85 | 20,20 | Slovenia | 2014 | 41,15 | 7,05 | 0,85 | 49,40 |
| Netherlands | 2010 | 0,00 | 22,50 | 1,10 | 23,60 | Slovenia | 2018 | 6,35 | 22,80 | 0,85 | 30,00 |
| Netherlands | 2012 | 0,95 | 14,25 | 0,65 | 15,85 | Spain | 1993 | 0,90 | 8,35 | 2,20 | 11,45 |
| Netherlands | 2017 | 0,90 | 21,50 | 0,85 | 23,25 | Spain | 1996 | 0,80 | 3,20 | 1,75 | 5,75 |
| Netherlands | 2021 | 1,70 | 12,00 | 1,35 | 15,05 | Spain | 2000 | 0,30 | 7,15 | 1,40 | 8,85 |
| Poland | 2005 | 5,60 | 31,00 | 1,50 | 38,10 | Spain | 2004 | 1,20 | 8,70 | 0,90 | 10,80 |
| Poland | 2007 | 24,30 | 12,20 | 1,20 | 37,70 | Spain | 2008 | 0,60 | 3,35 | 1,30 | 5,25 |
| Poland | 2011 | 16,40 | 2,50 | 1,35 | 20,25 | Spain | 2011 | 0,55 | 14,10 | 2,35 | 17,00 |
| Poland | 2015 | 21,10 | 13,05 | 2,55 | 36,70 | Spain | 2015 | 19,00 | 14,85 | 1,65 | 35,50 |
| Poland | 2019 | 7,80 | 9,40 | 4,05 | 21,25 | Spain | 2019 | 5,10 | 16,40 | 1,35 | 22,85 |
| Portugal | 1995 | 1,30 | 18,35 | 0,85 | 20,50 | Sweden | 1998 | 1,05 | 14,00 | 0,10 | 15,15 |
| Portugal | 1999 | 0,65 | 1,70 | 0,45 | 2,80 | Sweden | 2002 | 0,65 | 13,65 | 0,75 | 15,05 |
| Portugal | 2002 | 0,00 | 8,65 | 0,35 | 9,00 | Sweden | 2006 | 0,00 | 15,35 | 1,50 | 16,85 |
| Portugal | 2005 | 0,00 | 12,35 | 0,80 | 13,15 | Sweden | 2010 | 0,00 | 8,05 | 0,70 | 8,75 |
| Portugal | 2009 | 0,05 | 8,30 | 0,75 | 9,10 | Sweden | 2014 | 1,35 | 9,00 | 0,45 | 10,80 |
| Portugal | 2011 | 0,55 | 12,55 | 0,55 | 13,65 | Sweden | 2018 | 1,35 | 10,00 | 0,05 | 11,40 |
| Portugal | 2015 | 0,60 | 11,45 | 1,75 | 13,80 | UK | 1997 | 1,30 | 10,55 | 0,75 | 12,60 |
| Portugal | 2019 | 2,25 | 7,75 | 1,30 | 11,30 | UK | 2001 | 1,90 | 2,60 | 0,90 | 5,40 |
| Romania | 2008 | 47,10 | 1,85 | 2,05 | 51,00 | UK | 2005 | 0,20 | 5,45 | 0,50 | 6,15 |
| Romania | 2012 | 62,15 | 9,45 | 1,00 | 72,60 | UK | 2010 | 0,70 | 6,00 | 0,50 | 7,20 |
| Romania | 2016 | 87,40 | 0,55 | 1,45 | 89,40 | UK | 2015 | 2,40 | 14,95 | 0,85 | 18,20 |
| Romania | 2020 | 6,90 | 14,40 | 3,60 | 24,90 | UK | 2019 | 1,90 | 7,60 | 0,80 | 10,30 |

Appendices

*Table 2.* Ideological centers of gravity (0 – far left, 1 – far right). Based on Parties and Elections in Europe (2021).

| | *1993* | *1994* | *1995* | *1996* | *1997* | *1998* | *1999* | *2000* | *2001* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* | *2009* | *2010* | *2011* | *2012* | *2013* | *2014* | *2015* | *2016* | *2017* | *2018* | *2019* | *2020* | *2021* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | | | 0,61 | | | | 0,64 | | | 0,58 | | | | 0,58 | | 0,65 | | | | | 0,63 | | | | 0,66 | | 0,61 | | |
| Belgium | | | 0,42 | | | | 0,45 | | | | 0,44 | | | | 0,46 | | | 0,51 | | | | 0,51 | | | | | 0,50 | | |
| Bulgaria | | | | | | | | | | | | | | | | | 0,50 | | | | 0,41 | 0,56 | | | 0,45 | | | | 0,38 |
| Croatia | | | | | | | | | | | | | | | | | | | | | | | 0,57 | 0,58 | | | | 0,62 | |
| Cyprus | | | | | | | | | | | | | | 0,47 | | | | | 0,47 | | | | | 0,49 | | | | 0,42 |
| Czechia | | | | | | | | | | | | | | 0,48 | | | | 0,51 | | | 0,45 | | | | 0,58 | | | | 0,63 |
| Denmark | | 0,37 | | | | 0,39 | | | 0,40 | | | | 0,39 | | 0,42 | | | | 0,38 | | | | 0,47 | | | | 0,37 | | |
| Estonia | | | | | | | | | | | | | | | 0,58 | | | | 0,56 | | | | 0,60 | | | | 0,64 | | |
| Finland | | | 0,42 | | | | 0,44 | | | | 0,44 | | | | 0,46 | | | | 0,51 | | | | 0,51 | | | | 0,49 | | |
| France | 0,57 | | | | 0,45 | | | | | 0,60 | | | | | 0,57 | | | | | 0,44 | | | | | | 0,56 | | | |
| Germany | | 0,46 | | | | 0,43 | | | | 0,46 | | | 0,43 | | | | 0,43 | | | | 0,42 | | | | 0,50 | | | | 0,49 |
| Greece | 0,45 | | | 0,42 | | | | 0,43 | | | | 0,47 | | | 0,47 | | 0,43 | | | 0,51 | | | 0,42 | | | | 0,45 | | |
| Hungary | | | | | | | | | | | | | | 0,65 | | | | 0,87 | | | | 0,83 | | | | 0,85 | | | |
| Ireland | | | | | 0,63 | | | | | 0,61 | | | | | 0,62 | | | | 0,49 | | | | | 0,53 | | | | 0,48 | |
| Italy | | 0,58 | | 0,55 | | | | | 0,56 | | | | | 0,49 | | 0,52 | | | | | 0,47 | | | | | 0,60 | | | |
| Latvia | | | | | | | | | | | | | | 0,60 | | | | 0,57 | 0,61 | | | 0,59 | | | | 0,67 | | | |
| Lithuania | | | | | | | | | | | | 0,49 | | | | 0,57 | | | | 0,51 | | | | 0,48 | | | | 0,50 | |
| Luxemburg | | 0,52 | | | | | 0,54 | | | | | 0,53 | | | | | 0,52 | | | | 0,52 | | | | | 0,52 | | | |
| Malta | | | | | | | | | | | | | | | | 0,55 | | | | | 0,52 | | | | 0,49 | | | | |
| Netherlands | | 0,47 | | | | 0,47 | | | | 0,58 | 0,51 | | | 0,48 | | | | 0,54 | | 0,51 | | | | | 0,54 | | | | 0,56 |
| Poland | | | | | | | | | | | | | 0,79 | | 0,75 | | | | 0,74 | | | | 0,81 | | | | 0,78 | | |
| Portugal | | | 0,27 | | | | 0,26 | | | 0,28 | | | 0,25 | | | | 0,27 | | 0,29 | | | | 0,36 | | | | 0,25 | | |
| Romania | | | | | | | | | | | | | | | | 0,51 | | | | 0,50 | | | | 0,48 | | | | 0,55 | |
| Slovakia | | | | | | | | | | | | | | 0,60 | | | | 0,56 | | 0,48 | | | | 0,62 | | | | 0,58 | |
| Slovenia | | | | | | | | | | | | 0,44 | | | | 0,40 | | | 0,43 | | | 0,48 | | | | 0,46 | | | |
| Spain | 0,45 | | | 0,46 | | | | 0,49 | | | | 0,47 | | | | 0,47 | | | 0,49 | | | | 0,44 | 0,45 | | | 0,45 | | |
| Sweden | | | | | | 0,43 | | | | 0,44 | | | | 0,45 | | | | 0,49 | | | | 0,52 | | | | 0,54 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| UK | 0,46 | 0,46 | 0,49 | 0,55 | 0,57 | 0,56 | 0,59 |

Appendices

*Table 3.* Ideological distances. Based on Parties and Elections in Europe (2021).

| | *1993* | *1994* | *1995* | *1996* | *1997* | *1998* | *1999* | *2000* | *2001* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* | *2009* | *2010* | *2011* | *2012* | *2013* | *2014* | *2015* | *2016* | *2017* | *2018* | *2019* | *2020* | *2021* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | | | 0,27 | | | | 0,29 | | | 0,24 | | | | 0,26 | | 0,29 | | | | | 0,29 | | | | 0,28 | | 0,26 | | |
| Belgium | | | 0,24 | | | | 0,25 | | | | 0,27 | | | | 0,26 | | | 0,33 | | | | 0,32 | | | | | 0,35 | | |
| Bulgaria | | | | | | | | | | | | | | | | | 0,23 | | | | 0,27 | 0,27 | | | 0,30 | | | | 0,15 |
| Croatia | | | | | | | | | | | | | | | | | | | | | | | 0,20 | 0,19 | | | | 0,23 | |
| Cyprus | | | | | | | | | | | | | | 0,28 | | | | | 0,28 | | | | | 0,28 | | | | 0,26 |
| Czechia | | | | | | | | | | | | | | 0,26 | | | | 0,25 | | | 0,24 | | | | 0,20 | | | | 0,08 |
| Denmark | | 0,18 | | | | 0,22 | | | 0,26 | | | | 0,28 | | 0,28 | | | | 0,29 | | | | 0,32 | | | | 0,27 | | |
| Estonia | | | | | | | | | | | | | | | 0,16 | | | | 0,13 | | | | 0,17 | | | | 0,20 | | |
| Finland | | | 0,15 | | | | 0,15 | | | | 0,15 | | | | 0,15 | | | | 0,18 | | | | 0,17 | | | | 0,18 | | |
| France | 0,19 | | | | 0,21 | | | | | 0,22 | | | | | 0,21 | | | | | 0,16 | | | | | 0,13 | | | | |
| Germany | | 0,14 | | | | 0,15 | | | | 0,12 | | | 0,18 | | | | 0,20 | | | | 0,18 | | | | 0,24 | | | | 0,21 |
| Greece | 0,15 | | | 0,16 | | | | 0,16 | | | | 0,16 | | | 0,20 | | 0,21 | | | 0,27 | | | 0,26 | | | | 0,19 | | |
| Hungary | | | | | | | | | | | | | | 0,31 | | | | 0,26 | | | | 0,27 | | | | 0,25 | | | |
| Ireland | | | | | 0,15 | | | | | 0,16 | | | | | 0,15 | | | | 0,16 | | | | | 0,20 | | | | 0,21 | |
| Italy | | 0,26 | | 0,24 | | | | | 0,24 | | | | | 0,25 | | 0,14 | | | | | 0,16 | | | | | 0,16 | | | |
| Latvia | | | | | | | | | | | | | | 0,22 | | | | 0,23 | 0,24 | | | 0,25 | | | | 0,26 | | | |
| Lithuania | | | | | | | | | | | | 0,12 | | | | 0,14 | | | | 0,14 | | | | 0,15 | | | | 0,12 | |
| Luxemburg | | 0,14 | | | | | 0,14 | | | | | 0,13 | | | | | 0,14 | | | | 0,14 | | | | | 0,14 | | | |
| Malta | | | | | | | | | | | | | | | | 0,20 | | | | | 0,20 | | | | 0,19 | | | | |
| Netherlands | | 0,15 | | | | 0,15 | | | | 0,23 | 0,18 | | | 0,21 | | | | 0,24 | | 0,22 | | | | | 0,24 | | | | 0,25 |
| Poland | | | | | | | | | | | | | 0,19 | | 0,17 | | | | 0,17 | | | | 0,11 | | | | 0,18 | | |
| Portugal | | | 0,13 | | | | 0,13 | | | 0,13 | | | 0,12 | | | | 0,15 | | 0,15 | | | | 0,23 | | | | 0,12 | | |
| Romania | | | | | | | | | | | | | | | | 0,12 | | | | 0,07 | | | | 0,12 | | | | 0,19 | |
| Slovakia | | | | | | | | | | | | | | 0,29 | | | | 0,20 | | 0,16 | | | | 0,24 | | | | 0,20 | |
| Slovenia | | | | | | | | | | | | 0,08 | | | | 0,06 | | | 0,09 | | | 0,13 | | | | 0,13 | | | |
| Spain | 0,15 | | | 0,15 | | | | 0,13 | | | | 0,13 | | | | 0,13 | | | 0,14 | | | | 0,17 | 0,16 | | | 0,17 | | |
| Sweden | | | | | | 0,17 | | | | 0,15 | | | | 0,15 | | | | 0,19 | | | | 0,24 | | | | 0,26 | | | |
| UK | | | | | 0,18 | | | | 0,18 | | | | 0,19 | | | | | 0,20 | | | | | 0,20 | | 0,20 | | 0,20 | | |

*Table 4.* List of populist parties in EU Member states. Designed by author basing on information provided by Parties and Elections in Europe (2021) and Rooduijn et al. (2019) databases.

| *Country* | *Populist Parties* |
|---|---|
| Austria | FPÖ, BZÖ, FRANK, JETZT |
| Belgium | VB, FN, LDD, N-VA, PP, PvdA |
| Bulgaria | ATAKA, RZS, BP, BBC, NFSB, Volja, ITN |
| Croatia | ZZ, MB365, HDSSB, NS, DP, MOZEMO |
| Cyprus | AKEL, SYPOL, ELAM |
| Czech Republic | KSČM, ANO, USVIT, SPD |
| Denmark | RV, ERP, DF, FRP, NB |
| Estonia | EKRE |
| Finland | PS |
| France | FG, FN, PCF |
| Germany | *Hidden* |
| Greece | PS, KKE, SYN, SYRIZA, LAOS, XA, ANEL, EL |
| Hungary | FIDESZ, JOBBIK |
| Ireland | SP, AAA-PBP, S-PBP |
| Italy | LN, FDI, PDCI, IDV, M5S, LEGA, SI |
| Latvia | NA, KPV LV |
| Lithuania | TT, DP |
| Luxemburg | ADR |
| Malta | *None* |
| Netherlands | *Hidden* |
| Poland | PiS, SO, K, KONF |
| Portugal | CDU, CH |
| Romania | PNL, PP-DD, PNTCD, UDMR, PMP, AUR |
| Slovakia | SNS, LS-HZDS, MH, OLaNO, LSNS, SME-RODINA |
| Slovenia | LEVICA, SNS |
| Spain | IU, CiU, CS, PODEMOS, VOX, MP |
| Sweden | SD |
| UK | UKIP |

*Table 5.* Shares for populist parties in EU Members. Based on Parties and Elections in Europe (2021).

| | *1993* | *1994* | *1995* | *1996* | *1997* | *1998* | *1999* | *2000* | *2001* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* | *2009* | *2010* | *2011* | *2012* | *2013* | *2014* | *2015* | *2016* | *2017* | *2018* | *2019* | *2020* | *2021* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | | | 22 | | | | 28 | | | 10 | | | | 15 | | 30 | | | | | 28 | | | | 32 | | 17 | | |
| Belgium | | | 7 | | | | 11 | | | | 1 | | | | 4 | | | 27 | | | | 26 | | | | | 29 | | |
| Bulgaria | | | | | | | | | | | | | | | | | 13 | | | | 10 | 24 | | | 16 | | | | 24 |
| Croatia | | | | | | | | | | | | | | | | | | | | | | | 3 | 14 | | | | 16 | |
| Cyprus | | | | | | | | | | | | | | 22 | | | | | 24 | | | | | 20 | | | | 19 |
| Czechia | | | | | | | | | | | | | | 13 | | | | 13 | | | 47 | | | | 30 | | | | 12 |
| Denmark | | 11 | | | | 13 | | | 17 | | | | 22 | | 19 | | | | 22 | | | | 25 | | | | 20 | | |
| Estonia | | | | | | | | | | | | | | | 6 | | | | 0 | | | | 7 | | | | 19 | | |
| Finland | | | 1 | | | | 1 | | | | 2 | | | | 3 | | | | 20 | | | | 19 | | | | 20 | | |
| France | 4 | | | | 6 | | | | | 4 | | | | | 3 | | | | | 2 | | | | | | 3 | | | |
| Germany | | 4 | | | | 5 | | | | 0 | | | 9 | | | | 12 | | | | 10 | | | | 13 | | | | 11 |
| Greece | 7 | | | 7 | | | | 6 | | | | 6 | | | 16 | | 17 | | | 42 | | | 63 | | | | 37 | | |
| Hungary | | | | | | | | | | | | | | 42 | | | | 80 | | | | 70 | | | | 72 | | | |
| Ireland | | | | | 0 | | | | | 0 | | | | | 0 | | | | 2 | | | | | 4 | | | | 3 | |
| Italy | | 36 | | 24 | | | | | 20 | | | | | 18 | | 14 | | | | | 27 | | | | | 61 | | | |
| Latvia | | | | | | | | | | | | | | 8 | | | | 8 | 14 | | | 17 | | | | 29 | | | |
| Lithuania | | | | | | | | | | | | 35 | | | | 18 | | | | 33 | | | | 7 | | | | 3 | |
| Luxemburg | | 8 | | | | | 12 | | | | | 8 | | | | | 7 | | | | 1 | | | | | 1 | | | |
| Malta | | | | | | | | | | | | | | | | 0 | | | | | 0 | | | | 0 | | | | |
| Netherlands | | 0 | | | | 0 | | | | 0 | 6 | | | 6 | | | | 16 | | 10 | | | | | 13 | | | | 19 |
| Poland | | | | | | | | | | | | | 46 | | 36 | | | | 34 | | | | 51 | | | | 53 | | |
| Portugal | | | 7 | | | | 7 | | | 5 | | | 6 | | | | 7 | | 7 | | | | 7 | | | | 6 | | |
| Romania | | | | | | | | | | | | | | | | 19 | | | | 12 | | | | 12 | | | | 38 | |
| Slovakia | | | | | | | | | | | | | | 23 | | | | 15 | | 19 | | | | 27 | | | | 23 | |
| Slovenia | | | | | | | | | | | | 7 | | | | 6 | | | 0 | | | 10 | | | | 15 | | | |
| Spain | 10 | | | 11 | | | | 7 | | | | 2 | | | | 0 | | | 3 | | | | 32 | 30 | | | 36 | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sweden | 0 | | | 0 | | | 0 | | | 6 | | | 14 | | | 18 | | | |
| UK | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | |

Appendices

*Table 6.* Cyclically Adjusted Balances as % of potential GDP in the EU. Periods of austerity are highlighted (grey). Based on Kuhnert et al. (2020) and World Bank (2021).

| | *Cyclically Adjusted Balances, as % of potential GDP* | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1993* | *1994* | *1995* | *1996* | *1997* | *1998* | *1999* | *2000* | *2001* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* | *2009* | *2010* | *2011* | *2012* | *2013* | *2014* | *2015* | *2016* | *2017* | *2018* | *2019* | *2020* | *2021* |
| *Country* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *Austria* | | | | *-5,6* | *-4,2* | *-2,6* | *-3,0* | *-3,3* | *-3,9* | *-1,0* | *-1,3* | *-1,0* | *-4,3* | *-1,9* | *-2,7* | *-2,6* | *-2,6* | -3,7 | -3,4 | -2,7 | -2,2 | -1,4 | -2,0 | -0,2 | -1,1 | -1,0 | -0,7 | -0,3 | -3,4 | -1,1 |
| *Belgium* | | *-6,5* | *-4,6* | *-4,2* | *-3,2* | *-2,0* | *-0,7* | *-0,8* | *-0,8* | *-0,1* | *-0,1* | *-1,2* | *-0,5* | *-3,1* | *-0,5* | *-1,7* | *-2,0* | -4,3 | -3,8 | -4,2 | -3,9 | -2,5 | -2,7 | -2,6 | -2,6 | -1,3 | -1,4 | -2,4 | -4,5 | -2,9 |
| *Bulgaria* | | | | | | | | | | | | | | | | *0,0* | *0,1* | -3,7 | -2,8 | -2,0 | -0,1 | 0,1 | -4,8 | -1,5 | -0,1 | 0,7 | 1,3 | 1,1 | -1,3 | -1,6 |
| *Croatia* | | | | | | | | | | | | | | | | | | | | | | -4,1 | -4,0 | -2,6 | -1,0 | 0,1 | -0,9 | -1,2 | -4,4 | -1,9 |
| *Cyprus* | | | | | | | | | | | | *-4,8* | *-4,0* | *-3,2* | *0,5* | *-1,7* | -5,5 | -4,6 | -5,0 | -3,2 | -1,0 | -4,0 | 1,7 | 0,2 | 0,7 | -6,0 | -1,2 | -5,2 | -2,1 |
| *Czech Republic* | | | | | | | | | | | | -2,6 | *-3,9* | *-4,0* | *-2,8* | *-3,7* | -4,5 | -3,7 | -2,6 | -3,3 | 0,0 | -1,2 | -0,7 | 0,7 | 0,8 | 0,1 | -0,5 | -4,6 | -2,9 |
| *Denmark* | *-3,7* | *-3,6* | *-5,3* | *-2,5* | *-1,3* | *-0,4* | *-0,4* | *-0,9* | *-0,2* | *-0,8* | *-0,4* | *1,0* | *3,2* | *1,9* | *2,4* | *1,7* | -0,7 | -1,2 | -0,9 | -1,9 | 0,4 | 2,5 | -0,4 | 0,4 | 2,0 | 0,8 | 3,6 | -2,7 | 0,6 |
| *Estonia* | | | | | | | | | | | | *0,8* | *-1,8* | *-1,8* | *-3,3* | *-4,8* | 2,5 | 3,2 | 1,1 | -1,1 | -0,3 | 0,0 | -0,1 | -0,7 | -2,0 | -2,4 | -2,4 | -5,8 | -1,9 |
| *Finland* | | | | *-3,3* | *-1,1* | *-1,3* | *0,8* | *0,9* | *5,5* | *4,2* | *4,1* | *3,0* | *2,1* | *2,3* | *2,7* | *2,1* | *1,8* | 0,0 | -1,5 | -1,1 | -1,2 | -1,0 | -1,1 | -0,7 | -0,9 | -1,1 | -1,5 | -1,6 | -4,2 | -1,6 |
| *France* | | *-5,7* | *-4,9* | *-4,4* | *-2,8* | *-2,6* | *-1,9* | *-1,6* | *-2,1* | *-2,1* | *-3,3* | *-3,6* | *-3,7* | *-4,3* | *-3,8* | *-4,5* | *-4,2* | -5,6 | -5,9 | -4,8 | -4,2 | -3,0 | -2,9 | -2,8 | -2,9 | -3,1 | -2,9 | -3,7 | -4,9 | -2,6 |
| *Germany* | | *-2,8* | *-2,4* | *-2,9* | *-2,9* | *-2,4* | *-2,3* | *-1,7* | *-4,8* | *-3,9* | *-4,0* | *-2,9* | *-2,5* | *-2,3* | *-1,8* | *-0,7* | *-0,9* | -0,7 | -3,3 | -1,4 | -0,2 | 0,4 | 0,6 | 1,0 | 1,0 | 0,5 | 1,0 | 0,9 | -3,8 | -0,5 |
| *Greece* | | *-11,5* | *-8,3* | *-10,3* | *-8,7* | *-7,0* | *-7,5* | *-6,8* | *-4,9* | *-6,2* | *-6,7* | *-9,0* | *-10,6* | *-6,8* | *-8,2* | *-9,6* | *-12,3* | -15,0 | -8,8 | -4,3 | -0,8 | -4,9 | 3,4 | 0,7 | 6,2 | 5,3 | 4,4 | 3,8 | 0,4 | 1,0 |
| *Hungary* | | | | | | | | | | | | *-7,2* | *-8,8* | *-10,8* | *-5,9* | *-4,6* | -2,5 | -2,8 | -4,4 | -0,8 | -1,5 | -2,6 | -2,4 | -2,1 | -3,3 | -3,6 | -3,9 | -2,8 | -3,1 |
| *Ireland* | | *-3,0* | *-2,9* | *-2,7* | *-2,7* | *2,4* | *2,6* | *3,4* | *3,8* | *-0,2* | *-1,3* | *0,9* | *1,1* | *1,0* | *1,7* | *-2,0* | *-6,5* | -11,1 | -30,8 | -12,1 | -7,1 | -4,9 | -4,9 | -4,0 | -2,0 | -1,7 | -1,0 | -0,7 | -1,5 | -0,5 |
| *Italy* | | *-8,7* | *-8,0* | *-6,1* | *-5,3* | *-2,7* | *-2,4* | *-0,8* | *-3,6* | *-4,5* | *-3,7* | *-3,5* | *-3,9* | *-4,6* | *-4,8* | *-2,9* | *-3,4* | -3,2 | -3,3 | -3,1 | -1,3 | -0,4 | -0,5 | -0,6 | -1,3 | -2,2 | -2,2 | -1,5 | -6,1 | -3,5 |
| *Latvia* | | | | | | | | | | | | *-1,7* | *-1,9* | *-3,6* | *-4,7* | *-5,6* | -5,6 | -3,8 | -1,9 | -0,5 | -0,9 | -1,4 | -1,8 | -0,2 | -1,7 | -2,4 | -1,5 | -5,2 | -3,2 |
| *Lithuania* | | | | | | | | | | | | *-1,9* | *-1,6* | *-2,1* | *-4,1* | *-5,3* | -4,8 | -3,1 | -7,0 | -2,1 | -2,2 | -0,8 | -0,5 | -0,3 | -1,0 | -1,2 | -1,6 | -4,4 | -1,6 |
| *Luxemburg* | *2,9* | *3,1* | *3,2* | *2,4* | *2,9* | *3,0* | *3,1* | *5,5* | *4,0* | *0,6* | *0,1* | *-1,2* | *0,4* | *2,0* | *2,4* | *3,6* | 2,6 | 1,0 | 1,8 | 2,9 | 2,8 | 2,6 | 1,8 | 1,4 | 1,0 | 2,2 | 1,2 | -2,6 | 0,7 |
| *Malta* | | | | | | | | | | | | *-4,0* | *-2,9* | *-2,5* | *-2,7* | *-5,2* | -2,1 | -1,5 | -1,1 | -2,0 | -1,2 | -2,1 | -2,8 | -0,3 | 2,1 | 0,1 | -1,3 | -4,2 | -1,3 |
| *Netherlands* | *-2,3* | *-2,7* | *-7,7* | *-1,0* | *-1,3* | *-1,8* | *-1,0* | *-0,7* | *-1,6* | *-1,9* | *-1,8* | *-0,6* | *0,5* | *0,0* | *-1,2* | *-1,2* | -3,6 | -4,2 | -3,8 | -2,5 | -1,2 | -0,9 | -1,1 | 0,5 | 0,9 | 0,4 | 0,8 | -2,4 | -1,6 |
| *Poland* | | | | | | | | | | | | *-3,9* | *-2,9* | *-3,5* | *-3,1* | *-4,7* | -7,7 | -7,8 | -5,6 | -3,5 | -3,3 | -2,8 | -2,1 | -2,1 | -2,1 | -1,9 | -2,7 | -8,3 | -2,9 |
| *Portugal* | *-8,0* | *-7,4* | *-3,6* | *-4,3* | *-3,2* | *-3,7* | *-3,1* | *-4,2* | *-5,8* | *-3,7* | *-4,8* | *-5,6* | *-5,5* | *-3,9* | *-3,5* | *-4,2* | -8,8 | -11,4 | -7,2 | -4,2 | -3,1 | -5,8 | -3,6 | -1,6 | -3,6 | -1,6 | -1,1 | -3,6 | -0,9 |
| *Romania* | | | | | | | | | | | | | | | *-4,4* | *-7,9* | -9,1 | -5,5 | -4,3 | -2,7 | -1,5 | -0,8 | -0,1 | -2,3 | -3,0 | -3,3 | -4,4 | -6,7 | -9,2 |
| *Slovakia* | | | | | | | | | | | | *-2,2* | *-2,9* | *-4,4* | *-4,4* | *-4,8* | -7,0 | -7,1 | -3,8 | -3,6 | -1,6 | -2,1 | -2,5 | -2,4 | -1,3 | -2,1 | -2,3 | -6,6 | -4,0 |
| *Slovenia* | | | | | | | | | | | | *-2,7* | *-2,4* | *-3,2* | *-3,6* | *-4,9* | -4,5 | -4,5 | -5,7 | -1,7 | -11,6 | -3,4 | -1,2 | -1,2 | -0,7 | -0,7 | -0,9 | -4,5 | -1,2 |
| *Spain* | *-3,2* | *-3,5* | *-4,8* | *-2,2* | *-1,1* | *-1,6* | *-1,0* | *-1,4* | *-2,4* | *-2,0* | *-1,7* | *-1,4* | *-0,1* | *0,3* | *0,0* | *-5,4* | -9,4 | -7,2 | -6,8 | -6,4 | -2,3 | -2,0 | -3,3 | -3,8 | -3,6 | -3,8 | -4,2 | -5,8 | -5,2 |
| *Sweden* | | | *-5,8* | *-5,5* | *-4,4* | *-2,5* | *-2,7* | *-1,5* | *1,2* | *-1,2* | *-0,6* | *0,2* | *1,6* | *1,0* | *1,7* | *1,7* | 2,2 | 0,6 | -0,3 | 0,1 | 0,0 | -0,6 | -0,3 | 0,5 | 0,8 | 0,0 | 0,1 | -2,2 | -0,2 |
| *UK* | *-5,0* | *-4,9* | *-4,0* | *-2,2* | *-1,3* | *-0,2* | *0,6* | *0,7* | *-0,2* | *-2,1* | *-3,7* | *-3,4* | *-3,8* | *-3,7* | *-3,8* | *-5,3* | *-7,5* | *-7,2* | *-5,7* | -6,7 | -4,6 | -5,3 | -4,8 | -3,7 | -3,0 | -2,8 | -2,7 | -6,7 | |

*Table 7.* Cyclically Adjusted Total Revenue as % of potential GDP in the EU. Periods of taxation-based austerity are highlighted (green). Based on Kuhnert et al. (2020) and World Bank (2021).

*Cyclically Adjusted Total Revenue as % of potential GDP*

| Country | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | | | 49,7 | 52,5 | 54,0 | 54,3 | 53,7 | 52,9 | 50,7 | 49,7 | 49,5 | 48,9 | 48,6 | 47,8 | 47,9 | 48,4 | 48,8 | 48,4 | 48,3 | 49,0 | 49,7 | 49,7 | 50,1 | 48,6 | 48,4 | 48,8 | 49,0 | 50,2 | 49,1 |
| Belgium | 48,0 | 49,1 | 48,1 | 48,9 | 49,9 | 51,0 | 50,9 | 51,3 | 49,6 | 49,9 | 49,2 | 49,9 | 49,2 | 49,1 | 49,2 | 49,0 | 48,6 | 49,7 | 49,2 | 49,8 | 51,0 | 52,2 | 51,3 | 50,7 | 51,2 | 51,4 | 50,3 | 50,7 | 49,9 |
| Bulgaria | | | | | | | | | | | | | | | 39,1 | 39,1 | 35,2 | 33,1 | 31,9 | 34,1 | 37,3 | 37,7 | 38,7 | 35,1 | 36,2 | 38,7 | 38,6 | 38,9 | 38,3 |
| Croatia | | | | | | | | | | | | | | | | | | | | | 42,8 | 43,8 | 45,3 | 46,5 | 46,2 | 46,6 | 47,7 | 46,0 | 47,3 |
| Cyprus | | | | | | | | | | | | 34,7 | 36,9 | 37,4 | 40,5 | 38,9 | 36,7 | 37,1 | 36,6 | 36,7 | 38,0 | 41,2 | 40,0 | 37,7 | 38,7 | 39,5 | 40,9 | 43,1 | 44,1 |
| Czechia | | | | | | | | | | | | 40,2 | 39,4 | 39,3 | 39,9 | 38,8 | 38,7 | 39,3 | 40,3 | 40,5 | 41,5 | 40,3 | 41,1 | 40,7 | 41,1 | 42,2 | 42,2 | 41,7 | 41,7 |
| Denmark | 53,3 | 53,9 | 54,9 | 55,2 | 55,0 | 55,4 | 55,2 | 54,7 | 54,0 | 53,2 | 53,5 | 55,1 | 56,2 | 54,9 | 54,7 | 53,6 | 53,7 | 53,9 | 54,3 | 54,4 | 54,5 | 56,3 | 53,2 | 52,4 | 52,8 | 51,4 | 53,3 | 51,9 | 51,1 |
| Estonia | | | | | | | | | | | | 36,4 | 34,7 | 36,1 | 36,2 | 36,6 | 43,7 | 40,3 | 38,2 | 38,6 | 38,3 | 38,2 | 39,4 | 39,0 | 38,5 | 38,4 | 38,6 | 38,8 | 39,1 |
| Finland | | | 54,9 | 56,0 | 58,9 | 60,1 | 59,4 | 64,2 | 52,3 | 52,5 | 51,7 | 51,3 | 51,7 | 52,2 | 52,0 | 52,3 | 51,4 | 51,3 | 52,6 | 53,2 | 54,2 | 54,1 | 53,9 | 53,9 | 53,1 | 52,6 | 52,2 | 52,1 | 53,3 |
| France | 46,9 | 48,5 | 49,7 | 51,9 | 53,8 | 58,8 | 59,9 | 50,3 | 50,0 | 48,4 | 47,2 | 47,5 | 49,9 | 50,4 | 49,9 | 50,0 | 50,0 | 50,0 | 51,1 | 52,1 | 53,2 | 53,3 | 53,2 | 53,1 | 53,5 | 53,4 | 52,6 | 52,9 | 53,1 |
| Germany | 46,0 | 46,8 | 45,7 | 43,6 | 42,8 | 43,2 | 46,0 | 46,8 | 44,4 | 44,0 | 44,6 | 43,4 | 43,5 | 43,6 | 43,7 | 44,1 | 45,0 | 43,7 | 44,7 | 44,9 | 45,0 | 44,9 | 45,0 | 45,5 | 45,7 | 46,5 | 46,8 | 47,1 | 46,7 |
| Greece | 38,0 | 38,1 | 39,1 | 39,1 | 40,9 | 43,0 | 40,7 | 42,6 | 40,6 | 39,8 | 38,8 | 38,9 | 39,4 | 39,3 | 40,5 | 40,8 | 38,9 | 41,2 | 43,5 | 46,5 | 48,7 | 46,3 | 47,6 | 49,2 | 47,9 | 47,7 | 47,6 | 48,4 | 46,7 |
| Hungary | | | | | | | | | | | | 42,3 | 41,7 | 42,3 | 44,9 | 45,1 | 45,7 | 44,6 | 44,0 | 46,9 | 47,5 | 47,4 | 48,7 | 45,4 | 44,6 | 44,6 | 44,2 | 44,9 | 43,5 |
| Ireland | 37,8 | 39,4 | 38,7 | 39,7 | 39,3 | 38,7 | 38,8 | 35,4 | 33,4 | 32,7 | 33,4 | 34,5 | 34,9 | 36,6 | 36,1 | 34,8 | 33,3 | 33,1 | 33,8 | 34,0 | 34,3 | 33,9 | 26,9 | 27,0 | 25,7 | 25,4 | 25,1 | 24,2 | 23,8 |
| Italy | 47,4 | 45,0 | 44,4 | 43,8 | 46,4 | 44,3 | 45,0 | 42,9 | 44,1 | 43,8 | 43,9 | 43,4 | 43,1 | 44,1 | 45,4 | 45,2 | 46,1 | 45,7 | 45,6 | 47,7 | 48,2 | 48,0 | 47,8 | 46,7 | 46,3 | 46,3 | 47,1 | 48,2 | 46,6 |
| Latvia | | | | | | | | | | | | 34,1 | 34,7 | 36,5 | 34,6 | 34,4 | 35,3 | 37,0 | 36,6 | 37,3 | 37,2 | 37,1 | 37,3 | 37,8 | 38,3 | 38,8 | 38,8 | 37,6 | 36,9 |
| Lithuania | | | | | | | | | | | | 32,7 | 33,8 | 34,1 | 34,5 | 35,1 | 35,7 | 35,5 | 33,6 | 33,0 | 32,9 | 34,1 | 34,8 | 34,4 | 33,7 | 34,7 | 35,3 | 34,8 | 34,6 |
| Luxemburg | 41,7 | 43,8 | 42,9 | 43,2 | 44,1 | 44,8 | 44,0 | 44,6 | 44,1 | 43,7 | 43,7 | 42,7 | 43,6 | 41,8 | 42,4 | 43,4 | 44,8 | 43,8 | 43,2 | 44,6 | 44,4 | 43,5 | 43,2 | 42,8 | 43,5 | 45,4 | 44,8 | 45,4 | 46,3 |
| Malta | | | | | | | | | | | | 38,0 | 39,6 | 39,8 | 38,9 | 38,3 | 38,8 | 38,8 | 39,0 | 39,4 | 39,7 | 39,3 | 38,4 | 37,4 | 39,1 | 38,3 | 38,0 | 40,1 | 39,1 |
| Netherlands | 49,2 | 46,9 | 45,1 | 46,2 | 45,2 | 44,5 | 45,6 | 43,2 | 42,3 | 41,5 | 41,5 | 41,8 | 41,9 | 43,1 | 42,1 | 43,2 | 42,6 | 42,7 | 42,4 | 43,0 | 43,7 | 43,7 | 42,7 | 43,6 | 43,7 | 43,5 | 43,5 | 41,7 | 42,3 |
| Poland | | | | | | | | | | | | 38,6 | 40,3 | 40,9 | 41,0 | 40,4 | 37,6 | 38,4 | 39,5 | 39,1 | 38,5 | 38,8 | 39,1 | 38,8 | 39,7 | 41,2 | 41,2 | 40,9 | 40,4 |
| Portugal | 37,2 | 38,6 | 37,4 | 41,0 | 40,6 | 40,8 | 41,9 | 41,8 | 39,4 | 40,4 | 39,7 | 40,0 | 40,6 | 41,1 | 41,6 | 41,7 | 40,3 | 40,5 | 42,3 | 42,6 | 44,7 | 44,3 | 43,8 | 42,9 | 42,4 | 43,0 | 42,9 | 42,6 | 42,7 |
| Romania | | | | | | | | | | | | | | | 35,0 | 32,7 | 30,3 | 32,8 | 33,9 | 33,5 | 33,2 | 34,1 | 35,4 | 31,8 | 30,9 | 32,0 | 31,7 | 31,8 | 31,8 |
| Slovakia | | | | | | | | | | | | 35,6 | 36,9 | 35,3 | 34,6 | 34,7 | 36,1 | 34,7 | 36,9 | 36,5 | 39,3 | 40,1 | 43,1 | 40,2 | 40,6 | 40,9 | 41,6 | 41,1 | 40,9 |
| Slovenia | | | | | | | | | | | | 44,7 | 45,1 | 44,5 | 43,6 | 43,9 | 43,5 | 44,5 | 44,2 | 45,2 | 45,5 | 45,2 | 45,7 | 44,3 | 44,1 | 44,4 | 44,3 | 44,6 | 43,9 |
| Spain | 38,2 | 38,3 | 37,3 | 37,3 | 38,4 | 39,3 | 39,8 | 39,6 | 37,9 | 38,3 | 38,0 | 38,7 | 39,7 | 40,5 | 41,1 | 36,9 | 35,0 | 36,5 | 36,4 | 38,0 | 38,8 | 39,2 | 38,7 | 38,1 | 38,2 | 39,2 | 39,1 | 39,7 | 38,9 |
| Sweden | | | 56,4 | 57,4 | 57,8 | 62,4 | 63,6 | 59,8 | 54,2 | 52,5 | 52,9 | 53,0 | 54,4 | 53,6 | 53,0 | 52,2 | 51,6 | 50,4 | 49,6 | 50,0 | 50,3 | 49,3 | 49,5 | 50,7 | 50,7 | 50,6 | 49,8 | 49,4 | 49,8 |
| UK | 32,9 | 34,0 | 33,2 | 32,9 | 33,9 | 35,8 | 36,4 | 36,6 | 35,8 | 34,9 | 34,3 | 36,8 | 37,9 | 37,7 | 38,0 | 39,2 | 37,6 | 38,5 | 38,6 | 37,7 | 38,5 | 37,6 | 37,7 | 38,1 | 38,6 | 38,6 | 38,8 | 38,8 | 37,1 |

Appendices

*Table 8.* Cyclically Adjusted Total Expenditure as % of potential GDP in the EU. Periods of spending-based austerity are highlighted (yellow). Based on Kuhnert et al. (2020) and World Bank (2021).

| | Cyclically Adjusted Total Expenditure as % of potential GDP | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Country | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Austria | | | 55,3 | 56,7 | 56,6 | 57,3 | 57,0 | 56,8 | 51,7 | 51,0 | 50,5 | 53,2 | 50,5 | 50,5 | 50,5 | 51,0 | 52,5 | 51,8 | 51,0 | 51,2 | 51,1 | 51,7 | 50,3 | 49,7 | 49,4 | 49,5 | 49,3 | 53,6 | 50,2 |
| Belgium | 54,5 | 53,7 | 52,3 | 52,1 | 51,9 | 51,7 | 51,7 | 52,1 | 49,7 | 50,0 | 50,4 | 50,4 | 52,3 | 49,6 | 50,9 | 51,0 | 52,9 | 53,5 | 53,4 | 53,7 | 53,5 | 54,9 | 53,9 | 53,3 | 52,5 | 52,8 | 52,7 | 55,2 | 52,8 |
| Bulgaria | | | | | | | | | | | | | | | 39,1 | 39,0 | 38,9 | 35,9 | 33,9 | 34,2 | 37,2 | 42,5 | 40,2 | 35,2 | 35,5 | 37,4 | 37,5 | 40,2 | 39,9 |
| Croatia | | | | | | | | | | | | | | | | | | | | | 46,9 | 47,8 | 47,9 | 47,5 | 46,1 | 47,5 | 48,9 | 50,4 | 49,2 |
| Cyprus | | | | | | | | | | | | 39,5 | 40,9 | 40,6 | 40,0 | 40,6 | 42,2 | 41,7 | 41,6 | 39,9 | 39,0 | 45,2 | 38,3 | 37,5 | 38,0 | 45,5 | 42,1 | 48,3 | 46,2 |
| Czechia | | | | | | | | | | | | 42,8 | 43,3 | 43,3 | 42,7 | 42,5 | 43,2 | 43,0 | 42,9 | 43,8 | 41,5 | 41,5 | 41,8 | 40,0 | 40,3 | 42,1 | 42,7 | 46,3 | 44,6 |
| Denmark | 57,0 | 57,5 | 60,2 | 57,7 | 56,3 | 55,8 | 55,6 | 55,6 | 54,2 | 54,0 | 53,9 | 54,1 | 53,0 | 53,0 | 52,3 | 51,9 | 54,4 | 55,1 | 55,2 | 56,3 | 54,1 | 53,8 | 53,6 | 52,0 | 50,8 | 50,6 | 49,7 | 54,6 | 50,5 |
| Estonia | | | | | | | | | | | | 35,6 | 36,5 | 37,9 | 39,5 | 41,4 | 41,2 | 37,1 | 37,1 | 39,7 | 38,6 | 38,2 | 39,5 | 39,7 | 40,5 | 40,8 | 41,0 | 44,6 | 41,0 |
| Finland | | | 58,2 | 57,1 | 60,2 | 59,3 | 58,5 | 58,8 | 48,1 | 48,4 | 48,7 | 49,2 | 49,4 | 49,5 | 49,9 | 50,5 | 51,4 | 52,8 | 53,7 | 54,4 | 55,2 | 55,2 | 54,6 | 54,8 | 54,2 | 54,1 | 53,8 | 56,3 | 54,9 |
| France | 52,6 | 53,4 | 54,1 | 54,7 | 56,4 | 60,7 | 61,5 | 52,4 | 52,1 | 51,7 | 50,8 | 51,2 | 54,2 | 54,2 | 54,4 | 54,2 | 55,6 | 55,9 | 55,9 | 56,3 | 56,2 | 56,2 | 56,0 | 56,0 | 56,6 | 56,3 | 56,3 | 57,8 | 55,7 |
| Germany | 48,8 | 49,2 | 48,6 | 46,5 | 45,2 | 45,5 | 47,7 | 51,6 | 48,3 | 48,0 | 47,5 | 45,9 | 45,8 | 45,4 | 44,4 | 45,0 | 45,7 | 47,0 | 46,1 | 45,1 | 44,6 | 44,3 | 44,0 | 44,5 | 45,2 | 45,5 | 45,9 | 50,9 | 47,2 |
| Greece | 49,5 | 46,4 | 49,4 | 47,8 | 47,9 | 50,5 | 47,5 | 47,5 | 46,8 | 46,5 | 47,8 | 49,5 | 46,2 | 47,5 | 50,1 | 53,1 | 53,9 | 50,0 | 47,8 | 47,3 | 53,6 | 42,9 | 46,9 | 43,0 | 42,6 | 43,3 | 43,8 | 48,0 | 45,7 |
| Hungary | | | | | | | | | | | | 49,5 | 50,5 | 53,1 | 50,8 | 49,7 | 48,2 | 47,4 | 48,4 | 47,7 | 49,0 | 50,0 | 51,1 | 47,5 | 47,9 | 48,2 | 48,1 | 47,7 | 46,6 |
| Ireland | 40,8 | 42,3 | 41,4 | 42,4 | 36,9 | 36,1 | 35,5 | 31,7 | 33,6 | 34,0 | 32,5 | 33,4 | 33,9 | 34,9 | 38,1 | 41,3 | 44,4 | 63,9 | 45,9 | 41,1 | 39,2 | 38,8 | 30,9 | 29,0 | 27,4 | 26,4 | 25,8 | 25,7 | 24,3 |
| Italy | 56,1 | 53,0 | 50,5 | 49,1 | 49,1 | 46,7 | 45,8 | 46,5 | 48,6 | 47,5 | 47,4 | 47,3 | 47,7 | 48,9 | 48,3 | 48,6 | 49,3 | 49,0 | 48,7 | 49,0 | 48,6 | 48,5 | 48,4 | 48,0 | 48,5 | 48,5 | 48,6 | 54,3 | 50,1 |
| Latvia | | | | | | | | | | | | 35,8 | 36,6 | 40,1 | 39,3 | 40,0 | 40,9 | 40,8 | 38,5 | 37,8 | 38,1 | 38,5 | 39,1 | 38,0 | 40,0 | 41,2 | 40,3 | 42,8 | 40,1 |
| Lithuania | | | | | | | | | | | | 34,6 | 35,4 | 36,2 | 38,6 | 40,4 | 40,5 | 38,6 | 40,6 | 35,1 | 35,1 | 34,9 | 35,3 | 34,7 | 34,7 | 35,9 | 36,9 | 39,2 | 36,2 |
| Luxemburg | 38,8 | 40,7 | 39,7 | 40,8 | 41,2 | 41,8 | 40,9 | 39,1 | 40,1 | 43,1 | 43,6 | 43,9 | 43,2 | 39,8 | 40,0 | 39,8 | 42,2 | 42,8 | 41,4 | 41,7 | 41,6 | 40,9 | 41,4 | 41,4 | 42,5 | 43,2 | 43,6 | 48,0 | 45,6 |
| Malta | | | | | | | | | | | | 42,0 | 42,5 | 42,3 | 41,6 | 43,5 | 40,9 | 40,3 | 40,1 | 41,4 | 40,9 | 41,4 | 41,2 | 37,7 | 37,0 | 38,2 | 39,3 | 44,3 | 40,4 |
| Netherlands | 51,5 | 49,6 | 52,8 | 47,2 | 46,5 | 46,3 | 46,6 | 43,9 | 43,9 | 43,4 | 43,3 | 42,4 | 41,4 | 43,1 | 43,3 | 44,4 | 46,2 | 46,9 | 46,2 | 45,5 | 44,9 | 44,6 | 43,8 | 43,1 | 42,8 | 43,1 | 42,7 | 44,1 | 43,9 |
| Poland | | | | | | | | | | | | 42,5 | 43,2 | 44,4 | 44,1 | 45,1 | 45,3 | 46,2 | 45,1 | 42,6 | 41,8 | 41,6 | 41,2 | 40,9 | 41,8 | 43,1 | 43,9 | 49,2 | 43,3 |
| Portugal | 45,2 | 46,0 | 41,0 | 45,3 | 43,8 | 44,5 | 45,0 | 46,0 | 45,2 | 44,1 | 44,5 | 45,6 | 46,1 | 45,0 | 45,1 | 45,9 | 49,1 | 51,9 | 49,5 | 46,8 | 47,8 | 50,1 | 47,4 | 44,5 | 46,0 | 44,6 | 44,0 | 46,2 | 43,6 |
| Romania | | | | | | | | | | | | | | | 39,4 | 40,6 | 39,4 | 38,3 | 38,2 | 36,2 | 34,7 | 34,9 | 35,5 | 34,1 | 33,9 | 35,3 | 36,1 | 38,5 | 41,0 |
| Slovakia | | | | | | | | | | | | 37,8 | 39,8 | 39,7 | 39,0 | 39,5 | 43,1 | 41,8 | 40,7 | 40,1 | 40,9 | 42,2 | 45,6 | 42,6 | 41,9 | 43,0 | 43,9 | 47,7 | 44,9 |
| Slovenia | | | | | | | | | | | | 47,4 | 47,5 | 47,7 | 47,2 | 48,8 | 48,0 | 49,0 | 49,9 | 46,9 | 57,1 | 48,6 | 46,9 | 45,5 | 44,8 | 45,1 | 45,2 | 49,1 | 45,1 |
| Spain | 41,4 | 41,8 | 42,1 | 39,5 | 39,5 | 40,9 | 40,8 | 41,0 | 40,3 | 40,3 | 39,7 | 40,1 | 39,8 | 40,2 | 41,1 | 42,3 | 44,4 | 43,7 | 43,2 | 44,4 | 41,1 | 41,2 | 42,0 | 41,9 | 41,8 | 43,0 | 43,3 | 45,5 | 44,1 |
| Sweden | | | 62,2 | 62,9 | 62,2 | 64,9 | 66,3 | 61,3 | 53,0 | 53,7 | 53,5 | 52,8 | 52,8 | 52,6 | 51,3 | 50,5 | 49,4 | 49,8 | 49,9 | 49,9 | 50,3 | 49,9 | 49,8 | 50,2 | 49,9 | 50,6 | 49,7 | 51,6 | 50,0 |
| UK | 37,9 | 38,9 | 37,2 | 35,1 | 35,2 | 36,0 | 35,8 | 35,9 | 36,0 | 37,0 | 38,0 | 40,2 | 41,7 | 41,4 | 41,8 | 44,5 | 45,1 | 45,7 | 44,3 | 44,4 | 43,1 | 42,9 | 42,5 | 41,8 | 41,6 | 41,4 | 41,5 | 45,5 | 37,1 |

*Table 9.* Dominant austerity types in EU Members. Based on Kuhnert et al. (2020) and World Bank (2021).

| *Country* | *Taxation* | *Spending* | *Both High* | *Both Low* | *Fiscal Aust Years* | *Years in the EU* | *Dominant austerity type* |
|---|---|---|---|---|---|---|---|
| Austria | 3 (33%) | 6 (67%) | 0 (0%) | 0 (0%) | 9 (100%) | 27 | Spending-Based |
| Belgium | 4 (36%) | 5 (46%) | 1 (9%) | 1 (9%) | 11 (100%) | 29 | Spending-Based |
| Bulgaria | 4 (57%) | 0 (0%) | 3 (42%) | 0 (0%) | 7 (100%) | 15 | Taxation-Based |
| Croatia | 3 (43%) | 1 (14%) | 3 (43%) | 0 (0%) | 7 (100%) | 9 | Taxation-Based |
| Cyprus | 5 (38%) | 2 (15%) | 6 (47%) | 0 (0%) | 13 (100%) | 18 | Taxation-Based |
| Czech Republic | 0 (0%) | 0 (0%) | 0 (0%) | 2 (100%) | 2 (100%) | 18 | Mixed Light |
| Denmark | 6 (44%) | 2 (14%) | 3 (21%) | 3 (21%) | 14 (100%) | 29 | Taxation-Based |
| Estonia | 1 (20%) | 3 (60%) | 1 (20%) | 0 (0%) | 5 (100%) | 18 | Spending-Based |
| Finland | 4 (50%) | 0 (0%) | 4 (50%) | 0 (0%) | 8 (100%) | 27 | Taxation-Based |
| France | 11 (74%) | 2 (13%) | 0 (0%) | 2 (13%) | 15 (100%) | 29 | Taxation-Based |
| Germany | 1 (9%) | 7 (64%) | 1 (9%) | 2 (18%) | 11 (100%) | 29 | Spending-Based |
| Greece | 2 (13%) | 3 (20%) | 10 (67%) | 0 (0%) | 15 (100%) | 29 | Mixed Strong |
| Hungary | 2 (34%) | 1 (16%) | 2 (34%) | 1 (16%) | 6 (100%) | 18 | Taxation-Based |
| Ireland | 2 (11%) | 14 (74%) | 2 (11%) | 1 (4%) | 19 (100%) | 29 | Spending-Based |
| Italy | 6 (40%) | 5 (34%) | 4 (27%) | 0 (0%) | 15 (100%) | 29 | Taxation-Based |
| Latvia | 2 (29%) | 2 (29%) | 3 (42%) | 0 (0%) | 7 (100%) | 18 | Mixed Strong |
| Lithuania | 2 (25%) | 4 (50%) | 2 (25%) | 0 (0%) | 8 (100%) | 18 | Spending-Based |
| Luxemburg | 2 (34%) | 4 (66%) | 0 (0%) | 0 (0%) | 6 (100%) | 29 | Spending-Based |
| Malta | 1 (11%) | 5 (55%) | 1 (11%) | 2 (33%) | 9 (100%) | 18 | Spending-Based |
| Netherlands | 0 (0%) | 0 (0%) | 2 (29%) | 5 (71%) | 7 (100%) | 29 | Mixed Light |
| Poland | 2 (18%) | 3 (27%) | 2 (18%) | 4 (37%) | 11 (100%) | 18 | Spending-Based |
| Portugal | 1 (7%) | 11 (74%) | 3 (19%) | 0 (0%) | 15 (100%) | 29 | Spending-Based |
| Romania | 2 (29%) | 2 (29%) | 3 (42%) | 0 (0%) | 7 (100%) | 15 | Mixed Strong |
| Slovakia | 2 (33%) | 2 (33%) | 2 (33%) | 0 (0%) | 6 (100%) | 18 | Mixed Strong |
| Slovenia | 0 (0%) | 7 (70%) | 2 (20%) | 1 (10%) | 10 (100%) | 18 | Spending-Based |
| Spain | 6 (38%) | 2 (12%) | 2 (12%) | 6 (38%) | 16 (100%) | 29 | Taxation-Based |
| Sweden | 6 (46%) | 4 (31%) | 1 (8%) | 2 (15%) | 13 (100%) | 27 | Taxation-Based |
| UK | 3 (38%) | 2 (25%) | 1 (12%) | 2 (25%) | 8 (100%) | 28 | Taxation-Based |

*Table 10.* Correlations between EVI, RegV, ideological dispersions, populism and CABs to GDP ratios in countries with Market-based, Continental European, South European, and Social-Democratic capitalism. Calculated by author. Data from *Table 1, Table 3, Table 5* and *Table 6* in *Appendices.*

| | | *Aggregated EVI / CABs* | *RegV / CABs* | *Ideological Dispersions / CABs* | *Populism / CAB to GDP ratios* |
|---|---|---|---|---|---|
| *Types of Capitalist Systems* | *Market-based* | -0,511 (-51,1%) | -0,113 (-11,3%) | -0,161 (-16,1%) | 0,006 (0,6%) |
| | *Continental European* | -0,197 (-19,7%) | 0,151 (15,1) | -0,155 (-15,5%) | -0,218 (-21,8%) |
| | *South European* | 0,226 (22,6%) | 0,134 (13,4%) | 0,294 (29,4%) | 0,296 (29,6%) |
| | *Social-Democratic* | -0,354 (-35,4%) | -0,014 (-1,4%) | -0,155 (-15,5%) | -0,152 (-15,2%) |

*Table 11*. Linear simple and multiple models explaining Electoral Volatility (operationalized as EVIs, %) in countries with South European (Model 1-2), Social-Democratic (Model 3-4), Market-based (Model 5-6), Continental European (Model 7-8) capitalism. Calculated by author based on data from *Table 1 in Appendices* and *Table 6 in Appendices*.

| | ***Model 1*** | ***Model 2*** | ***Model 3*** | ***Model 4*** | ***Model 5*** | ***Model 6*** | ***Model 7*** | ***Model 8*** |
|---|---|---|---|---|---|---|---|---|
| *Cyclically Adjusted Balances (CABs) to GDP, %* | 0,627<br>(0,431) | 0,242<br>(0,408) | -0,712<br>(0,431) | -1,189<br>(0,721) | -1,076*<br>(0,572) | -1,091<br>(2,311) | -1,411**<br>(0,726) | -1,385*<br>(0,747) |
| *Regime type (0 - Parliamentary, 1 - Semi-Presidential, 2 - Presidential Democracy)* | | 2,107<br>(2,616) | | -2,834<br>(3,286) | | 23,007*<br>(12,362) | | 2,684<br>(2,897) |
| *Inflation, %* | | -1,116*<br>(0,834) | | -0,001<br>(1,122) | | -1,491**<br>(0,667) | | 14,311***<br>(4,963) |
| *Unemployment, % of total labor force* | | 0,943***<br>(0,293) | | 0,029<br>(0,747) | | 2,618*<br>(1,181) | | 0,287<br>(4,859) |
| *GDP, trillion dollars* | | 4,125***<br>(2,258) | | -3,547<br>(9,580) | | 8,956<br>(8,816) | | -0,412<br>(0,887) |
| *Years between elections* | | 1,378<br>(1,508) | | 0,013<br>(2,398) | | 0,315<br>(3,023) | | 0,081<br>(0,502) |
| *Intercept* | 16,608***<br>(2,406) | -1,938*<br>(8,904) | 11,866***<br>(0,788) | 14,062<br>(8,682) | 9,972***<br>(2,673) | -21,575*<br>(27,380) | 9,972***<br>(2,673) | 0,514<br>(1,745) |
| *N* | 41 | 41 | 21 | 21 | 12 | 12 | 12 | 8,804<br>(9,170) |
| $R^2$ | 0,051 | 0,545 | 0,126 | 0,300 | 0,262 | 0,920 | 20,963***<br>(2,366) | 8,804<br>(9,170) |
| *Adjusted* $R^2$ | 0,027 | 0,428 | 0,80 | -0,082 | 0,188 | 0,759 | 95 | 95 |
| *Residual Std. Error* | 10,558 | 7,866 | 3,586 | 4,128 | 7,034 | 4,191 | 0,039 | 0,300 |
| *F-Statistic* | 2,112 | 4,628*** | 2,735 | 0,785 | 3,545* | 5,714** | 0,029 | 0,218 |
| *Note* | Standard errors in parentheses $*p < 0.1$; $**p < 0.05$; $***p < 0.01$ | | | | | | | |

*Table 12*. Linear simple and multiple models explaining RegV (electoral volatility caused by vote switching between parties that enter or exit political system) in countries with Continental European (Model 1-2) and South European (Model 3-4) capitalism. Calculated by author based on data from *Table 1 in Appendices* and *Table 6 in Appendices*.

| | ***Model 1*** | ***Model 2*** | ***Model 3*** | ***Model 4*** |
|---|---|---|---|---|
| *Cyclically Adjusted Balances (CABs) to GDP, %* | -1,463**<br>(0,600) | -1,255*<br>(0,652) | 0,389**<br>(0,201) | 0,292*<br>(0,208) |
| *Regime type (0 - Parliamentary, 1 - Semi-Presidential, 2 - Presidential Democracy)* | | 1,150<br>(2,732) | | 2,107*<br>(1,616) |
| *EU Membership (0 – old Members, 1 – new and newest Members)* | | 12,856***<br>(4,722) | | -3,299<br>(4,848) |
| *Immigrants (0 – lower than 10% of population; 1 – higher than 10% of population)* | | -1,690<br>(4,623) | | |
| *Inflation, %* | | -1,637**<br>(0,844) | | -1,116<br>(0,834) |
| *Unemployment, % of total labor force* | | 0,117<br>(0,478) | | 0,943***<br>(0,293) |
| *GDP, trillion dollars* | | -0,115<br>(1,661) | | 4,125*<br>(2,258) |
| *Years between elections* | | 1,289<br>(1,344) | | 1,378<br>(1,508) |
| *Intercept* | 6,813***<br>(2,281) | -0,911<br>(8,752) | 4,823***<br>(1,122) | -1,938<br>(8,904) |
| *N* | 95 | 95 | 41 | 41 |
| $R^2$ | 0,045 | 0,331 | 0,088 | 0,545 |
| *Adjusted* $R^2$ | 0,035 | 0,253 | 0,064 | 0,428 |
| *Residual Std. Error* | 15,038 | 12,318 | 4,923 | 7,867 |
| *F-Statistic* | 4,371** | 4,260*** | 3,747** | 4,628*** |
| *Note* | Standard errors in parentheses<br>*p < 0.1; **p < 0.05; ***p < 0.01 | | | |

*Table 13*. Linear simple and multiple models explaining ideological dispersions in European countries with Market-based (Model 1-2), Continental European (Model 3-4), South European (Model 5-6) capitalism. Calculated by author basing on data from *Table 3 in Appendices* and *Table 7 in Appendices*.

| | ***Model 1*** | ***Model 2*** | ***Model 3*** | ***Model 4*** | ***Model 5*** | ***Model 6*** |
|---|---|---|---|---|---|---|
| *Cyclically Adjusted Balances (CABs) to GDP, %* | -0,001<br>(0,002) | -0,002<br>(0,007) | 0,000<br>(0,003) | -0,001<br>(0,004) | 0,002<br>(0,002) | -0,002<br>(0,002) |
| *Regime type (0 - Parliamentary, 1 - Semi-Presidential, 2 - Presidential Democracy)* | | 0,005<br>(0,044) | | -0,150<br>(0,016) | | 0,007<br>(0,015) |
| *EU Membership (0 – old Members, 1 – new and newest Members)* | | | | -0,073***<br>(0,023) | | 0,086***<br>(0,005) |
| *Immigrants (0 – lower than 10% of population; 1 – higher than 10% of population)* | | | | -0,028<br>(0,023) | | |
| *Inflation, %* | | -0,011<br>(0,005) | | -0,006<br>(0,004) | | -0,005<br>(0,005) |
| *Unemployment, % of total labor force* | | -0,003<br>(0,008) | | 0,002<br>(0,307) | | 0,004**<br>(0,002) |
| *GDP, trillion dollars* | | 0,004<br>(0,27) | | -0,017**<br>(0,008) | | 0,004<br>(0,013) |
| *Years between elections* | | 0,003<br>(0,009) | | -0,008<br>(0,007) | | -0,005<br>(0,009) |
| *Intercept* | 0,180***<br>(0,009) | 0,197<br>(0,084) | 0,199***<br>(0,010) | 0,297***<br>(0,043) | 0,195***<br>(0,010) | 0,144***<br>(0,051) |
| *N* | 12 | 12 | 95 | 95 | 41 | 41 |
| $R^2$ | 0,013 | 0,876 | 0,000 | 0,196 | 0,018 | 0,401 |
| *Adjusted* $R^2$ | -0,086 | 0,629 | -0,011 | 0,103 | -0,007 | 0,245 |
| *Residual Std. Error* | 0,023 | 0,0123 | 0,064 | 0,060 | 0,053 | 0,045 |
| *F-Statistic* | 0,130 | 3,538 | 0,018 | 2,105** | 0,711 | 2,580** |
| *Note* | Standard errors in parentheses $*p < 0.1$; $**p < 0.05$; $***p < 0.01$ | | | | | |

*Table 14*. Linear simple and multiple models explaining populism in European countries with Market-based (Model 1-2), Continental European (Model 3-4), Social-Democratic (Model 5-6), and South European (Model 7-8) capitalism. Calculated by author basing on data from *Table 5 in Appendices* and *Table 7 in Appendices*.

| | ***Model 1*** | ***Model 2*** | ***Model 3*** | ***Model 4*** | ***Model 5*** | ***Model 6*** | ***Model 7*** | ***Model 8*** |
|---|---|---|---|---|---|---|---|---|
| *Cyclically Adjusted Balances (CABs) to GDP, %* | -0,062<br>(0,120) | 0,410<br>(0,007) | -1,128<br>(0,745) | -0,609<br>(0,900) | 0,087<br>(1,107) | -1,803<br>(1,623) | 1,219**<br>(0,634) | 0,456<br>(0,701) |
| *Regime type (0 - Parliamentary, 1 - Semi-Presidential, 2 - Presidential)* | | 3,312<br>(1,878) | | -6,171*<br>(3,197) | | 3,159<br>(7,395) | | 1,033<br>(0,820) |
| *EU Membership (0 – old Members, 1 – new and newest Members)* | | | | 0,429<br>(5,548) | | | | 0,867<br>(8,329) |
| *Immigrants (0 – lower than 10% of population; 1 – higher than 10%)* | | | | -19,791***<br>(5,432) | | | | |
| *Inflation, %* | | -0,378**<br>(0,218) | | -0,405<br>(0,992) | | -1,294<br>(2,526) | | -2,732**<br>(1,432) |
| *Unemployment, % of total labor force* | | 0,511*<br>(0,224) | | -0,696*<br>(0,362) | | -1,848<br>(1,680) | | 1,169**<br>(0,504) |
| *GDP, trillion dollars* | | 1,111<br>(1,153) | | -1,271<br>(1,951) | | 6,313<br>(21,556) | | 5,469<br>(3,880) |
| *Years between elections* | | -0,037<br>(0,395) | | -0,715<br>(1,579) | | -2,350<br>(5,396) | | -0,674<br>(2,591) |
| *Intercept* | 0,563<br>(0,560) | -3,147<br>(3,580) | 14,797***<br>(2,428) | 41,795***<br>(10,251) | 12,066***<br>(0,788) | 34,608<br>(19,535) | 21,580***<br>(3,535) | 9,297<br>(15,298) |
| *N* | 12 | 12 | 95 | 95 | 21 | 21 | 41 | 41 |
| $R^2$ | 0,026 | 0,957 | 0,024 | 0,318 | 0,000 | 0,279 | 0,087 | 0,473 |
| *Adjusted* $R^2$ | -0,072 | 0,871 | 0,014 | 0,238 | -0,052 | -0,115 | 0,063 | 0,336 |
| *Residual Std. Error* | 1,472 | 0,548 | 16,009 | 14,473 | 9,224 | 9,291 | 15,515 | 13,516 |
| *F-Statistic* | 0,265 | 11,095** | 2,294 | 4,013*** | 0,006 | 0,708 | 3,698** | 3,463*** |
| *Note* | Standard errors in parentheses ∗p < 0.1; ∗∗p < 0.05; ∗∗∗p < 0.01 | | | | | | | |