



Patterns of Political Participation

Determinants of Cross-Country Variation of
Participation in EU Public Consultations

MASTER THESIS

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Abstract

This master thesis investigates different factors influencing political participation in EU public consultations against the background of the democratic deficit of the European supranational polity. Employing a fixed effects regression model on a micro panel comprising 27 EU member states, the study investigates the relationship between a selected set of five determinants and the observed participation share of EU countries in the Commissions' public consultations. The findings reveal two determinants - the frequency of discussing EU politics and years of formal education – significantly influence the participation share: Countries where citizens – on average – engage frequently in discussions on EU politics and in which the average citizen has fewer years of formal education tend to exhibit higher participation shares. These results emphasize the importance of promoting political discussions and considering alternative ways to foster political participation in countries where the average citizen participates less in deliberative venues of institutional political participation. Contrary to expectations derived from literature discussing these determinants at the individual level, the study doesn't find evidence that factors such as political trust, sense of citizenship, or GDP per capita positively correlate with participation share at the country level. This calls for further research to better understand the complexities of political participation within the European context. Based on these findings, two main policy recommendations emerge: Firstly, in order to increase political participation, policymakers may increase funding of initiatives that encourage and facilitate discussions on EU politics. Secondly, especially in countries that exhibit lower levels of political participation, targeted strategies should be implemented to reach and activate citizens, as an equitable distribution of participation across EU member states would enhance the input legitimacy of democratic decision-making processes in Europe and provide a remedy for the democratic deficit of the EU.

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1. Introduction

Political participation has traditionally been studied by analyzing phenomena in the context of electoral campaigns, elections, and voting. But although elections and the act of voting have become the focal point for most citizens when it comes to their political participation, it is just one of several ways to get politically involved. This thesis attempts to explain cross-country variations of political participation with empirical data from a specific venue of political participation: the contributions of EU citizens in public consultations on legislative proposals of the EU Commission.

The Treaty of the European Union mandates that the Commission “shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent” (Article 11 (3) of the TEU). To this end, the Commission established public consultation processes, including a standardized process for legislative proposals. Whenever the Commission publishes a new legislative proposal, the public will shortly thereafter be asked to provide feedback. This is achieved by digitally publishing the initiative along with an accompanying questionnaire on the “Have Your Say” platform, hosted by the European Commission. Respondents are given between 8 and 12 weeks of time to answer the questionnaire. After conclusion of the consultation period, the contributions of the respondents are published along with summary data on who participated in the consultation.

EU public consultations are seen as a promising instrument to address an issue hotly debated since the 1990s: the democratic deficit of the European Union (Dahl, 1994; Hix, 2013; Majone, 2005; Scharpf, 1999; Schmidt, 2006, 2012). The democratic deficit is often characterized as a lack of input and/or output legitimacy in EU decision-making, resulting from “submerging a national democratic government into a larger and less democratic transnational system” (Dahl, 1994, p. 23). By involving citizens in the decision-making process, public consultations are a tool that could have the potential to increase the democratic quality of the European political system.

On the one hand, some recent public consultations for legislative initiatives of the Commission on salient issues such as the “Digital Services Act” or the “Revision of the animal welfare legislation” have managed to generate thousands of respondents across all member states of the EU, contributing to the notion that this elevated participation levels have increased the input legitimacy. On the other hand, other data, such as cross-country differences in participation levels suggest there might be ample reason to doubt such claims of higher input legitimacy, as such consultations might only make the voices heard of those that have the cognitive and timely resources to participate. Further, the self-selection bias inherent in the consultation process might lead to outcomes where countries with vested interests in specific legislation show higher participation levels. Therefore, to determine whether public consultations contribute to increased input legitimacy in EU decision-making, it is essential to understand how country-level determinants of participation shape the variation of country participation levels in these early stages of EU legislation.

Thus, the research at hand will attempt to establish country-level factors that influence the participation in EU public consultations and seek to find those that are best suited to explain variations in political participation across countries. By focusing on variation across countries rather than individual-level data, I aim to explore the broader contextual factors that influence this specific dimension of political participation. This approach follows the underlying hypothesis that country-specific characteristics, such as the institutional framework, socio-economic conditions, and certain elements of a nations' political culture may be important determinants of its citizens' participation in the political process. This leads me to the following research question:

"Which country-level factors contribute to cross-country variation of EU citizens' political participation in public consultations for EU legislative acts?"

My investigation into patterns of political participation in EU public consultations and the analysis of cross-country differences aims to develop insights into a topic with high social and academic relevance. The academic relevance is built on two arguments: First, to my best knowledge and after extensive desk research, there is currently only one quantitative study that provides descriptive statistics for general patterns of participation in online public consultations undertaken by the European Commission (Quittkat, 2011). Most research primarily addresses the normative aspects of public consultations, and their potential impact on transparency, inclusiveness, accountability as well as input and output legitimacy of the EU's political system. Other research on EU public consultations is centered on a policy area and/or a specific legislative proposal (Biondi et al., 2020; Chalmers, 2018; Gallagher et al., 2021). In contrast, by attempting to explain cross-country differences of participation in EU public consultations, the research at hand looks at broader aspects of the phenomenon itself. The research also expands the existing literature on political participation by shifting the focus beyond traditional modus operandi of participation, such as electoral campaigns and voting. By examining the vocal aspect instead of the voting aspect of political participation, the study fills a crucial research gap.

The findings of this research may also have important social implications. Public consultations have emerged as a potential remedy to address the often-cited democratic deficit within the European Union, characterized by a perceived lack of input and output legitimacy in European decision-making processes. Understanding the factors that contribute to variations in citizens' participation across countries sheds light on the inclusivity of public consultations, and whether they can be characterized as an effective remedy to address the democratic deficit. Identifying factors that hinder or facilitate political participation at the country-level further enables policymakers and stakeholders to develop targeted strategies to encourage citizen engagement in countries that are underrepresented in EU public consultations.

2. Theoretical Framework

2.1 Political Participation and the Legitimacy of Democratic Systems

There is a broad consensus on the crucial role that political participation plays for the functioning as well as the legitimacy of modern-day democratic political systems. Active citizen participation is embedded in the etymological origins of the word democracy itself: *dēmos* (“people”) and *kratos* (“rule”) – the people rule. In his book “Democracy and its Critics”, Dahl (1989) discusses how the history of enlargement of democracies is also a history of the ongoing challenge to maintain a certain level of political participation in democratic political systems. Citing a fictional discussion involving Jean-Jacques Rousseau, Dahl quotes Rousseau as saying: “either democracy was *participatory*, or it was a sham” (Dahl, 1989, p. 226). But as the size of democracies expanded, a significant problem emerged for the participatory aspect of democracies: The standard practice shifted from direct public participation to a system of representation. With small ancient city-state democracies, it was still feasible to have direct democratic decision-making as a core element of political participation. But as the number of people involved in democratic decision-making grew, other venues of political participation emerged and with this the very meaning of political participation changed.

Dahl conceptualizes this development as the “three great transformations” (Dahl, 1994, p. 25), with the first being the transformation from nondemocratic city-states into democracies in the fifth century B.C. The core institution of participation and main decision-making venue of these city-state democracies was the assembly, whose transformative innovation was the radical idea that all (male) citizens could participate in the decision-making process. The second transformation, from city-state democracies to nation-states was made largely possible by another innovation of democratic political systems: representation. Representation, and regularly held elections in which representatives were chosen, solved the scalability issue of city-state democracies and has been ingrained so deeply into the semiotics and the idea of modern democracies that it may even be omitted as an adverb to describe which kind of democracy is meant, without changing the signified: the term *democracy* usually evokes the idea of *representative democracy*. Although the constitutionally vested decision-making power of elected officials means that elections and voting has become the most influential act of political participation, the lack of other participatory elements, such as deliberation and contributions to consultations, have become more obvious in recent decades. This is especially true with the third transformation, which can be currently observed since the 20th century, e.g. with the formation of supra- or transnational political systems such as the United Nations or the European Union (Dahl, 1994).

2.2 The Democratic Deficit of the European Union

In the context of the European Union, these challenges have been discussed around the term “democratic deficit”, initially coined by David Marquand (1979), a British parliamentarian and scholar,

to characterize the disconnect between the extensive decision-making authority of the European Economic Community (EEC), the EU's precursor, and its lack of democratic accountability. The concerns were mainly raised by scholars and politicians from countries that had a comparatively stable set of democratic institutions, such as the Scandinavian countries and some middle and western European countries (Hix, 2013). A rich academic debate subsequently developed, especially since in the 1990s and 2000s (Dahl, 1994; Hix, 2013; Majone, 1998; Moravcsik, 2002, 2008; Scharpf, 1999; Schmidt, 2012). Subsequently, the term has become a commonplace element in research that aims at analyzing elements of the political system of the EU. Although scholars have explored a wide array of subdimensions of the democratic deficit, the spotlight has largely remained on either the lack of democratic legitimacy (Schmidt, 2006, 2012), the existence thereof (Majone, 1998; Moravcsik, 2002, 2008) or issues of democratic accountability (Hix, 2013; Majone, 2005).

The debate is a contested area of research, in which some scholars view the democratic deficit as a central element in the development of various crises within the Union. E.g., the democratic deficit has been cited as an important element contributing to the European sovereign debt crisis (Kratochvíl & Sychra, 2019; Ruffert, 2011), the Brexit (Jessop, 2016), the rejection of the European Constitution by the French, the Irish and the Dutch in the 2000s (Hobolt & Brouard, 2010) and – back in the 1990s – the hiccups surrounding the ratification of the Treaty of Maastricht, which was feared by some to deepen the democratic deficit of the European political system (Dahl, 1994). Other scholars, such as Moravcsik (2008) and Majone (1998) argue that the democratic deficit – at large – is a myth, facilitated by politicians and scholars, who base their argument “on a vague understanding of what the ‘democratic deficit’ is, ignore concrete empirical data about whether one exists, and hold the EU to the impossible standard of an idealized conception of Westminsterian or ancient-style democracy – a perfect democracy in which informed citizens participate actively on all issues” (Moravcsik, 2008, p. 332). The thesis at hand will try to navigate the middle ground, and – acknowledging that the European Union should indeed not be compared against a normatively overloaded democratic utopia – will be founded on the basic assumption that a democratic deficit does exist. The following section will address different options that have been discussed to fix this deficit.

2.3 Political Participation as a Remedy for the Democratic Deficit

Many scholars have emphasized that one of the most important remedies for the democratic deficit would be to improve the input and/or the output legitimacy of the EU. Simon Hix, for example, argues that – although the EU has increasingly enlarged its influence across many aspects of the lives of its citizens – it has not subsequently also established sufficient mechanisms for democratic oversight and accountability. To improve input legitimacy, the EU would have to enhance transparency within EU decision-making procedures and provide more deliberative venues and opportunities for debates that are centered around EU-specific issues (Hix, 2013). Fritz Scharpf highlights the issue of democratic

deficit of the EU within the context of governance effectiveness: He acknowledges how difficult decision-making at the EU level has become due to the EU's complex institutional architecture, but also suggests improving the democratic legitimacy by increasing the effectiveness and quality of decision-making processes (i.e. input legitimacy) while making sure that policies adequately address the needs of EU citizens (i.e. the output legitimacy) (Scharpf, 1999).

When applying these arguments to the research subject at hand, i.e. to the phenomenon of cross-country variation in participation levels in EU public consultations, it becomes clear how the findings of my thesis may contribute to the debate on whether public consultations are rather a democratic fig leaf or if they can be considered a promising remedy for the democratic deficit and a tool to improve the democratic legitimacy of the European Union (Gastil, 2021): The thesis at hand is designed to provide insights into determinants of country-level variations of participation, which – if too excessive – may be seen as harmful to the input legitimacy. The following section attempts to provide an overview of the most relevant contributing factors.

2.4 Established Determinants of Political Participation

In general, all determinants presented below have been empirically tested or theoretically discussed related either to the broader concept of political participation or to voter turnout as a specific institutionalized form thereof. A crucial and basic assumption of this research design is that, as both voting and participation in EU public consultations are closely related concepts that represent institutionalized political participation, the determinants found in the literature for voter turnout may also be used in a theoretical model that explains cross-country patterns of participation in EU public consultations.

In the existing literature on political participation, one of the most controversial discussed relationships is that between political trust and political participation. The literature provides empirical evidence for two opposite relationships: On the one hand, Almond & Verba find that there is a close correlation between trust towards the political system and the propensity to participate in politics (Almond & Verba, 1963). On the other hand, low trust levels and a distrust of the political system were also found to be closely related to higher levels of institutional and non-institutional political participation (Barnes & Kaase, 1979). Rosanvallon & Goldhammer (2008) conclude that the politically passive citizen is an academic myth and that political participation in the age of distrust in institutionalized politics and elections rather shifts to other forms of political involvement, where citizens may formulate and express their preferences in other ways than voting. Other literature suggests that there might be a moderation effect at play, as “political trust can only be expected to have a positive effect on participation levels if it is combined with other civic resources” (Hooghe & Marien, 2013, p. 132). Thus, political trust is often considered only a necessary, but not a sufficient determinant of political participation.

Apart from political trust, an often-discussed determinant of political participation is an individual's frequency or propensity to discuss politics. Lake and Huckfeldt (1998) found that political discussions within an individual's peer network correlate with higher levels of political participation, which was operationalized as involvement in campaign-related activities during the 1992 US presidential election. Similar results were found by Mutz (2002) and by McLeod et al. (1999), the latter in their study on the effects of different discussion network characteristics on political participation at local political venues. By employing an experimental research design, Klofstad (2007) was able to even establish a causal effect, which indicated that a higher frequency of political discussions with roommates increases political participation.

Another often discussed determinant of political participation is an individuals' sense of citizenship. Analyzing political participation in different European countries, Hooghe & Quintelier (2014) find that the status as a citizen not only enhances institutionalized political participation, which might be a common sense expectation, as citizenship is often a requirement to participate in institutionalized forms of participation such as voting, but it also contributes to a higher likelihood of engaging in non-institutionalized forms of political participation that wouldn't necessarily require citizenship but only the sense of citizenship. Dalton (2008) further differentiates between different citizenship norms ("citizen duty" and "engaged citizenship") and finds that a sense of "citizen duty [...] is significantly positively related to electoral participation" (Dalton, 2008, p. 88) and negatively to different forms of non-institutionalized participation such as legal or illegal protests (Dalton, 2008, p. 88), while "engaged citizenship" has a significant positive relation to all institutionalized and non-institutionalized forms of political participation, with the only exception being voting.

Another cluster of frequently mentioned predictors revolves around the socio-economic factors of citizens and country-level aggregates thereof. Campbell (1962) observed that "perhaps the surest single predictor of political involvement is the number of years of formal education" (Campbell, 1962, p. 20). This is in line with findings of other scholars: Especially regarding two elements of the SES (education and economic wellbeing) there is a widespread consensus, that individuals higher SES are more likely to become highly involved in politics than persons of lower status (see Milbrath, p. 53 ff.). Looking at determinants other than the established SES factors, Verba, Schlozman & Brady (1995) acknowledge that political participation is the result of a "complicated interplay of various elements: issue salience, mobilization efforts, socio-economic status, civic skills, interest, motivation, political opportunity, political trust and political competence and awareness" (Hooghe & Marien, 2013, p. 132 citing Verba, Schlozman & Brady, 1995). Nonetheless, they conclude that access to three principal resources is crucial, which subsequently serve as potent predictors of political participation in their theoretical model. These resources encompass "*time* to take part in political activity, *money* to make contributions, and *civic skills* (i.e., the communications and organizational skills that facilitate effective participation)" (1995, p. 271, emphasis in original).

Lastly, research in the adjacent field of voter turnout at European elections has conclusively shown that compulsory voting, a country-level institutional factor, has a strong influence on voter turnout (Franklin, 2001; Franklin & Hobolt, 2011; Mattila, 2003; Smith, 1999). Mattila (2003) finds that “in countries with compulsory voting turnout in the EP elections is *ceteris paribus* about 20 percentage points higher than in countries where failure to vote is not punished” (Mattila, 2003, p. 463). Similar results were found by Smith (1999) and Franklin (1999). I argue that, as both voting and participation in EU public consultations are related concepts (both are forms of institutional political participation), the existence of compulsory voting laws has a similar influence also on the “voicing turnout” at EU public consultations.

2.5 Concept Specifications and Hypotheses

Summarizing the literature, I will specify all discussed concepts and formulate hypotheses for each of the theoretically deducted determinants of political participation, which I will then integrate within a visualization of the theoretical model.

2.5.1 Political Participation

Lester M. Milbrath, in his seminal work, defines political participation broadly as behavior affecting governmental decisions (Milbrath, 1971). He categorizes participation into active forms such as voting or engaging in political debates, and passive ones like obeying laws or paying taxes. Milbrath also introduces a hierarchy of involvement ranging from apathetics, who avoid any form of participation, to individuals engaging in gladiatorial activities such as running for office.

		Input to the System by Individuals	Outtake from the System by Individuals
Active	Instrumental	Leader selection (vote) Party activity Contributing money Keeping informed Volunteering Disobedience	Stewardship Communication opportunities Services Economic opportunities Conflict resolution Justice
	Expressive	Allegiance Demonstrations Protests (vote) Political argument	National symbols Sense of identification Governmental protests Sense of superiority
Passive		Obedience Compliance Conscription Paying taxes Indifference	Public order Security

Table 1: “Map of an Individuals Political Behavior” (Milbrath, 1971, p. 14)

Verba & Nie narrowed the scope of political participation to only include citizen activities aimed at influencing political systems (Verba & Nie, 1972). Similarly, Huntington & Nelson define it as private citizens' activities intended to sway governmental decision-making (Huntington & Nelson, 1976). Building on these definitions, Jan van Deth formulates an operational definition of political participation through a decision tree based on four necessary criteria: any (1) voluntary (2) activity (2) of citizens that (4) are related to government/state/politics (van Deth, 2014).

Academic literature further emphasizes a distinction between institutional and non-institutional political participation. Institutional participation occurs within the established political system, such as the case with voting, lobbying or participation in public consultations. In contrast, non-institutional participation includes, e.g., signing petitions or participating in demonstrations. Verba and Nie pioneered this dichotomy, emphasizing the need to look beyond electoral participation (Verba & Nie, 1972). Embedded in an even broader typology of different forms of civic, political and non-participation, Amnå & Ekman distinguish similarly between *formal political participation* that aligns with above activities mentioned by Verba & Nie and *extra-parliamentary political participation* that includes activities such as signing petitions, participating in strikes or demonstrations (Amnå & Ekman, 2014, p. 295).

With their empirical study that explored how people perceive different types of political participation, Sabucedo & Arce (1991) were able to provide empirical evidence in support of the construct validity of this basic dichotomy, for which they used the specific terms *action within the system* and *action outside the system*: “statistical results favour a two dimensional representation of political participation, though only one of these dimensions was clearly interpretable in political terms - a dimension distinguishing political action within the system from action outside the system” (Sabucedo & Arce, 1991, p. 100). The second dimension, which was ultimately dismissed, was that of *progressive vs. conservative forms of political participation* (*ibid.*).

As laid out above, the literature separates the concept of political participation into two main types: institutional and non-institutional. This distinction is clear and – as empirical evidence suggests – also conceptually relevant, which adds to the construct validity of the concept that I am using as my dependent variable in this study. As Dalton's (2005, 2008) work suggests, the ways people in which citizens participate in politics are shifting, influenced by various factors unique to different countries. Thus, building on this differentiation of political participation, my research will explore cross-country differences of institutional political participation and aim to identify and understand country-level factors that, based on established theories, may have caused these variations.

2.5.2 Frequency of Political Discussions

The concept of *political discussions* refers to “episodes of political conversation and discussion that take place between the non-elite members of a political community” (Schmitt-Beck, 2008, p. 341).

As such, they include any debates, conversations and other communicative exchange of information or opinions between citizens that relate to politics. *Frequency* adds a manifest component to the concept and can be either directly observed as the number of discussions in any given period (e.g., number of daily, weekly, or monthly political discussions) or as a qualitative assessment of the frequency (often / never). Building on above literature, which suggests a positive relationship between the frequency of political discussions and the level of political participation, I hypothesize that:

H1: In EU member states, a higher average frequency of political discussions correlates with higher levels of institutional political participation.

2.5.3 Political Trust

Political trust is a complex concept and may refer to various subdimensions of citizen attitudes, such as attitudes towards the overall political community, to government institutions, to the regime type or to specific political actors (Norris, 1999; Wang, 2005). As the context of this study suggests, the subdimension of interest in this study is political trust towards a specific EU institution, namely the Commission. By nature of the Commissions' dual role – as the author of any legislative proposal that is discussed and as the host of the platform on which these deliberations are conducted – it is the main political actor in the process of EU public consultations. Within the theoretical framework of this study, I thus specify political trust as trust towards the institution of the EU Commission. According to the above literature, higher political trust levels correlate to higher levels of political participation. Thus, I hypothesize that:

H2: In EU member states, higher average levels of political trust correlate with higher levels of institutional political participation.

2.5.4 Sense of EU Citizenship

The concept of *citizenship* has a long history in political sciences and political philosophy, but ever “since the times of Athenian democracy and the Roman Republic its core meaning has been a status of membership in a self-governing political community” (Bauböck, 2006, p. 15). As such, it has changed along with the evolution of different political systems of which its citizens were members. On top of this broad ingroup-versus-outgroup dichotomy, the concept of citizenship is “internally defined by rights, duties, participation, and identity” (Delanty, 1997, p. 285). The seminal work of Marshall & Bottomore (1992) further specifies three subdimensions of citizenship – namely: civil, political and social.

Legally, EU citizenship was introduced in 1992 by the Treaty of Maastricht. It grants citizens from EU member states additional rights, such as the freedom of movement and residence and EU wide access to social security, but doesn't come with substantial additional duties (Kochenov, 2014).

Subsequently, I specify the concept of *sense of EU citizenship* as an individual's self-assessed feeling of being a member of the European political system. Building on above literature, I hypothesize that:

H3: In EU member states, a higher average sense of EU citizenship correlates with higher levels of institutional political participation.

2.5.5 Years of Formal Education

Formal education describes any education usually received in schools and universities that requires full-time involvement of the pupil/student and is often interchangeably used with full-time education. Further, "formal and non-formal education are distinguished by the recognition (or not) of an educational programme as part of the country's educational system by the relevant authorities. Formal education is ultimately institutionalised by the state" (Schneider, 2013, p. 368). The concept of *years of formal education* has a manifest component (number of years) and a latent component (formal education). Thus, I will need to find data that captures the number of years and is a valid representation of the above specified concept of formal education. Following the findings of the literature presented in section 2.4, I hypothesize that:

H4: In EU member states, higher average years of formal education correlate with higher levels of institutional political participation.

2.5.6 GDP per Capita (constant prices, PPP)

Global domestic product (GDP) per capita at constant prices and purchasing power parity (PPP) is an economic concept that measures the economic output of the average person of a country. The constant prices qualifier denotes that the output is adjusted for inflation and the purchasing power parity qualifier specifies that the average output is adjusted for differences in price levels across countries. As such, this specific variant of the GDP concept is often used for cross-country comparisons with regard to differences in wealth and economic well-being. According to the literature, money is an important resource that enables citizens to have the capacity to participate in political processes. Thus, I hypothesize that:

H5: In EU member states, a higher GDP per capita (constant prices, PPP) correlates with higher levels of institutional political participation.

2.5.7 Control Variable: Compulsory Voting

Compulsory voting, often also referred to as mandatory or enforced voting, is the legally codified obligation for eligible voters to participate in the election and cast a vote. The specific way in which compulsory voting is implemented and the penalties for not adhering to those rules differ from one

jurisdiction to another. Depending on the country, compulsory voting regulations may include penalties for non-compliance or exceptions for certain groups of people (Hirczy, 1994). In this study, I will use the broad concept specification which only relates to whether or not a legal obligation exists that mandates citizens to vote. Hence, the concept can be operationalized by a simple dummy variable. As this is the only variable that is not anchored at the individual level, but at the country level, I will use it as a control variable. As the literature has proven, compulsory voting is an important determinant that is positively related with voter turnout at elections (Mattila, 2003). Because both voting and participating in public consultations can be categorized as institutional political participation, I will use this time-invariant country-level characteristic as a control variable.

2.6 The Micro-Macro Problem in Social Sciences

One ongoing challenge for empirical social science studies is the so-called micro-macro problem. In essence, it describes the theoretical and methodological challenges that emerge when a research design links individual characteristics to a broader social phenomenon at the macro-level or vice versa.

On the one hand, this often calls for concern regarding the issue of ecological fallacies: For example, if data shows that countries with higher GDP per capita have a higher level of political participation, this might (but should not) be used to conclude that individuals with higher income are more likely to participate in political processes. As results from such designs have often been interpreted by researchers in ways that resulted in conclusions that represented spurious correlations, linking micro and macro data has often been criticized as a threat for the validity of academic research (Freedman, 1999; Piantadosi et al., 1988).

On the other hand, there is also sound reasoning that explicitly calls for the intertwinement of macro-level and micro-level characteristics, because “the collective environment – institutions and material conditions – provides incentives, constraints, and alternatives to individual actors and shapes their choices and actions. At the same time, the choices and actions of individuals shape their collective environment” (Allmendinger, 1989, p. 231). Thus, and building on the argument, that “empirical analyses too often overlook the fact that individual choices about schooling are significantly shaped and constrained by the opportunities the environment offers” (*ibid*), Allmendinger’s research design makes a conscious choice to link individual educational attainment (micro-level data) to cross-country variations of mobility patterns (macro-level data).

Following a similar reasoning, scholars have also linked aggregate data of individual citizens’ attitudes to country-level variations of tax morale (Torgler & Schneider, 2007) or used aggregate survey data on “personal life satisfaction, political satisfaction, interpersonal trust and support for the existing social order” (Inglehart, 1988, p. 1203) to explain cross-country variations of the stability of democracies. In his study, Inglehart argues, that the country aggregates of these four variables shape a

country specific *civic culture syndrome* (Inglehart, 1988). Seligson (2002) criticizes that aggregating to country-level data does “not seem to fit most cases throughout the world, except for a small group of highly industrialized, advanced democracies in northern Europe and North America” (Seligson, 2002, p. 287). Further, he finds that this approach serves as an example of an ecological fallacy and suggests that “future analyses of system-level data ought first to look carefully at individual-level associations before making similar claims” (Seligson, 2002, p. 288).

In their riposte, Inglehart & Welzel (2003) claim that Seligsons’ reasoning itself is a case of individualistic fallacy and provide a convincing argument: Referencing Robinson (2009), they illustrate how the relationship of variables don’t always align at the macro- and the micro-level. Aggregate data shows that electoral districts with high proportions of African Americans often elect segregationist representatives, despite African Americans being against segregation at the individual level: “The correlation between race and electoral behaviour reversed its sign when one moved from the individual to the aggregate level, and the findings at both levels of analysis were genuine and important” (Inglehart & Welzel, 2003, p. 62). Similar results were found for voting behavior in France and Germany. Thus, Inglehart & Welzel conclude that “it is perfectly possible – and frequently true – that an aggregate level linkage is not reflected at the individual level. Nevertheless, this linkage is not somehow unreal or spurious. Quite the contrary, aggregate level linkages often have more impact on society than those found at the individual level” (Inglehart & Welzel, 2003, p. 63).

Furthermore, I justify the aggregation of individual-level variables to create country-level co-variates for my regression analysis with two additional arguments: First, aggregating data at the national level allows for the estimation of country fixed effects. These enable me to account for unobserved time-invariant variables that might affect the level of political participation across countries. Second, the starting point of this research was the observation of differences between the observed and the expected share of participants from different EU Member States. As my research question and hypotheses refer to country-level outcomes, the research design follows Inglehart’s (1988) research strategy and aggregates individual-level data to country-level data to reflect the importance of the social and societal context.

Building on these arguments, I operationalize the theoretical concepts of most of my co-variates by aggregating individual-level data from the Eurobarometer survey. As my hypotheses show, I expect the directionality of the correlations between co-variates and my dependent variable to be analogous to what the literature suggests for the relationships of these concepts at the micro-level. Following the literature, I assume all variables will have a positive linear relationship with the dependent variable, as shown below in the visualization of my theoretical model. For each item, I aggregate the individual-level data at the country level for each year of the panel data set. The data used is derived from different iterations of the Eurobarometer surveys (see Appendix, I).

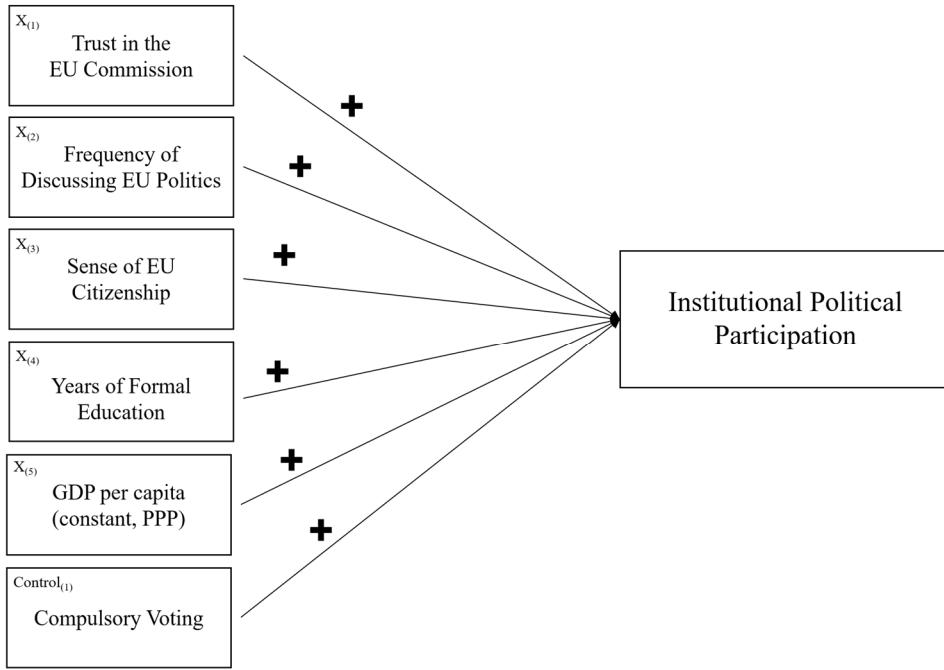


Figure 1: Visualization of theoretical model

3. Research Design and Methods

In order to determine whether or not my theoretical model explains some of the variation observed in my operationalization of political participation, I run an ordinary least squares (OLS) multivariate regression with country fixed effects. To this end, I constructed a micro panel with longitudinal data from 2019 through 2022, which includes publicly available data on public consultations for legislative proposals published by the European Commission, as well – for my covariates – data from different Eurobarometer iterations as well as data from the International Monetary Fund.

3.1 Operationalization of Independent Variables

The first variable, *political trust*, is operationalized through a Eurobarometer (EB) survey item that asks whether people trust different European institutions, one of which is the European Commission (“Please tell me if you tend to trust or tend not to trust these European institutions”) (EB 91.5 | item: QA10_2). This item gauges the respondents' trust level regarding the European Commission, which very closely relates to the context of the research at hand. As such, I deem this an operationalization that precisely measures the concept of political trust. The questionnaire item has two manifestations: “Tend to trust” indicates trust towards the Commission and “Tend to not trust” indicates distrust. Apart from the European Commission this item also asks for citizens trust in the European Parliament, the European Central Bank and – in some iterations of the Eurobarometer – also in the European Council.

The second variable, *frequency of discussing politics*, is operationalized through a survey item that asks the following question: "When you get together with friends or relatives, would you say you discuss frequently, occasionally or never about...?" (EB 91.5 | item: D71_2¹). All three possible answers (1: National political matters, 2: European political matters and 3: Local political matters") are rated on a scale of 1 – 3 ("Frequently", "Occasionally" and "Never"). As the second item explicitly measures the frequency of discussion of European political matters, I deem it suitable data to measure cross-country variation of this theoretical construct.

The third variable, *sense of citizenship*, is operationalized through a survey item, that asks respondents to tell the interviewer to what extent the statement "You feel you are a citizen of the EU" corresponds or not to the respondent's own opinion (EB 91.5 | item: QD2_1). The item has 4 answer options that range from 1 – 4 ("Yes, definitely", "Yes, to some extent", "No, not really", No, definitely not"). I chose this item because it captures the concept of sense of citizenship precisely by asking whether or not the interviewee feels in such a way.

There was, however, no straightforward operationalizations for the concept *years of formal education*. I was not able to find any data that included the total of all years spent in primary, secondary and tertiary formal education. Most datasets provide percentage values for educational attainment levels, i.e. how much of the population has achieved a degree of a certain educational level. Hence, I operationalize my fourth variable, *years of formal education*, by making a few assumptions and using following Eurobarometer questionnaire item: "How old were you when you stopped full-time education?" (EB 91.5: item D8). The assumptions are: (1) *Full-time* education captures the same concept as *formal* education. (2) Children in EU member states start their full-time education at the age of 6. (3) The period of education continues without gaps until the year at which the respondents indicated they had stopped their full-time education.

As of mid-2023, World Bank and Eurostat data currently still don't include GDP per capita data for 2022. Hence, I operationalize the variable with data sourced from the International Monetary Fund's (IMF) world economic outlook database, which calculates estimates for countries for which the data for 2022 is currently still missing. The values are denominated in 2017 international dollars.

Lastly, the control variable *compulsory voting* is operationalized by using a simple dummy variable, for which the value is either 1 for countries with compulsory voting laws or 0 for countries without. Of all EU member states, only Belgium, Luxembourg and Greece have mandatory voting laws (Malkopoulou, 2021) and are thus coded as 1.

To ensure the comparability of the regression coefficients, I flip and subsequently normalize the scales of the Eurobarometer variables *political trust*, *frequency of discussing politics* and *sense of citizenship*, which provides me with a uniform range of [-1,1]. As a result, all data that represents

¹ For an overview of the variable names in the different iterations of the Eurobarometer, see Appendix

answers with negative qualifiers in the statement (“not” or “never”) is now coded as a negative value in my panel. Finally, I aggregate all individual-level variables (*political trust, frequency of discussing politics, sense of citizenship* and *education*) to country-level means by every year of my micro panel dataset (2019-2022).

3.2 Operationalization of Dependent Variable

The dependent variable was calculated for each observation as a log-ratio of the observed and the expected level of participation, i.e. as the logarithmic ratio of the share of participants from a country (=observed participation share) in comparison to the share of the population of that country of the total EU 27 population (=expected participation share). For example, as the average consultation has ~500 participants it could be reasonably expected that Austria – with a population share of 2% of the EU 27 population – would average around 10 respondents per consultation ($\sim 500 * 0.02 = \sim 10$). For such an observation, with no deviation between observed and expected share, the ratio for Austria thus would be calculated as 1. Should the participation share ratio result in a heavily skewed distribution, I will calculate a log-ratio and use this measure as my dependent variable.

The main challenge for this choice of operationalization are the numerous observations, in which countries show 0 respondents for a given consultation. On the one hand, not removing those observations would result in a bias that would underestimate the participation of smaller countries, as they are naturally more often expected to have less than 1 but more than 0 participants, which is logically not possible. Instead, the ratio calculation often has a 0 as numerator (the observed participation) resulting in a 0 value as the ratio of the share. Removing those observations would, on the other hand, result in a loss of information and introduce a bias towards overestimating the participation share of those smaller countries.

However, I would argue that as there are plenty of other observations, in which the participation share of these smaller countries can nevertheless be observed for other consultations, this should provide enough data points to do a regression analysis, without introducing too much bias. A second option for such zero-frequency issues would be to add a very small value to the numerator: By shifting all data by a small uniform value, I could eliminate the zeros without losing the information provided in the data (*add-on smoothing* or *Laplace smoothing*) (Kikuchi et al., 2015). I will ultimately decide which operationalization of my dependent variable I use based on how well the resulting variables fit the regression model assumptions.

Thus, I will operationalize two alternatives for the dependent variable. The first operationalization, with *Laplace smoothing*, would be conducted by adding a small value to the observed participation share prior to computing the log-ratio, as delineated below:

DV Option I

P = participation share (observed)

S = population share (expected)

$$\text{ratio} = \frac{P + 0.001}{S}$$

$$\log - \text{ratio} = \ln(\text{ratio}) = \ln\left(\frac{P+0.001}{S}\right)$$

The second operationalization would be, as discussed above, to drop any observations, where the denominator equals 0 and perform the log transformation only on the participation share ratios of the remaining observations. This would be denoted as follows:

DV Option II

P = participation share (observed)

S = population share (expected)

$P' = \{p \in P \mid p \neq 0\}$

$$\text{ratio} = \frac{P'}{S}$$

$$\log - \text{ratio} = \ln(\text{ratio}) = \ln\left(\frac{P'}{S}\right)$$

3.3 Data Collection and Sampling

The data for the dependent variable was scraped from the “Have Your Say” platform hosted by the EU Commission. The website provides a search tool to access the overview pages for a total of currently 2817 initiatives, that include different types of acts (communications, delegated acts, implementing acts and legislative acts). Each observation is uniquely identifiable by the name of the legislative proposal for which the consultation was conducted. Further, I retrieved data on the policy area as well as the year of the consultation for each legislative proposal, which provides me with a rich corpus of data to conduct my analysis.

Following my research question, I have limited the analysis to data on participation in proposals for legislative acts. Furthermore, I limited the sample to include only public consultations that have been completed by the day on which I scraped the data (June 1, 2023). The raw data includes 238 observations of online public consultations from 2017 to 2023 (see figure 2). Although the participants can be citizens, organizations or other entities, the vast majority of participation comes from EU citizens. Due to data limitations, I must only assume that the distribution of citizen participation by country equals the distribution seen in the overall participation across all participants. Further, I removed consultations

with missing data (consultations with 0 respondents across all countries) as well as consultations with excessively high numbers of respondents, which have been subject to targeted campaigns and automated responses (>30.000 respondents) (European Commission, 2020). Although the operators of the consultation platform are aware of these botched campaigns (only for these outliers they have included an option to filter by “all feedback”, “unique feedback” and “campaigns”), a deep dive into the data of supposedly unique feedbacks of the botched consultations showed that there was reasonable doubt about the accuracy of this filter. Hence, I excluded any campaign with more than 30.000 respondents. Further, I removed duplicate observations, which occurred whenever a joint consultation was done for a legislative package that, for example, included a directive as well as a regulation. In the raw data, these appear as two distinct observations. Finally, I removed all remaining observations from 2017, 2018, and from 2023 in order to maintain a relatively balanced panel data set. In total, this left me with 178 observations of EU public consultations.

year	number of consultations by year							<i>n</i>
	2017	2018	2019	2020	2021	2022	2023	
raw data	2	11	16	53	79	70	7	238
cleaned data	0	0	7	45	65	61	0	178

Figure 2: Overview of observations by year (before and after data consolidation)

In the remaining data, more than 90% of the respondents are from one of the 27 EU member states. Nevertheless, it is notable that citizens from all over the world (192 countries) have taken the opportunity to voice their opinions and preferences. In total, there were 91573 participants from EU member states across 178 public consultations, averaging ~514 EU participants for each consultation.

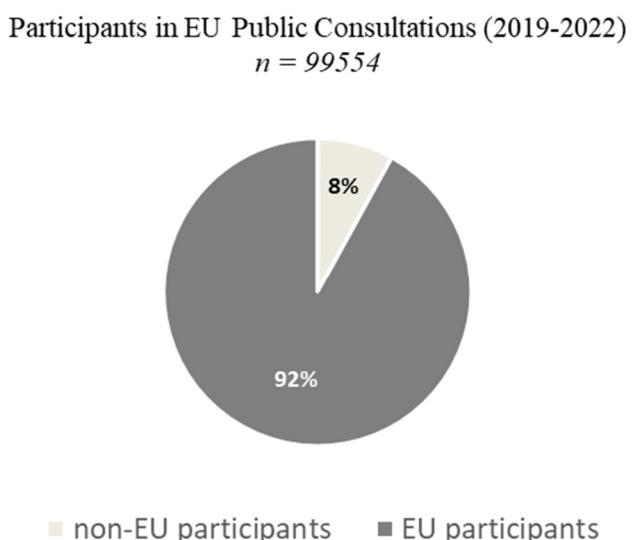


Figure 3: Share of participants from EU and non-EU countries

3.4 Methods for Data Analysis

For the regression analysis, I employ a fixed effects model – also known as within model – to account for time-invariant unobservable characteristics that vary across different countries but don't change over time. This could be any stable country specific characteristics, for example its legal and institutional framework. This allows me to control unknown characteristics of each country and ensures that my estimates are not biased by omitted country-specific variables. I will however conduct a Hausman Test to statistically determine whether a random effects model might better suit my data. The fixed effects model denotes as follows:

Fixed Effects Model:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \alpha_i + \epsilon_{it}$$

with

i as the index for the country where $i = 1, 2, \dots, 27$

t as the index for my selected time period where $t = 2019, 2020, 2021, 2022$

Y_{it} as my dependent variable for country i at time t

$X_{1it}, X_{2it}, X_{3it}, X_{4it}, X_{5it}$ as five independent variables for countries i at time t

α_i as the fixed effect for country i

ϵ_{it} as the error term for country i at time t .

β_0 as the intercept

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ as coefficients for the five independent variables

Additionally, I want to control for a time-invariant country specific dummy variable (*compulsory voting*), which is however inherently controlled for in above fixed effects model. Therefore, I will additionally run a random effects regression with all five variables as well as the control variable. This allows me to conclude whether *compulsory voting* might be one of the omitted time-invariant country-specific variables that contribute to the estimated country fixed effects.

4. Empirical Findings

In this section, I present the findings from my country fixed effects regression analysis. The purpose of using this model was to account for differences across countries by allowing each country to have its own baseline. This is particularly useful for analyzing data that spans across various countries and time periods, such as the case with the micro panel at hand. Through this model, I can focus on the relationship between the variables that have been derived from the literature, while taking into account unknown time-invariant characteristics that are specific to each country. I will begin with an overview of the variables, continue with checking assumptions for doing a regression analysis and end with the presentation and interpretation of the results of my analysis. Additionally, I will assess the reliability of my model by running basic diagnostic tests.

4.1 Descriptive Statistics

My independent variables derived from the Eurobarometer are all aggregated as a country-level average for every year of the micro panel. With four yearly average values for every of the 27 EU member states from the Eurobarometer data set, this subsequently results in $27 \times 4 = 108$ unique values for every variable. Below histograms and boxplots provide a summary of basic descriptive statistics for these variables, grouped by country. Further, I calculated individual-level averages for each Eurobarometer variable and cross-referenced those with the country-level averages presented in below boxplots, which allowed me to visually check that there were no erroneous calculations done when calculating the country-level means (see Appendix table II).

4.1.1 Independent Variables

At a glance, the overview of all independent variables shows that all 108 unique values of each variable are rather normally distributed. As a result of their calculation as yearly country averages, the Eurobarometer variables (I, II, III) have cut-off distribution tails (see figure 4). As a result of some outliers at around 120.000 \$ per capita, the GDP per capita variable (V) is skewed to the right.

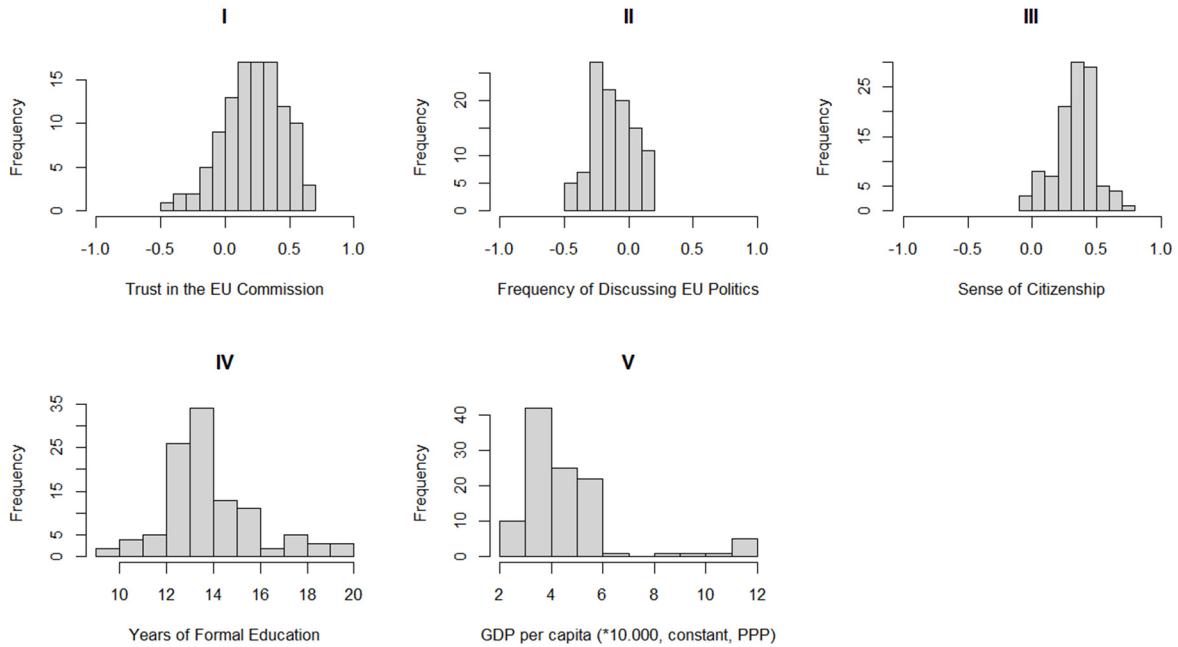


Figure 4: Histograms of all independent variables (except compulsory voting)

Additional details will be provided in the boxplots below, which allow for a cross-country comparison. The first co-variate, *frequency of discussing politics*, shows little variation between countries, with most countries averaging values around 0. Portugal, Spain and France stand out as a regional cluster in which – on average with mean values well below 0 – comparatively many people never discuss EU politics.

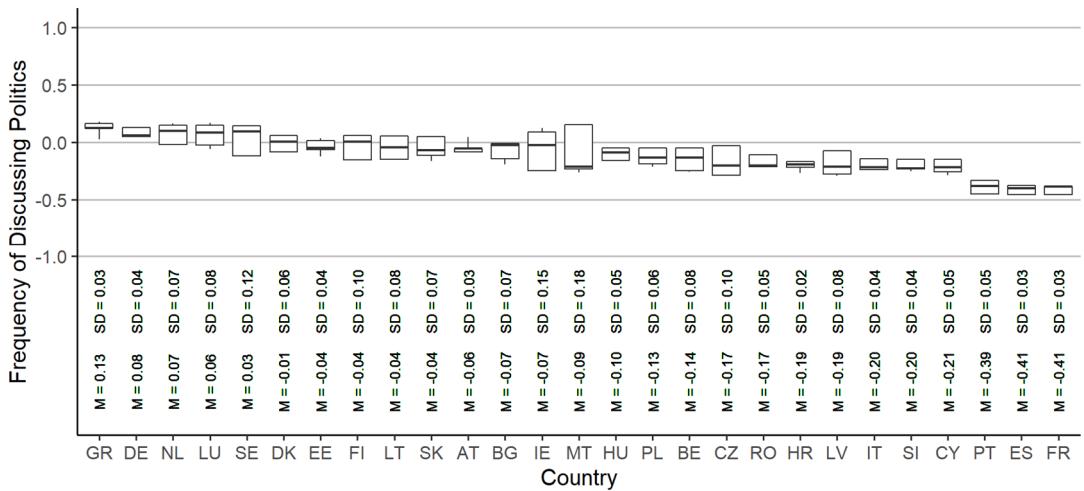


Figure 5: Boxplot of yearly country averages of the variable "frequency of discussing EU politics"

On average, people in twenty countries were inclined to trust the Commission in every of the four years of the panel. In five countries, the average trust in the Commission fluctuated between positive and negative values (IT, SI, ES, CY and CZ). Only two countries had an average trust that was consistently on the negative side ("Tend to not trust") in all years between 2019 and 2022. Of those,

France was rather close to neutral and only Greece has shown average values that could be described as negative outliers (Mean of the averages = -0.38 | SD = 0.02).

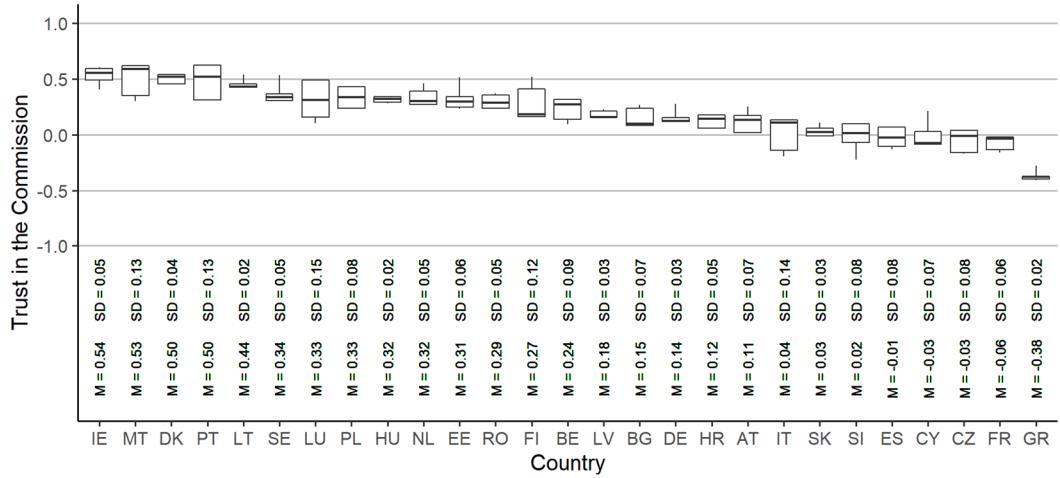


Figure 6: Boxplot of yearly country averages of the variable "trust in the EU Commission"

Overall, people in EU member states tend to feel as citizens of Europe rather than not. Although Greece again shows the lowest average means of this variable across all years of the panel, it cannot be considered an outlier as with the first co-variate. In general – except for a few countries (e.g.: Malta) – variation of the averages of one country across the four years is small, indicating that this variable might even represent a time-invariant concept.

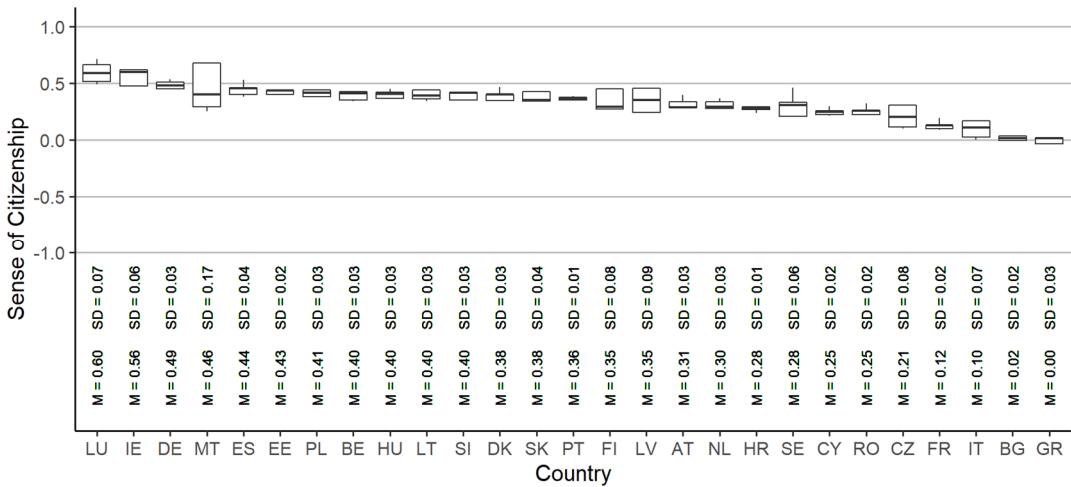


Figure 7: Boxplot of yearly country averages of the variable "sense of EU citizenship"

The boxplots for the years of formal education exhibit a cluster of three outliers from the Scandinavian countries Denmark, Finland, and Sweden, which have averages of over 18 years of full-time education. Although this might be at large the result of a specific characteristic of Scandinavian countries, which have long been proponents of formal adult education and lifelong learning (Bostrom,

2017; Kuusipalo et al., 2021), this might also show exhibit an issue of how this variable was calculated (see discussion in section 5).

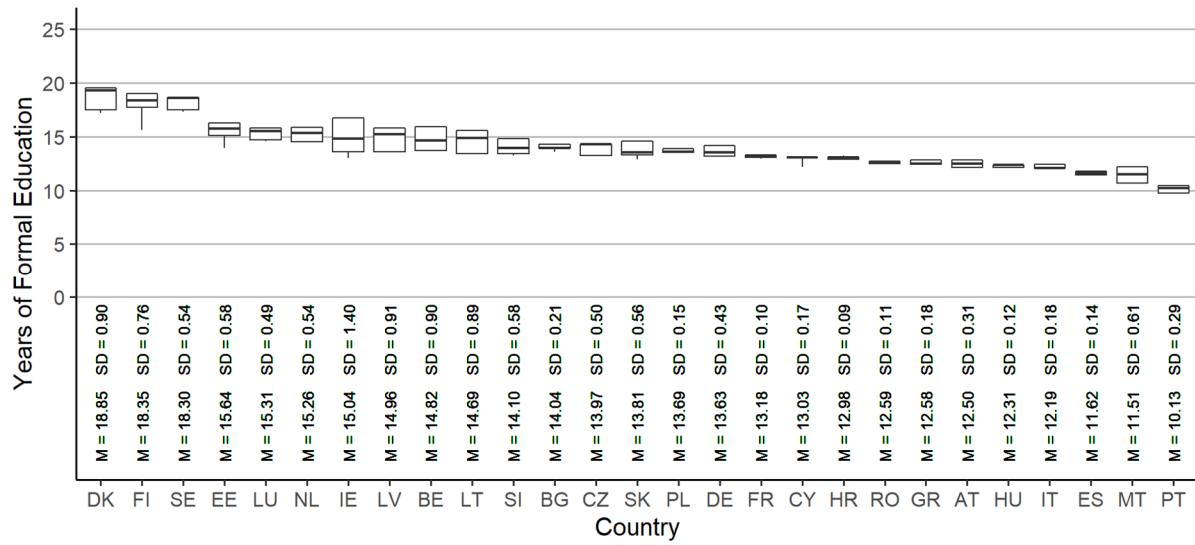


Figure 8: Boxplot of yearly country averages of the variable "years of formal education"

The boxplot graph for GDP per capita by country, measured at 2017 international Dollars and at purchasing power parity, shows that Europe has two outlier countries (Luxembourg and Ireland), in which the per capita output is by far higher than in all other countries. During the period that is captured by the panel data set, which encompasses the Covid-19 outbreak as well as the subsequent economic crises, the variation over time of all countries was comparatively high. Nevertheless, only three countries have a standard deviation of more than 2000 US-Dollar (Ireland, Malta and Croatia).

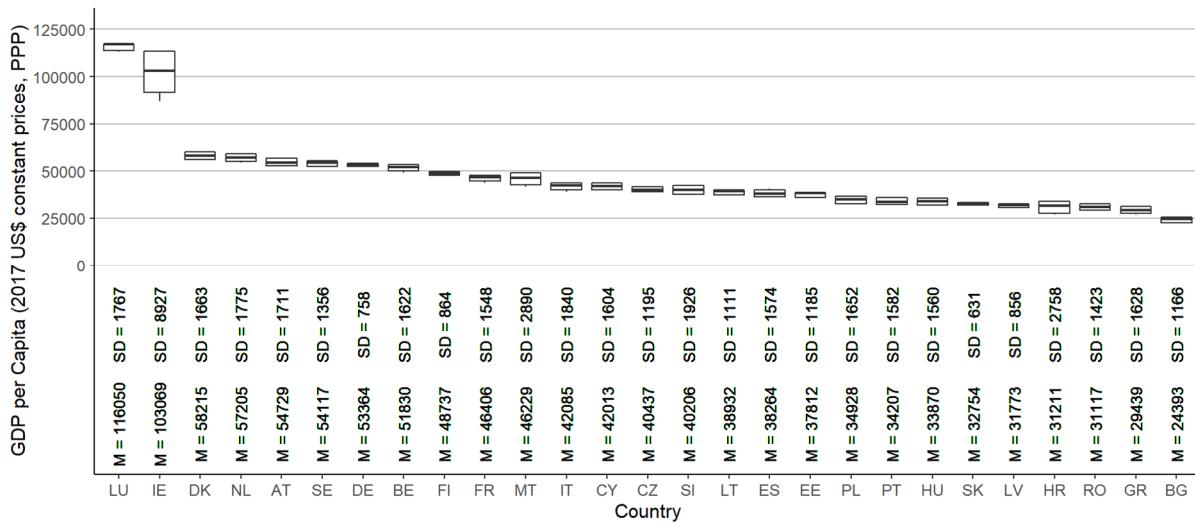


Figure 9: Boxplot of yearly country averages of the variable "GDP per capita (constant 2017 international dollars, PPP)"

4.1.2 Dependent Variable

At a glance, one log-transformed ratio of participation share is preferable to the other. The DV with Laplace-smoothing is skewed to the left, which could indicate that the add-on smoothing introduced some asymmetry into the data. However, I would argue that this also might just represent the natural constraints of a variable that was calculated as a ratio. As such, it has a lower bound of 0, but no upper limit, which leads to a left skew after the log transformation. However, as the DV with dropped observations shows a near perfect distribution, this might be the better choice of operationalization. Even after dropping all observations with 0 responses, the number of observations is of no concern.

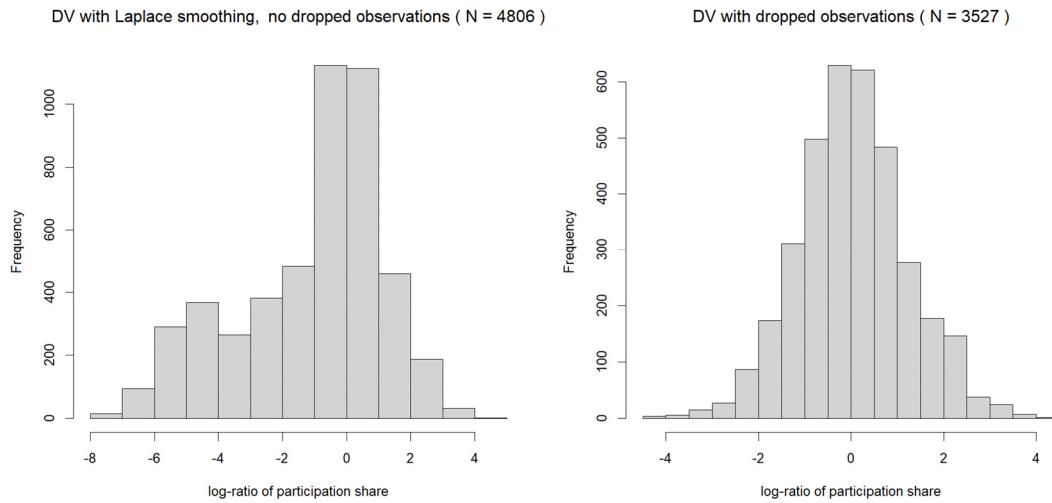


Figure 10: Histograms of different operationalizations of the dependent variable

A short glance at the country wise boxplots of both operationalizations provides a similar picture: On the one hand, the Laplace smoothed variable has higher standard deviations and rather big interquartile ranges for most countries:

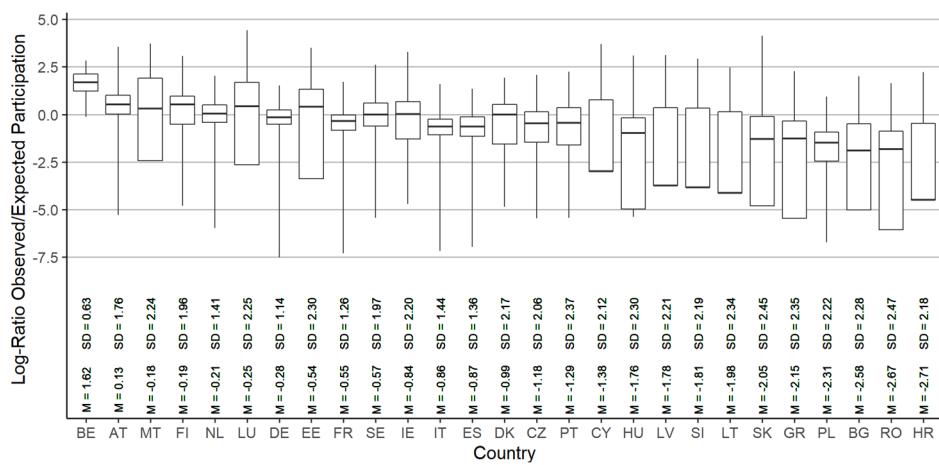


Figure 11: By-country boxplots of the Laplace-smoothed dependent variable "log-ratio of observed/expected participation share" (n = 4806)

On the other hand, the log-ratio of participation share, that was calculated after dropping 0 response observations shows consistent standard deviations of around 1 and smaller interquartile ranges. However, it does indeed seem to introduce a positive bias of the log-ratio towards smaller countries, as suspected above. Smallest member states, such as Malta, Luxembourg, Cyprus, Latvia and Estonia all move up, while bigger countries such as France, Germany, Spain, Italy all move down in their mean log-ratio participation share.

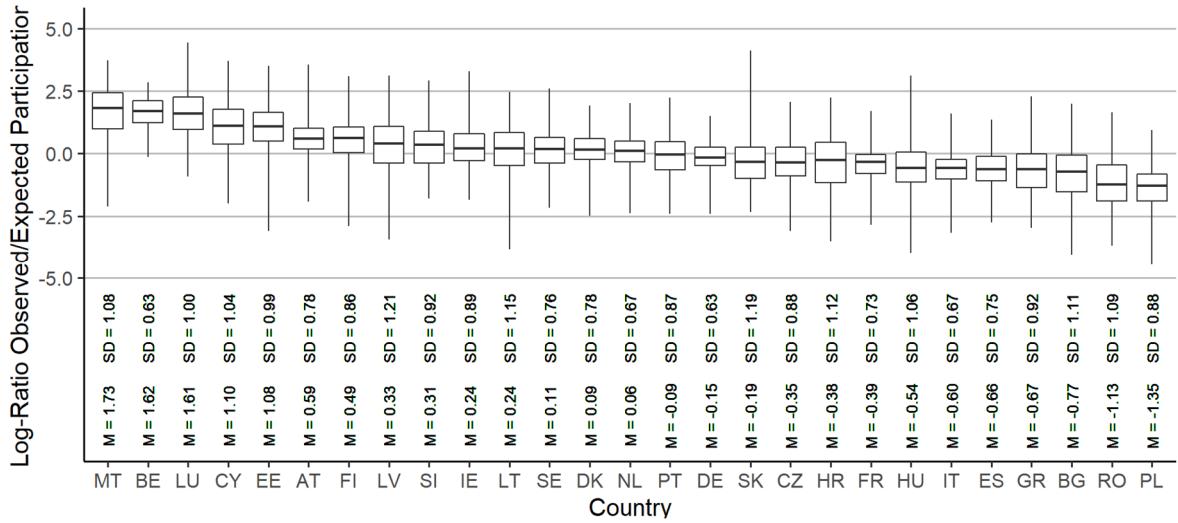


Figure 12: By-country boxplots of the dependent variable "log-ratio of observed/expected participation share", calculated after dropping 0 frequency observations (n = 3527)

4.2 Inferential Statistics

Before I conduct the regression analysis, I will assess whether basic assumptions are met and whether the fixed effects model might be preferable over a random effects or pooled OLS model. Whenever the statistical checks require me to include the dependent variable, I will use the log-ratio variable that was calculated after dropping zero response observations.

The most important assumptions I need to check are (1) whether the samples are representative of the population, (2) the linearity of the relationship between the independent variables and the dependent variable, (3) possible multicollinearity of the independent variables, (4) endogeneity, which closely relates to the choice of the appropriate panel model, and (5) homoscedasticity of the residuals. The assumption of normal distribution of all variables of the dataset has already been checked in the previous section. As I have a micro panel with only 4 years of data, neither a stationarity test (Hadri & Larsson, 2005) nor a serial correlation test is necessary (Baltagi, 2021).

4.2.1 Regression Assumptions

Representativeness

The sampling for the Eurobarometer survey is highly representative (Nissen, 2014). It is based on a random sampling method that involves demographic and spatial stratification, i.e. the distribution of the national resident population across metropolitan, urban, and rural areas and across demographic characteristics (*ibid.*). The dependent variable, however, is not representative of the general population, as I must assume a high degree of self-selection bias.

Linearity

The visual representation of the relationship between the dependent variable and the independent variable implies that there is a positive linear relationship between all co-variates and the log-ratio of the participation share (see table below). Minor issues only seem to be present with the *years of formal education* variable.

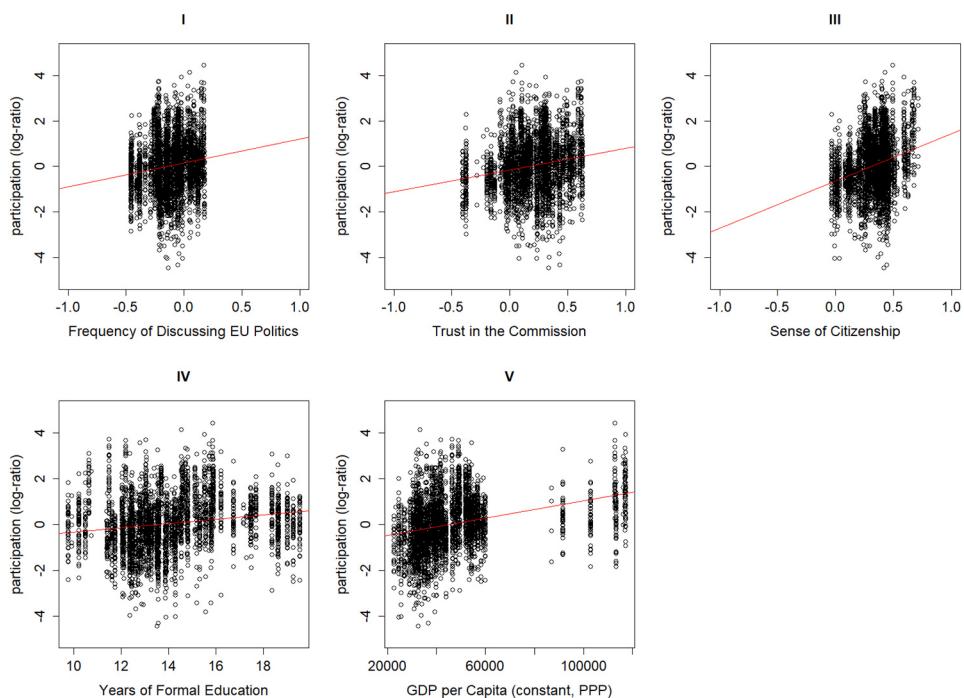


Figure 13: Scatterplots of independent variables with the dependent variable.

Multicollinearity

In order to find possible issues with multicollinearity, a correlation test of all independent variables was conducted. Although all independent variables are positively correlated, correlation coefficients between 0.137 and 0.614 allow me to safely rule out multicollinearity.

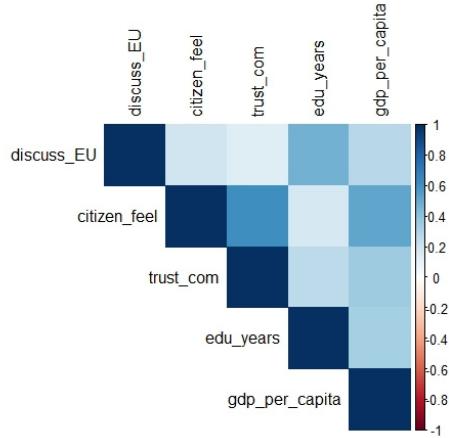


Figure 14: Correlation matrix plot for all independent variables (except dummy control: compulsory voting)

Endogeneity and Choice of Panel Model

First, I use the Breusch-Pagan Lagrange Multiplier Test to assess whether a random effects model would be preferable to a simple OLS regression. As the p-value is highly significant (value < 2.22e-16), I reject the null hypothesis of the test and conclude that a random effects model would be preferable to a simple OLS regression. Next, I conduct an *F test for individual effects* to check whether this also holds true for the comparison of the OLS regression in comparison to a fixed effects model. The result indicates that there is strong evidence against the null hypothesis of no significant effects of individual countries (p-value < 2.22e-16). Thus, I will either use a fixed effects or a random effects model, which I will choose by conducting the *Hausman test*. Additionally, this test allows me to assess the possible presence of endogeneity issues in the fixed effects model. The null hypothesis serves as my initial assumption, positing that the random effects estimator is both consistent (meaning that as the sample size increases, it converges to the true parameter values) and efficient (meaning it utilizes the data in an optimal manner). In contrast, the alternative hypothesis challenges the reliability of the random effects estimator, suggesting that fixed effects may be more appropriate for producing consistent estimates. Through the application of the Hausman test, I evaluate the data to establish which hypothesis is better supported by the empirical evidence of my dataset.

The Hausman test produced a chi-square statistic of approximately 10.2 with 5 degrees of freedom, which corresponds to the five main regression coefficients of my model, and a p-value of 0.069. Based on conventional levels of statistical significance (i.e., $p = 0.05$), the p-value of 0.069 does not provide sufficient evidence to reject the null hypothesis of the Hausman test, which states that the difference in coefficients between the fixed effects and random effects models is not systematic (Silwal & McKay, 2015) or a result of endogeneity, i.e. a correlation between unobserved effects and the regressors. Because this result suggests that issues of endogeneity, which would render the fixed effects estimator inconsistent, are not severe, I will cautiously proceed with the random effects model. However,

as the p-value is above the conventional threshold for statistical significance, I will need to check whether other assumptions are violated.

Assumption of Homoscedasticity

Below scatterplots are used to visually check the relationship between residuals and fitted values of my fixed effects model in two different scales (on the logarithmic ratio as well on the original scale). This was done to check whether the log transformation has biased the residuals systematically. In the first scatterplot, which displays standardized residuals on the y-axis and fitted values on the x-axis, a lowess line is plotted to capture the overall trend. The lowess line shows a slight upward bump in the middle but remains generally horizontal. Similarly, in the second scatterplot where original scale residuals are plotted against original scale fitted values, the lowess line also exhibits a small upward deviation in the middle while maintaining a relatively flat pattern. Both observations suggest that the fixed effects model does not suffer from significant issues regarding any heteroscedasticity of the residuals. The slight bumps in the lowess lines indicate some localized deviations from homoscedasticity, but overall, the relationship between the residuals and fitted values appears to be relatively constant and unbiased.

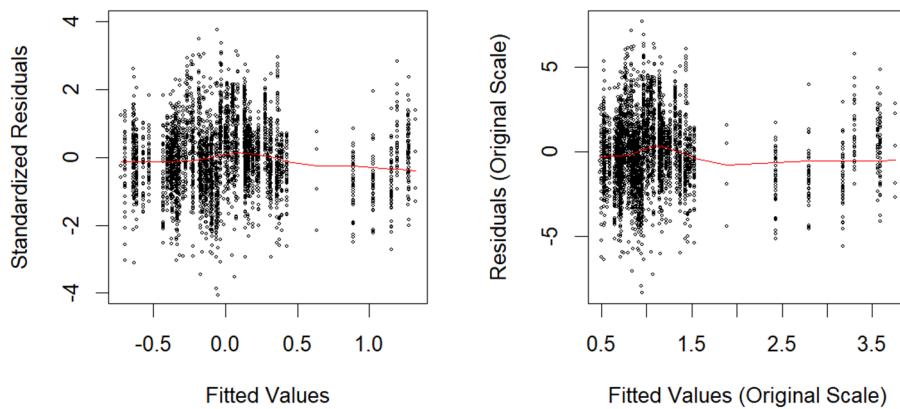


Figure 15: scatterplots of residuals and fitted values (log and original scale)

4.2.2 Results

The regression table below shows two similar fixed effects model specifications, which share the identical set of independent variables but differ in the operationalization of the dependent variable. Model (1) uses the operationalization in which I dropped all observations where no one from the country participated in a given public consultation. Model (2) was calculated with the add-on smoothed variable.

The summary statistics allow me to conclude that both models are statistically significant (both with a model p-value < 2.22e-16). Noticeably, with regard to the 5 independent variables, the results of both model specifications are similar. However, the comparison of both R² and adjusted R² values indicates that model (1) explains more than double of the observed variation of the dependent variable,

suggesting a better goodness-of-fit of this model. With approximately 43.7% explained variance, the R^2 also indicates a good model fit in absolute terms. Thus, I will use this as my baseline model and present the results in the following paragraph.

The regression coefficients suggest that alongside with unobserved time-invariant country fixed effects, only two co-variates from my theoretical model – *frequency of discussing EU politics* (p-value = 0.06982) and *years of formal education* – are significant predictors of the observed cross-country variation of participation share in EU public consultations. Thus, I reject hypotheses 2, 3 and 5, which stated that higher average levels of political trust, sense of citizenship and economic output per capita correlate with higher levels of institutional political participation. Additionally, although the estimated coefficient is significant, I also reject the fourth hypothesis, as it expected a positive relationship between years of formal education and institutional political participation. Instead, according to my fixed effects model, the relationship of the correlation is the other way around: For every additional year of formal education, the log-ratio value of participation share decreases by 0.115. Thus, I can only find empirical evidence that supports the first hypothesis, which assumed that EU member states, in which people more frequently discuss EU politics also have higher participation shares in EU public consultations ($\beta=1.206$, p-value= 0.002).

Regarding the country fixed effects estimators, only seven EU member states don't have significant fixed effects estimators (Denmark, Ireland, Lithuania, Latvia, Portugal, Sweden and Slovenia) in comparison to the baseline country of Austria. This indicates that there is strong evidence of time-invariant unobserved variables that influence the level of political participation of these countries. The countries with positive and significant positive coefficients include Belgium, Cyprus, Estonia, Finland, Luxembourg and Malta, countries with significant negative coefficients include Bulgaria, Czechia, Germany, Spain, France, Greece, Croatia, Hungary, Italy, Netherlands, Poland, Romania and Slovakia (see table 2 on page 29).

Further, I highlighted the countries that have compulsory voting laws, which serves as my control variable. As a fixed effects model already controls time-invariant country characteristics, I can't include the control variable into my main model. However, as discussed at the beginning of this section, the Hausman provided evidence that a random effects model may also be appropriate for my micro panel. As this allows for the inclusion of a dummy variable for *compulsory voting*, I controlled for this variable with two random effects model specifications seen in table 3 on page 30.

With less than 1% of explained variance (R^2 model (3) = 0.003, R^2 model (4) = 0.004, both random effect models don't show a great goodness-of-fit. Hence, any conclusions drawn from the estimators must be taken with a grain of salt. However, both model specifications corroborate the robustness of the *frequency of discussing EU politics* estimator, which is positively correlated with the log-ratio of participation share (p-value = 0.016 in model (3) and p-value = 0.027 in model (4)).

	<i>Dependent variable:</i>	
	DV: non-responses dropped <i>country fixed effects</i> <i>linear</i> (1)	DV: Laplace-smoothed <i>country fixed effects</i> <i>linear</i> (2)
1 discussing politics	1.206 *** (0.384)	2.803 *** (0.738)
2 political trust	-0.430 (0.291)	-0.698 (0.552)
3 sense of citizenship	-0.200 (0.513)	-1.017 (0.965)
4 gdp per capita	-0.025 (0.107)	-0.160 (0.207)
5 education years	-0.115 *** (0.039)	-0.266 *** (0.074)
factor(isocntry)BE	1.456 *** (0.167)	2.455 *** (0.336)
factor(isocntry)BG	-1.287 *** (0.367)	-3.036 *** (0.700)
factor(isocntry)CY	0.627 *** (0.205)	-1.328 *** (0.383)
factor(isocntry)CZ	-0.762 *** (0.205)	-1.051 ** (0.408)
factor(isocntry)DE	-0.743 *** (0.120)	-0.332 (0.252)
factor(isocntry)DK	0.350 (0.309)	0.814 (0.591)
factor(isocntry)EE	0.882 *** (0.259)	0.075 (0.500)
factor(isocntry)ES	-1.001 *** (0.308)	-0.474 (0.609)
factor(isocntry)FI	0.603 ** (0.269)	1.222 ** (0.520)
factor(isocntry)FR	-0.623 *** (0.192)	0.025 (0.386)
factor(isocntry)GR	-1.835 *** (0.319)	-3.869 *** (0.615)
factor(isocntry)HR	-0.829 *** (0.296)	-2.738 *** (0.571)
factor(isocntry)HU	-1.055 *** (0.259)	-1.930 *** (0.508)
factor(isocntry)IE	0.296 (0.539)	1.051 (1.053)
factor(isocntry)IT	-1.167 *** (0.187)	-1.152 *** (0.371)
factor(isocntry)LT	-0.002 (0.247)	-1.519 *** (0.466)
factor(isocntry)LU	1.487 ** (0.677)	1.443 (1.310)
factor(isocntry)LV	0.151 (0.321)	-1.192 * (0.613)
factor(isocntry)MT	1.251 *** (0.181)	-0.178 (0.341)
factor(isocntry)NL	-0.281 * (0.171)	0.193 (0.342)
factor(isocntry)PL	-1.655 *** (0.268)	-1.997 *** (0.524)
factor(isocntry)PT	-0.430 (0.315)	-1.129 * (0.606)
factor(isocntry)RO	-1.572 *** (0.293)	-2.779 *** (0.566)
factor(isocntry)SE	0.161 (0.267)	0.694 (0.513)
factor(isocntry)SI	0.008 (0.248)	-1.330 *** (0.479)
factor(isocntry)SK	-0.736 *** (0.270)	-2.226 *** (0.528)
Observations	3,527	4,806
R ²	0.437	0.199
Adjusted R ²	0.431	0.193
F Statistic	87.422 *** (df = 31; 3492)	38.175 *** (df = 31; 4771)

Note:

* p<0.1; ** p<0.05; *** p<0.01

Table 2: Country fixed effects panel regression. Two model specifications with different operationalizations of the dependent variable.

<i>Dependent variable:</i>		
DV: non-responses dropped		
<i>random effects</i>		
<i>linear</i>		
	(3)	(4)
1 discussing politics	0.641 ** (0.266)	0.584 ** (0.265)
2 political trust	-0.170 (0.244)	-0.131 (0.243)
3 sense of citizenship	0.024 (0.459)	0.069 (0.454)
4 education years	-0.050 * (0.026)	-0.046 * (0.026)
5 gdp per capita	0.051 (0.052)	0.039 (0.051)
6 compulsory voting		0.844 * (0.431)
Constant	0.597 (0.443)	0.473 (0.435)
Observations	3,527	3,527
R ²	0.003	0.004
Adjusted R ²	0.002	0.002
F Statistic	10.739 *	14.821 **

Note: *p<0.1; **p<0.05; ***p<0.01

Table 3: Random effects regression model. Dependent variable calculated without 0 frequency observations. Model (3) with all independent variables from the theoretical model. Model (4) controls for compulsory voting.

Although the inclusion of the control variable doesn't increase the explained variance in any meaningful way, the control variable shows a significant positive correlation with the dependent variable. As it doesn't interfere heavily with the significance or the coefficients of the other five independent variables, I conclude that my control variable – although significant – doesn't have a substantial impact on the relationship between my independent variables and the dependent variable.

5. Discussion

The results of the fixed effects regression analysis provide valuable insights into the factors influencing political participation in EU public consultations. The analysis reveals that only two of the five independent variables – frequency of discussing EU politics and years of formal education – are significant predictors of the observed cross-country variation of participation share in EU public consultations. These findings challenge some of the assumptions made in the theoretical model, leading to the rejection of four hypotheses.

The first hypothesis, which proposed that EU member states in which people more frequently discuss EU politics have higher participation shares in EU public consultations, is strongly supported by the empirical evidence. Positive and significant coefficients were found across all model specifications. This finding aligns with the literature suggesting that political discussion is a key driver of political engagement. It suggests that fostering a culture of political discussion could be a viable

strategy for increasing the level of political participation in EU countries that currently have lower participation shares. As discussed at the beginning of this master thesis, public consultations may only be considered a remedy for the democratic deficit, if all countries contribute a comparatively equal share to the deliberations in the EU public consultations. However, as shown in the descriptive statistics of my dependent variable, many countries from Southern and Eastern Europe exhibit comparatively low participation shares.

Interestingly, the fourth hypothesis, which expected a positive relationship between years of formal education and institutional political participation, was rejected on the grounds of having the wrong direction of the found relationship. The analysis shows that for every additional year of formal education, the log-ratio value of participation share decreases. This counterintuitive finding contradicts previous research suggesting that higher levels of education are associated with increased political participation (Verba et al., 1995). One possible explanation would be that those with more formal education have the resources to be engaged in other forms of political activity, such as campaigning, rather than in public consultations. This finding may also be the result of how I operationalized education: In hindsight, the use of the Eurobarometer questionnaire item "How old were you when you stopped full-time education?" as an operationalization for years of formal education is problematic, as it assumes that all individuals start their education at the same age and that education continues without gaps. This assumption must be challenged, as the descriptive statistics of this variable show a Scandinavian country cluster which has rather high values. This might not be the result of the average Scandinavian having had more years of formal education, but rather indicate that many Scandinavians take up formal education again at later stages of their life. As this wouldn't accurately reflect the concept that I envisioned to measure with this operationalization, this might have led to a measurement error and puts into question the internal validity of the research design.

The rejection of the second, third, and fifth hypothesis, which proposed that higher levels of political trust, sense of citizenship, and economic output per capita are associated with higher levels of political participation, is also surprising. These findings challenge widely held assumptions about the drivers of political participation. However, it is also possible that these variables are not as influential in the specific context of political participation in EU public consultations. Further research is needed to determine whether this relationship holds true for regression analysis with a similar theoretical model but, instead of using aggregate data, with using individual-level data.

Another limitation of the study is that my research design didn't investigate non-linear and/or moderated relationships between the set of variables in my theoretical model. For example, building on the idea of *critical citizens*, Norris (2011) discussed a phenomenon of political cultures that may result in (non-linear) moderation effects: increasing levels of education and higher average knowledge about politics may increase distrust of political institutions and – as I would conclude – may contra intuitively lead to lower participation levels.

A main finding of my thesis is that the country fixed effects estimators indicate the presence of significant unobserved country-specific factors influencing political participation. However – apart from controlling for compulsory voting – the analysis was not designed to provide further insights into what these factors might be. The finding that compulsory voting is associated with higher political participation in the random effects model is to be taken with a grain of salt: Because of the low explained variance of the dependent variable, the goodness-of-fit of the random effects model is questionable and casts doubt on the reliability of any findings from the random effects model. Future studies should aim to build a research design that includes country-specific control variables in the baseline model and choose the appropriate variables or regression models to do so.

I further suggest three methodological improvements: (1) to add further model specifications that make use of population size weights or post-stratification weights included in the Eurobarometer data, thereby correcting for biases that might be detrimental to the representativeness of the data. (2) As King et al. suggested, it would improve the validity to use weighted averages when aggregating individual-level data to country-level averages (*Method of Bounds*). This also comes with the benefit of carrying more information from the micro to the macro level (King et al., 2004, p. 3). And (3), it seems that the chosen baseline operationalization of my dependent variable in model (1) indeed introduced a bias towards overrepresenting the participation share of small countries, as seen in the table below. And although there seems to be no bias in the operationalization of model (2), this operationalization came with other previously discussed pitfalls.

Biased Estimators introduced by DV operationalization		
	Correlation of Fixed Effect Estimators with Population Share	
	model (1) DV: non-responses dropped	model (2) DV: Laplace-smoothed
correlation:	-0.435	0.017

Table 4: Correlation of fixed effect estimators with population share

In summary, while my analysis did provide some interesting insights, the findings should be interpreted with caution. The research design of my thesis raises several methodological concerns – as discussed for example with the different choices of how to operationalize the dependent variable, the micro-macro problem and some far-reaching assumptions I make – which I couldn't resolve satisfactorily. Further research would need to address these issues in order to deepen the understanding of country-level factors that influence political participation in EU public consultations.

6. Conclusions and Recommendations

The findings of this study contribute to answering the research question regarding the factors influencing political participation in EU public consultations. Through a comprehensive fixed effects

regression analysis, it was revealed that the frequency of discussing EU politics and years of formal education are significant predictors of the observed cross-country variation in participation share. These results provide valuable insights into the determinants of political participation in the EU context.

The research findings also have implications for addressing the issue of the democratic deficit and improving the input legitimacy of democratic decision-making in Europe. The strong support for the hypothesis, which stipulated that an increased frequency of discussing EU politics is associated with higher participation shares in a given country suggests that fostering a culture of political discussion can be a viable strategy to enhance political participation. Encouraging citizens to engage in discussions about EU politics can help bridge the gap between citizens and EU institutions, promoting a sense of ownership and empowerment among European citizens. This, in turn, can contribute to a more equitable and participatory decision-making process at the European level.

Additionally, the unexpected finding that years of formal education have a negative correlation with participation share at the country level challenges existing assumptions about the relationship between education and political engagement at the individual level. Further research is needed to explore the underlying mechanisms and possible omitted variables that might contribute to this counterintuitive finding. For example, a classist argument would be that higher education might be correlated with the lack of spare time, which in turn decreases political participation. Nevertheless, policymakers should consider the potential implications of this result when designing initiatives to promote political participation in deliberative political venues.

Based on these findings, I would give two policy recommendations: Firstly, policymakers should promote initiatives that encourage and facilitate discussions on EU politics at various levels, including educational institutions (for adults), community organizations, and on online platforms. By stimulating open and inclusive dialogue, citizens can develop a better understanding of EU issues and feel empowered to participate in EU public consultations, thereby enhancing the input legitimacy of democratic decision-making at the EU level. This could be achieved through allocating resources for educational campaigns, public forums, and online platforms that foster engagement and provide accurate and accessible information on EU policies and decision-making processes.

Secondly, EU policymakers should consider adopting targeted strategies to reach and engage citizens in countries with lower participation rates. This can be achieved through tailored outreach programs that provide accessible information about EU public consultations in the respective country language, emphasizing the relevance and impact of citizens' participation. Such programs can include workshops, training sessions, and informational materials specifically designed to cater to the specific political culture in that country. By addressing the potential barriers faced by the populace of these countries, policymakers could contribute to a more representative participation of EU countries in these consultations.

However, it is important to acknowledge the limitations of my thesis. The research design employed in this thesis raises methodological concerns, including the use of country-level aggregates of

individual-level variables and the lack of control for country-specific factors beyond compulsory voting. Further research is needed to overcome these limitations and provide a more comprehensive understanding of the determinants of political participation in EU public consultations. They should consider incorporating country-specific control variables, weighted averages, and more robust research designs to capture the complexities of patterns of political participation dynamics in Europe.

This thesis contributes to the understanding of political participation in EU public consultations by identifying key factors that influence cross-country variation. The results highlight the importance of fostering a culture of political discussions, especially in countries with lower participation rates. However, further research is necessary to refine the understanding of the underlying mechanisms, especially at the country level, and to address the limitations identified in this study. This will ultimately contribute to the development of more effective strategies for enhancing political participation and addressing the democratic deficit in the European Union.

7. References

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8. Appendix

I: Mapping of Eurobarometer Variables

	2019 (EB 91.5)	2020 (EB 93.1)	2021 (EB 95.3)	2022 (EB 97.5)
Variable 1: Discussing EU Politics	d71a_2	d71a_2	d71_2	d71_2
Variable 2: Trust in the Commission	qa14_2	qa12_2	qa10_2	qa10_2
Variable 3: Sense of EU Citizenship	qd2_1	qc2_1	qc2_1	qd2_1
Variable 4: Years of Full-Time Education	d8	d8	d8	d8

II: Summary statistics of Eurobarometer variables at the individual level

	isocntry	Discuss EU (Mean)	Discuss EU (SD)	Trust Com (Mean)	Trust Com (SD)	Citizen Feel (Mean)	Citizen Feel (SD)	Edu Years (Mean)	Edu Years (SD)
1	AT	-0.04	0.63	0.14	0.99	0.33	0.57	12.55	3.63
2	BE	-0.17	0.62	0.24	0.97	0.39	0.52	14.49	3.47
3	BG	-0.09	0.63	0.17	0.99	0.02	0.67	13.93	3.59
4	CY	-0.23	0.69	0.02	1	0.26	0.57	12.85	4.96
5	CZ	-0.2	0.61	-0.07	1	0.18	0.64	13.77	3.2
6	DE	0.08	0.64	0.17	0.99	0.5	0.56	13.52	4.71
7	DK	0	0.65	0.5	0.87	0.4	0.59	18.42	5.8
8	EE	-0.05	0.59	0.34	0.94	0.42	0.56	15.22	4.4
9	ES	-0.4	0.67	-0.02	1	0.46	0.53	11.56	4.58
10	FI	-0.05	0.6	0.31	0.95	0.37	0.55	17.67	6.27
11	FR	-0.4	0.65	-0.07	1	0.13	0.67	13.13	3.66
12	GR	0.11	0.66	-0.36	0.93	0.01	0.64	12.59	4.14
13	HR	-0.21	0.65	0.11	0.99	0.27	0.58	13.05	2.89
14	HU	-0.1	0.59	0.32	0.95	0.41	0.53	12.25	2.84
15	IE	-0.08	0.64	0.52	0.85	0.56	0.51	14.53	5.22
16	IT	-0.2	0.67	0.02	1	0.1	0.6	12.22	4.03
17	LT	-0.07	0.61	0.46	0.89	0.39	0.57	14.23	3.87
18	LU	0.05	0.65	0.33	0.94	0.61	0.48	15.16	4.09
19	LV	-0.21	0.61	0.19	0.98	0.36	0.6	14.56	4.86
20	MT	-0.14	0.62	0.52	0.86	0.44	0.52	11.26	4.01
21	NL	0.09	0.67	0.36	0.93	0.32	0.59	15.03	4.47
22	PL	-0.15	0.65	0.32	0.95	0.42	0.51	13.68	3.14
23	PT	-0.4	0.59	0.44	0.9	0.37	0.51	10.11	4.57
24	RO	-0.19	0.66	0.31	0.95	0.27	0.57	12.59	3.31
25	SE	0.06	0.57	0.38	0.92	0.33	0.61	18.03	6.11
26	SI	-0.21	0.58	-0.04	1	0.39	0.55	13.86	3.79
27	SK	-0.08	0.59	0.05	1	0.38	0.55	13.57	2.94

III: Link to Public Github Repository with R Code and Data

<https://github.com/fmmoestl/Master-Thesis->