Freie Universität Berlin
Department of Political and Social Sciences
Institute of Sociology
First Assessor: Prof. Dr. Céline Teney
Second Assessor: Dr. Stephan Dochow-Sondershaus

MA Thesis

Preferences for EU Environmental Policy Making:

A joint European Project vs. National Solo Effort(s)

Charlotte Rößler-Prokhorenko
Martriculation no: 5396014
Master Sociology – European Societies
Date of submission: 04 October 2022

Contents

1. Introduction

The summer 2022 in Europe was exemplary and yet only a foretaste of what the anthropogenic climate crisis will bring if humanity will not act upon maximum efforts to reduce greenhouse gas emissions and other measurements of environmental protection. On the one hand, the European energy scarcity following the Russian war against Ukraine reveals the urgency to become independent from fossil fuels. On the other hand, it also lays open the past and current unwillingness to act appropriately, to expand on alternative (renewable) energies and transform ways of production and habits of consumption. It is evident that climate change mitigation can only be effective in a joint effort to reduce emissions and establish sustainability in other aspects of life. The European Union could be a vanguard, as a unique supranational organization, to set binding goals and path the way to become a climate neutral continent. But when the European Commission called for European solidarity in the face of energy scarcity, for sanctions against Russia, or in the face of the Corona pandemic health crisis, the Union appears to be not that united. This perception is reinforced by recent national elections in European member states. In Hungary and Italy Eurosceptic right-wing populists (re-)won elections, in France and Sweden the party groups could gain large shares of votes.

Under the impression of sluggish crisis management and tenacious Euroscepticism, the research project aims at exploring to what extent and under which conditions EU citizens see environmental policies as a field of national legislation or would wish the EU members to jointly administer policies. Environmental issues, of which the climate crisis is probably the most pressing, demands a unified effort of the international community. Individual states on their own, cannot substantially reduce emissions to limit the global warming or prevent further loss of biodiversity. The European Green Deal introduced by the European Commission in 2019, shows that authorities in Brussel are aware the urgency to act and acknowledge their responsibility. After all, the EU is home to more than 400 million people, the third largest economy of the world but also the third biggest polluter (Joint Research Centre (European Commission) et al., 2021).

But just as with so many other issues, opinions diverge. Starting with the question how drastically and by which date the share of emissions should be reduced, the controversy continues over the choice of measurements and regulations (most recently, the EU taxonomy for sustainable activities, other examples: trade of carbon credits, the future of atomic energy, subsidies for renewables, social compensations for structural change and so on). Besides

disputes over environmental issues and appropriate measures per se, a number of potential conflicts remain. One is a classic conflict of a supranational organization, its competencies and state sovereignty. Policies like of emission reduction can be far-reaching, touching upon national sovereignty, as it concerns not only pollution restrictions or recycling requirements, but also upon the economy more broadly, connecting issues of energy, agriculture, infrastructure, tax and social compensation policies. Against the backdrop of very different initial positions when it comes to domestic industry, energy and economic production (e.g., car industry, coal dependency) that push regional structural change, environmental policies bear enormous potential for controversy. Finally, the transition to an environmentally friendly economic base is also a question of social (in-) equality. Even though humanity will only benefit from climate change mitigation in the long term, changing a (seemingly) running system is costly, demands more effort in some regions and not all states have the same economic power and financial means.

These factors can thwart ambitions for effective mitigation and adaptation measurements. At the same time common sense tells that the climate crisis, pollution and reduction of biodiversity (and the rat-tail of its impacts) do not stop at national borders. As a collective action problem, it cannot be combatted unilaterally but only collectively. In a joint effort members of the EU can more effectively mitigate climate change and the destruction of the environment and better coordinate help for each other to create the preconditions and structures for an GHG free and environmentally friendly living.

Much research investigates on who and why supports the European Union or only aspects of it, as well as which people, by trend, are more pro-environmental and support environmental policies. Less is known how both strands of attitude and preference formation may work together. This is especially interesting in the context of the EU member states, and their different dispositions, regarding the varying progress of environmental protection (also related to emissions and fossil fuel dependencies) and the varying societal and political salience of the issue.

Based on Eurobarometer data from December 2019 – the period when new Commision President Ursula von der Leyen announced the European Green Deal program – the paper examines how Europeans approach the issue of environmental protection, if they prefer their national government do deal with the issue, or if they support an orchestrated common European advance.

Assuming that preference for the one or the other is a result of support for or opposition toward the EU on the one, and environmental attitudes on the other hand, the research mainly draws on these research strands. The paper starts with a brief outline of the development of the environment as policy domain in the EU, including typical policy instruments and the targets of the current European Green Deal, to get a better picture of the issue. After a short introduction on the 'classic' theory of political support, research insights on support for the EU generally, and specific preferences are presented. And finally, research on environmental attitudes and policy support gives an understanding of who is more environmental or under what conditions supports corresponding policy.

On the basis of (multilevel) regression analysis, the role of general EU support, concern about climate change and socio-demographic factors are tested. Moreover, the potential influence of context, as the member states environmental progressiveness or political environmentalism are examined. Finally, it also analyses to which extent individual level attitudes and markers, vary in their effect size between countries and country groups.

Insights on who prefers which level of governance when it comes to environmental protection policies, can help understanding peoples' resentments or maybe even expectations for the EU's capacity of policy making. Insofar the paper can add to the research on public opinion of the EU more generally, and more specifically adds to understanding the facets of responsibility ascription in a multi-level governance system as the EU in light of *a* – if not *the* – major challenge of our times. After all, support enhances legitimacy. Lacking support can constrain all efforts and thwart outcome effectiveness. Only with the acceptance and compliance the effectiveness of the measurement can be guaranteed.

2. Theory

2.1 EU Environmental Policies

Although the European Union in its early forms (European Coal and Steel Community, ECSC; European Economic Community, EEC), started out as an organization mainly preoccupied with economic questions it early extended it competences to flanking fields. The issue of environmental protection and environment as a field of policies is part of the Union for five decades already, and was developed further ever since. To better understand the EU's role in environmental policies (vis a vis its member states and international treaties) and also better understand peoples potential experience, perception and attitudes toward it, the following chapter will briefly introduce the history of the policy field as well as the status quo on competences, policies and targets.

2.1.1 The Development of Environmental Policy as an own Field in the EU

The 'official' founding of EU environmental policy dates back to 1972 – the same year the Club of Rome published it's *The Limits of Growth* report. In their declaration of the European Council on the Paris Summit, the Heads of State and Government officially acknowledged the importance and need of environmental policies and a "programme of action" (*Statement from the Paris Summit (19 to 21 October 1972)*, pp. 5–6). The same year, by 1973, the first Environmental Action Programme is adopted by the member states stressing the merit of precaution, prevention and introduced the 'polluter pays principle' (see below). As progressive as this early stage of European environmental policy may seem, it must be noted that it was only integrated via the argument of establishing a single European market as set out in the Treaty of Rome. In other words, environmental protection was not the driving motivation but economic objectives (Knill & Liefferink, 2021). By the middle of the 1980s, about 200 legal acts on environmentally issues got adapted, each only in unanimity of the member states as was statutory by the Treaty of Rome (Farmer, 2012). Under the impression of cross-bordering environmental catastrophes and problems (e.g., sour rain), due to increasing domestic pressure and politicization (maturing environmental movements), member states pushed for the integration of environmental issues to a higher level (ibid.; Knill & Liefferink, 2021). Only with the Single European Act (SEA) in 1987 environment policies became an official and legal task of the EU. The 'Environment Title' of the SEA gave environmental policies a legal basis setting basic principles and goals, settling competences between the European Community and the member states. As a department in its own right, policies now could be passed outside economic

explanations. Instead, and even more, environmental protection should be component of other policy fields.

The meaning of environmental policies got further incrementally enhanced in the following years: The Maastricht Treaty of the European Union (TEU, 1993), introduced the co-decision procedure[1] and qualified majority voting (QMV)[2] for environmental legislations. The Treaty also for the first time mentioned the term of "sustainable … growth" and thus, set the connection of the environment and economy as a guiding principle (Treaty on European Union Including the Protocols and Final Act with Declarations, 1993: Art. 2). A year later, 1994, the European Environment Agency started its work, as an agency to provide data on environmental indicators in Europe and advice and evaluation on policy. As with the European integration more generally, the development of further environmental policies, instruments and competences stagnated since the 2000s (Steurer, 2021).

2.1.2 Principles, Framework and Tools

Relevant for the current environmental policies is the Treaty of the Functioning of the European Union (TFEU). Article 191 to 194 outline the main principles of goals and decision-making (Consolidated Version of the Treaty on the Functioning of the European Union, n.d.). The main objectives are:

"- preserving, protecting and improving the quality of the environment,

- protecting human health,

- prudent and rational utilisation of natural resources,

- promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change." (TFEU, Article 191)

The same article lays down the polluter pays principle, i.e., the party (country, company, etc.) who caused pollution and damage, should bear the costs of the consequences, as remedy, control, prevention. Further goals and competences related to environmental or 'sustainable' principles are integrated in other articles of policy areas in the TFEU, such as agriculture, transport and internal market; as Article 11 (TFEU) reads:

[1] Strengthening the role of the European Parliament (EP), which is traditionally known to be ‚greener' (Hofmann, 2021; Kurrer, 2021). The EP became co-legislator, with equal power as the Council.
[2] Making agreements within the Council easier, since vetos of single member states can be overruled.

“Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development.“

Article 4 (TFEU) sets the environment as an area of “[s]hared competence between the Union and the Member States” (in contrast to exclusive or coordinative and supportive competences). That means that both, the EU and member states can pass laws. Yet, the latter only, if no legislation on EU level already exists, and the EU does not plan to do so. More practically, whereas the EU has almost free rein when it comes to air and water pollution, waste management and climate change legislation, it is constrained in two ways in other fields (Farmer, 2012; Kurrer, 2021). Firstly, the Principle of Subsidiarity (TEU, Art. 3) allows the EU to act only in areas where lower levels of authority (i.e., member states governments or regional authorities) cannot solve a problem sufficiently. In other words, for problems and areas that are too large in scale, and can be more effectively tackled by the EU. Secondly, despite the QMV as mentioned above, in rather sensitive fields (fiscal matters, such as eco-taxation, choice of energy supply, energy infrastructure or land use) decisions in the Council require for unanimity, which means that single countries can veto and thus hinder legislations.

The more specific goals of EU environmental policy are defined in European Action Programmes (EAPs). These programmes are elaborated and issues by the Commission and set the agenda for the next 3 to 10 years (Bundesumweltministerium, n.d.; Kurrer, 2021). As a basic framework they define prospective goals, strategies and in parts also specific measures. Since 1972 eight EAPs have been adopted. The 8th EAP most recently entered into force as from 2 May 2022, sets the agenda to 2030 (European Commission, 2022). It follows and tightens mostly the goals of the 7th EAP (2014-2020) which, among others, established the goal to reduce annual greenhouse gas emissions in comparison to 1990 by 80-95% by 2050; interim by 20% until 2020, and by 40% until 2030.

More prominent than the EAPs themselves, is the European Green Deal that the president of the European Commission, Ursula von der Leyen, announced in December 2019. The concept sets a new general principle of EU environmental policies as it defines the overarching goal of the EU becoming the first climate neutral bloc of countries by 2050 (and reduce emissions by 55% until 2030 – compared to 1990 emissions) and extends to wider field of policy areas and sectors (Kurrer, 2021; WECOOP, n.d.). It includes the areas and aims of a circular economy, zero pollution in the environment, promoting alternative options and fuels for transport, and

many others. Moreover, it provides a budget plan of €1 trillion and the "Just Transition Mechanism" to assist regions in structurally worse conditions to achieve the aims.

Additional aspects of EU environmental policies involve the consideration of environmental impact in the planning of projects (Environmental Impact Assessment – EIA & Strategic Environmental Assessment – SEA); the consultation of the public in environmental project planning; the monitoring of the implementation of legislations (Environmental Implementation Review & European Environment Agency) (Kurrer, 2021). Last but not least, the EU engages in other regions of the world and officially acts at international summits and supports for instance the UN Sustainable Development Goals (SDG) and the Paris Agreement on Climate Change.

So what are the concrete instruments of the EU legislation repertoire to implement environmental policies? Though there exist several variants to categorize types of policies, Moore et al. (2021) identify four types of instruments that are applied in terms of EU environmental legislation: Regulatory, market based, informational and voluntary instruments. *Regulatory instruments* are probably the classic type of policy, prescribing targets that have to be met and reserving the right to sanction laggards. Examples are the *Car CO2 Regulation* (1st version 2009; which sets the maximum average CO2 emissions (grams/kilometer) for cars) or the *Regulation on the Governance of the Energy Union* (2018, which obliges member states to plan, report and monitor *National energy and climate plans* to contribute to realize the ambitions of the Paris Agreement). *Market-based instruments* aim at incentivizing pro-environmental consumption and production. Most prominent example in this regard is probably the *Emission Trading System* (since 2005, which caps emissions that can be traded via certificates). In contrast, *informational instruments* are information provided that should help actors, such as consumers, to orientate their behavior. Typical examples are the European Energy Label (1992, the label applied to electronic devices to inform about their energy efficiency and other emission criteria); or the EU Ecolabel (1992, that identifies sustainable non-food and non-medical products). Lastly, *voluntary instruments* are agreements between public administration and business actors who agree on an environmental achievement in which the industry partner receives a subsidy to do so. This type of instrument is rather rare and unknown. One example is the voluntary agreement to improve the energy efficiency of games consoles (2015, agreed to by Sony, Microsoft and Nintendo to find ways to increase the energy efficiency of their products). This short overview of policy instruments gives a little insight on what the EU can and does implement actually, and that some measures appear regularly in our

every-day lives. Still, about three quarter of EU environmental policies are of regulatory type (ibid.).

2.1.3 Recent Developments and Challenges

As a first international organization with policy making competences, the EU has the reputation of a pioneer in considering environmental protection and pushing binding minimum standards and other targets in this regard (Burns et al., 2020; Buzogány & Ćetković, 2021). Nevertheless, scholars of the EU (environmental policies) identified a halt starting 20 years ago. One reason concerns the EU itself and the designs of the Treaties of Maastricht, Amsterdam and Lisbon. The treaties only did bring about little innovation, and major issues, like decisions on eco-taxation or environmental policies that affect energy sources still required the member states unanimity (Knill & Liefferink, 2021; Steurer, 2021). A further reason is seen in the accession of Central Eastern Europe, 2004 and 2007 (Burns et al., 2020; Wurzel et al., 2019). The accession of 12 new member states has shifted majorities in the Council, making QMV decisions more difficult. These countries are typically more reliant on coal and more climate change sceptic. Due to lower economic development, they associated economic goals with EU membership (Ámon, 2020; Burns et al., 2020). But also the previous vanguards (Denmark, Germany, Netherlands, Sweden, Finland, Austria) of environmental protection are argued to have become reluctant (ibid.; Wurzel et al., 2019). The financial crisis of 2008 and the subsequent European sovereign debt crisis led to reluctance and the dismantling of environmental policies as economic concerns took over (Burns et al., 2020; Gravey & Jordan, 2021). The rise Eurosceptic parties then, curbed joint European efforts further.

Overall, this overview has shown how environmental policies by today became a firm domain within the EU policy framework. Some legislations (mostly regulations) are deeply integrated in the daily routines of European citizens, without them knowing (e.g., pollution limits). Still, there are limitations for the EU when it comes to far-reaching initiatives that require the consent of *all* EU member states. The reputation of the EU as a pioneer of ambitious environmental protection lost its gloss in the past two decades, even though the climate crisis gained salience (due to research, extreme weather, movements such as Fridays for future and the Paris Climate Agreement of 2015). Against this backdrop, the European Green Deal as a new cornerstone may represent a turning point that places climate change mitigation and environment more generally center stage, if only consequently pursued.

2.2 Political Support and Attribution of Responsibility

In the following, essential theoretical concepts will be introduced that are commonly used in the research on political support more generally but also for the European Union. It should answer the questions of how do people arrive at their judgement if they support or oppose a political system or political actor?; Where are limitations and what potentially influences the mechanisms of support and preference formation?; (Why) Is a distinction between general and specific support senseful?

Political systems, above all democratic systems, rely on the support of their people. The general acceptance and legitimacy of a constitution and government, as well as support for more specific contents as policies are important factors for the stability of a system and effectiveness of governance. A classic starting point of the discussion is David Easton's conception of political support (1965, 1975) which aims at a better understanding of why or under which circumstances public discontent leads to political system change or remain stable. Support more generally, according to Easton, "refers to the way in which a person evaluatively orients himself to some object through either his attitudes or his behavior" (1975, p. 436). The *object* that the political individual develops a psychological orientation to, can either be very target-oriented or rather vague and more general. Easton made a distinction between the two types of *specific* and *diffuse* support. Specific support is directed to specific actors, authorities, their actions and policies. Based on evaluations of specific outcomes and circumstances (in the past and also anticipated for the future), individuals attribute causal responsibility to an actor and blame or reward – not necessarily expressed in behavior as voting, but also just in attitude. Condition or problem here, is that individuals would have to be aware and know their needs, to what extent their demands are met, and who is responsible for that. Further, as specific support is sensitive to decisions, utterances, news events etc., it is not necessarily very stable but can fluctuate over time. In contrast, diffuse support is directed to a broader entity, such as the regime and the political community as the nation. This kind of support is more stable and durable and develops with socialization. In comparison to specific support, general support implies the acceptance and legitimacy of the system. Even if direct support for a policy or incumbent is not given, the regime itself is not questioned. Yet, repeated disappointment and discontent with policy output (i.e., constant lacking specific support) can undermine this regime support and yield instability. The distinction between specific and diffuse support is not binary, rather both terms open a continuum with several sub-levels, ranging from the very general attitudes toward the nation-

state (national identity) on the one end, to very specific satisfaction with incumbent officials or policies on the other (Norris, 2017).

Important takeaway message from this conception is the different levels and targets the term 'political support' contains, how these aspects may relate to each other. Though diffuse support, thus the acceptance and legitimacy of a political system can be quite persistent as people comply with 'the rules of the game', it is not independent from people's evaluation of the system's output. People can support the system, but may dislike incumbent office-holders and/or their policies. Accumulated positive or negative evaluations, can enhance or weaken the legitimacy of a system. As also will be seen in the subsequent chapter(s) research on political support, on environmental policy support, on support of the EU and specific EU policies, has (more or less deliberately) extensively hearken back to Easton's concept of the different levels and targets of political support. For instance, Kuhn and Stoeckel (2014) include the strength of national identity as the most diffuse level of political support as an explanatory when researching people's support for European economic governance during the Eurozone crisis. Other research analyses include the items of trust in different (EU or national) institutions (Arnold et al., 2012; Stadelmann-Steffen & Eder, 2021) or items of satisfaction with "how democracy works" in the EU and or the respondents country, to capture general support (Cerniglia & Pagani, 2008; De Winter & Swyngedouw, 1999). An example for specific support is the question if people believe their country has benefitted from EU (ibid.). Main interest of the authors is to identify correlations and spill-overs from diffuse to specific support and conversely.

These connections are particularly interesting in case of the EU. Attitudes toward and support for the EU do not develop in some vacuum, but must be considered in the relation to other political authorities that play a prominent role in people's perceptions of politics. The 'classic' theory of political support and responsibility attribution are applicable only to limited extent in multilevel political systems. As noted, especially specific support presumes knowledge for the 'accurate' attribution of responsibility. In their *theory of economic voting*, Powell & Whitten (1993) can show empirically that when functions and responsibility in a government are more distributed or 'blurred' (such as in a federal system) national economic and other performance factors play a minor role, in comparison to centralized states where the national government is more 'clearly' responsible for economic conditions: "The greater the perceived unified control of policymaking by the incumbent government, the more likely is the citizen to assign responsibility for economic and political outcomes to the incumbents." (ibid., p. 398). This suggests that in less centralized or multilevel systems as the EU is, individuals have a hard time

to accurately attribute responsibility and, hence, may adhere to other mechanisms to form their judgement.

The *clarity of responsibility thesis* was further tested in multilevel systems and paved the way to alternative or complemental approaches helping to explain how individuals come to judgement of who to hold responsible (e.g., C. D. Anderson, 2006; Arceneaux, 2005; Cutler, 2004; Hobolt et al., 2013; León et al., 2018; Rudolph, 2003b). In *multilevel* systems, political authority and competences do not lie within one central governmental institution but are dispersed across different levels. Each level or unit of government is an own organization with its own autonomy and sphere of power over citizens, in legislative and executive terms (C. D. Anderson, 2006). Although the EU is no federation (as Germany, Russia, Swiss or the USA), it is a unique multilevel system of an international organization as it contains several supranational elements.[3] That is, the European Commission, the Parliament and Court of Justice are independent from member states' governments and EU legislation and laws must be adhered by the members. The *multilevel governance* concept (most prominently developed for the studies of the European Integration by Hooghe & Marks, 2001) differentiates between four levels: 1) the EU (supranational) level, 2) the national level of the member states, 3) the regional level (e.g., the federal states in case of Germany) and 4) the municipal level. Ideally, the allocation of power across different levels is thought to be more effective than a central institution bearing all authority. Resources can be pooled and economies of scale effects utilized. Cross-bordering problems and common goals can be coordinated more effectively by an independent superior institution, or, as in case of the European Monetary Union, is even necessary. On the other hand, regional specificities and local problems can be better addressed by the corresponding authorities.

Getting back to the concept of clarity responsibility as a condition for properly assigning responsibility of policies and outcomes, it becomes obvious that a multilevel structure makes things more difficult. Firstly, dispersed competence makes it much more demanding for citizens to identify the 'correct' player responsible.[4] Resources, as time, knowledge and interest – more generally, political sophistication – are necessary not only for accurate competence attribution,

[3] It can be argued that the EU in some terms is a federation already, but the term is rather avoided by some political officials and heads of states. (Hüttmann & Fischer, n.d.)

[4] It goes without saying, that, beyond an accurate accountability attribution for legislations and policy outcomes, actual responsibility is almost never straightforwardly to identify. Many factors, as interdependencies of institutions and actors, complicated compromise-seeking or finally also fortune may have a bearing.

but also to keep up with the news and political competition, especially when it comes to elections at the different levels (C. D. Anderson, 2006; Arceneaux, 2005). Which leads to another aspect that, secondly, multilevel systems open opportunities for blame-shifting and credit-taking. For the country level and in case of the EU, researchers found how political actors actively blur responsibility to distract from own failures and blame other institutions instead, and conversely seek to take the credits for positive outcomes (C. D. Anderson, 2006; Heinkelmann-Wild et al., 2020; León et al., 2018).

Beside the objective institutional structure that impacts the way and to what extent individuals attribute responsibility, there is also found to be subjective factors, that, in a sense compensate for the gaps in clarity and knowledge. Research has identified the psychological mechanisms that help individuals to form a responsibility judgement under uncertain circumstances, which is an individual bias based on group-belonging and previous (political) preferences. The "group-serving attribution bias" from social psychology theory posits that individuals tend to attribute positive results to members of the group they (feel they) belong to (as the ingroup) and failures to the other group (outgroup) (Hewstone, 1990; Pettigrew, 1979). A powerful group identity is (and much more used to be) partisanship, as well as more general ideological beliefs condition how individuals perceive (political) outcomes and attribute either success to their favored group and blame disliked party for failures (Rudolph, 2003a). Applying this theory to some broader context, Hobolt et al. (2013) argue that this heuristic also explains responsibility attribution within the EU, i.e., between EU and national institutions (see also Hobolt & Tilley, 2014; León et al., 2018): As the European Union is a complex multilevel governance system, processes of selective bias play out even more. When information seems distant, complex and resource-intense, the cognitive bias function gets activated. Competences are not only dispersed across (supranational) EU institutions, national governments and regional and municipal authorities, but also differ between policy fields and can also differ between member states.[5] Studies in this field (see above), find that in case of good performance evaluation, support for the national government increase the attribution of responsibility to the national level (rewarding), but even more so if individuals are partisans of the government party. Whereas perceived bad performance gets rather attributed to the EU (Hobolt & Tilley, 2014b). These

[5] For instance, due to *Opt-outs* that allow member states to not participate in certain EU policy fields: e.g., Denmark with opt-outs in the Economic and Monetary Union and the Common Security and Defence Policy; Poland in the Charter of Fundamental Rights (European Union, n.d.).

dynamics, however, are not unequivocal but differ between policy field and context. For instance, when the national government is perceived to be particularly active in a policy field, more responsibility gets attributed to this level (ibid.). Hence, (national) salience of an issue also plays a role. In another study, Hobolt et al. (2013) find the general attitude toward the EU to be the most robust predictor of responsibility attribution, which, in turn, points toward deeper ideological beliefs of individuals. In other words, being generally in favor of the EU, increases the allocation of responsibility. Other factors are previous experience and retrospective evaluations (León et al., 2018).

The discussion showed that, although the theory of political support seems quite straightforward, the application to the reality of the European Union brings several challenges. Knowledge, politicization and blame-shifting, or support for incumbent government are major variables, that can condition political support in multilevel systems. The next chapter will expand the theory introduced here to the context of the EU.

2.2 Attitudes toward and Support for the EU

2.2.1 General EU Support

The question of support for the EU is a question of its democratic legitimacy that evolved with its increasing scope, competences, members. Although democratic elements that increased the quality of representation and participation of the European citizens have expanded ever since the foundation of the EU, it is still under pressure to rebut its rumored "democratic deficit" (Follesdal & Hix, 2005; Majone, 2005; Moravcsik, 2002). The debate on the democratic legitimacy of the EU came up in the 1970s. Before, in the years of its institutional predecessors (ECSC, EEC), the politicians in charge tried to avoid the involvement of the public. After WWII, political elites presumed that everyone, people and countries wanted the same: avoid war and economic prosperity (Sternberg, 2017). Thus, public opinion did not matter, democratic legitimacy was not even claimed and thought to be naturally reached via output legitimacy. Only in the 70s and 80s, when memberships and competences of the EC should be extended, elites acknowledged the importance of public opinion, that otherwise may get a problem sooner or later. After all, first economic and financial crises, and international conflicts questioned the benefit of (further) European integration. Besides the election of the European Parliament since 1979 which was intended to represent the European electorate, the Eurobarometer (EB) was launched in 1973, "framed as an optimized way of listening to what people wanted, thought, and felt" (ibid., p. 37). It was not only thought of as an instrument to

learn about the European public preferences, but also to advertise opinions and a European identity. (Which relates to the criticism of the Eurobarometer as a non-scientific public opinion survey; Höpner & Jurczyk, 2012) The struggle on the ratification of the Maastricht Treaty in 1992/93[6], and the following deeper integration, finally, made not only the officials in charge realize that public opinion must no longer be ignored, but also raised scientific interest in public opinion on the European Union, fueling debates on its democratic legitimacy. Ever since and spurred by following crises[7], a huge body of research seeks to understand Europeans attitudes toward the EU. Besides debates from the point of view of democracy (e.g., Scharpf, 2003) and single country or small n studies (Bobzien & Kalleitner, 2021), studies of quantitative cross-national comparison draw on the survey data from the EB or the European Election Study (EES).[8] Theories of neofunctionalism and intergovernmentalism, that explained proceeding integration on the basis of prospective gains for political elites and interest groups, are superseded by postfunctionalist theory (Hooghe & Marks, 2009). It reasons the European Integration in a growing public awareness that bars further proceeding (*constraining dissensus,* e.g., Hooghe & Marks, 2009). Since the 2000s, scholarly debates revolved around the *Politicization* of the European Union and a perceived growing *Euroscepticism*. In these approaches the EU as idea and actor became object in some wider trend of the "transformation of the political space" that largely structure the explanations of general EU support and skepticism (Kriesi et al., 2006, 2008). European integration reinforces effects of globalization that is melting national boundaries and exposing individuals to international competition that some can benefit from and pose a (perceived) 'threat' for others. This refers, firstly, to the opening of international (European) market which leads to deregulation and increased pressure on costs and jobs. Secondly, the opening of borders and increased migration also increases cultural diversity. And finally, the nation state in competition with international treaties and supranational organization loses sovereignty to higher order authorities in international law and regulation of (financial) markets. These trends in a nutshell, neither objectively nor subjectively affect all people in the same way. The attribution of "winners and losers of globalization" builds the main explanation for people's political preferences more generally and their attitude toward

[6] The rejection in the first Danish referendum, the super slim majority in France, the complaint of unconstitutionality in Germany.
[7] The failed ratification of the Treaty of Nice in the first referendum in Ireland (2000), the (non-) ratification of a constitution for Europe (2004), the financial and Eurozone crisis (2008 and following).
[8] Besides newer, other independent research programs as eupinions (https://eupinions.eu/).

the EU. It is structured as a two-dimensional space, a socio-economic dimension and a cultural dimension cutting the former at 90 degrees angle. In a socio-economic dimension, conflict arises between positions calling for a strong and rather protectionist state, versus positions advocating liberal markets unhampered by state regulations. In the cultural dimension, conflict occurs between those with a strong (if not exclusive) identification with their nation and traditions, versus those with cosmopolitan values that embrace diversity (Hooghe & Marks, 2017; Kriesi et al., 2006, 2008). Social scientists put forward a number of concepts to grasp this pattern of winners and losers and to name both sides of the transforming political space: such as the demarcation and integration cleavages (ibid.), liberation-universalistic and traditionalist-communitarian (Bornschier, 2010), cosmopolitan and communitarian (Teney et al., 2014) or the green-alternative-libertarian (gal) versus the traditional-authoritarian-nationalist (tan) cleavage (Hooghe et al., 2002).

Within these dimensions, economic and cultural interests shape attitudes toward the EU. Utilitarian and identity approaches are the two main argumentation lines of explaining public support for the EU more generally (Hobolt & de Vries, 2016; Hooghe & Marks, 2005). Utilitarian explanations dominate the research on EU support. They emphasize the role of cost-benefit calculations. On an individual level, the risks and chances of European integration (in terms of market liberalization and freedom(s) of movement) for the own fate are evaluated. Especially manual workers, low educated people, are more vulnerable to losing their job (to cheaper alternatives as migrant workers), such as people more dependent from the state rather feel their social benefits threatened. Higher educated or skilled professionals, are more likely to benefit from the opening borders, being more mobile, finding a job and place that corresponds to their wishes (e.g., Gabel, 1998b; Hobolt & de Vries, 2016; Hooghe & Marks, 2005). But also on the collective level, individuals can perceive the membership of the EU and the implications of further integration as a burden or benefit for the economic conditions of their country (e.g., C. J. Anderson & Reichert, 1995; Gabel, 1998a; Verhaegen et al., 2014). For instance, in terms of fiscal transfers when people feel their country contributes much more to the budget of the EU while others seem to profit. The second main approach, asserts a vital role of identity and culture. As European integration accelerates trends of multicultural societies, people with 'exclusive identity' and disposition to hostility toward strangers feel their nation and traditions threatened (e.g., McLaren, 2002; Vreese & Boomgaarden, 2005). Further does the transfer of political competences to EU level undermine national sovereignty. Both approaches suggest explanations for support of the European Union on objective and perceived

socio-economic status on the one, and cultural beliefs and values on the other hand. To sum up, research suggests that people of higher economic status, of higher education and with cosmopolitan values are rather pro-European, bear higher trust or perceive membership as a good thing. At the aggregate level, in terms of countries, Belgium, Czech Republic, Estonia, France, Hungary, Ireland, Poland, Portugal, Slovenia, and Spain are typical pro-EU countries. Austria, Denmark, Finland, Germany, Great Britain, the Netherlands, and Sweden are countries with majorities of sceptics (De Vries, 2018).

Research, however, has also found limitations. General support for the EU is no one way route paved via class, education and identity values. Accounting for the multilevel character of the EU (as discussed above), a crucial amendment is the domestic political context that conditions people's evaluation of the European Union. A country's economic performance and the functioning of domestic institutions are two important aspects on the macro level that influence perceptions on the micro level. European countries still vary in economic development and other general issues and problems that may be salient. Rohrschneider and Loveless (2010) found that people in the less affluent countries evaluate the EU on the basis of economic criteria, whereas after a certain point of affluence and institutional quality reached, economic criteria do not play a major role anymore. Instead, in these countries people evaluate the EU on the basis of its democratic quality. Further developed theories of the role of national context for EU support suggest either a congruence or compensation mechanism of attitudes toward the country and the EU.[9] According to the congruence model, or also spillover effect, citizens use their perception of domestic conditions (satisfaction with the system, performance and trust in government) to transfer it analogous to EU level (Anderson, 1998; Ares et al., 2017; Kritzinger, 2003; Rohrschneider, 2002). Due to lacking interest and or knowledge, they use national conditions as a proximate. In other words, people satisfied with their national government are more likely to also support the EU. In contrast, the idea of a compensation mechanism proposes the reverse: People with low satisfaction of their institutions and government performance may have good reason to expect better from the European Union, whereas people satisfied with and trusting their system, are more inclined to suspect a worsening development with further integration (Kritzinger, 2003; Sánchez-Cuenca, 2000). De Vries (2018) refers to this mechanism as benchmarking aiming at explaining the British's vote for leaving the EU when

[9] Studies usually refer to either satisfaction with government performance or trust in government institutions, which is not differentiated here for the sake of convenience.

the utilitarian and identity approach did not hold: People evaluate the current situation (membership of the EU as the status quo) with the potential benefits and disbenefits of the alternative state (leaving the EU). Finally, also both mechanisms have been found to be at work, and field research underscores the importance of the differentiation between individual level effects and correlations found on aggregate level (Arnold et al., 2012; Muñoz et al., 2011). It becomes obvious, that attitudes toward the EU are complex. Although it repeatedly could be confirmed that income, education, age, gender and values are correlated with more general EU support, the configuration and magnitude of these individual level factors is often conditioned by macro conditions.

A further amendment is, that individuals themselves do not develop their attitudes and political positions in an objective space, but that it needs political entrepreneurs who broach the issues of European integration, economic and social and physical security or migration, and who intentionally mobilize sentiments of economic and cultural threat. The depicted public interest, and especially skepticism with respect to European integration is also a due to the politicization of the EU.[10] As a result of the increased authority of the EU, political parties across Europe, especially the populist right, made the EU a target of their program, appealing via economic and cultural insecurities connected to cultural liberalism, migration and environmental protection (De Wilde & Zürn, 2012; Kriesi et al., 2006). Political events of the past decade have contributed to a differentiated politicization of the EU. In South Europe the Euro crisis led to a politicization of the EU along the economic dimension in which rather populist left parties mobilized against deregulation and austerity politics. Also, the crisis divided European countries in 'debt' and 'creditor' states. Whereas in North and Central East Europe, immigration on the cultural dimension became an issue and motive to criticize the EU for, mainly by populist right parties (Hooghe & Marks, 2017; Hutter & Kriesi, 2019). This is in line with De Vries' finding that Eurosceptics issue priorities differ across Europe. Whereas sceptics in affluent countries care more about immigration, sceptics in countries less economically developed care about their national economy and unemployment in particular (De Vries, 2018).

To sum up, the general support for the EU is a multilayered phenomenon. In the first layer, attitudes toward the EU can be explained on the basis of socio-demographic attributes, which in turn, point to the positioning in the cosmopolitan-communitarian dimensions, in which

[10] Additionally, media framing should be mentioned here, but is not discussed to not go beyond the scope of the paper.

people, that potentially gain from open markets and embrace cultural diversity, feel more positive to the EU. This link, however, is conditioned by the domestic context, in which national issues are weighed up against the consequences of EU membership. Finally, research on politicization and political entrepreneurs illustrates that the EU is a multifarious target of skepticism and scapegoat of (populist) parties. It also shows the limitations of *general* support or rather the close connection to underlying issues and reasons. The next chapter will outline empirical findings on specific support for the EU.

2.2.2 Specific EU Support

Such as Easton differentiated between diffuse and specific support, there is not only two camps of EU enthusiasts and EU opponents. De Vries (2018) offers a practical typology to make sense of forms of EU support and skepticism, bridging specific and diffuse political support. She differentiates between loyal supporters, soft sceptics and hard sceptics. In contrast to hard sceptics who oppose the EU as such, soft sceptics are discontent with either the regime (i.e., the institutional structure, as often the democratic deficit) or certain policies. Whereas soft sceptics potentially can change their opinion, hard skepticism is the attitude that led to the Brexit vote.

Not later than the financial and Eurozone crisis, scholars took an increasing interest in what aspects of the EU Europeans like or dislike for what reasons. Evidence on specific support will be presented in two groups: First, research on the preferences of competence allocation across several policy fields; second, more recent research on specific policy instruments of the European community in the context of crisis.

As the short excursion on the development of environmental policies in the EU above has shown, from its early stages until today, the EU could widen and deepen its competences vis a vis the influence and sovereignty of its member states. Against the backdrop of discussions about a European Constitution, a few studies examine people's preferences for the competence allocation across different policy domains (also in comparison to experts' preferences). First of all, a major relevant finding is that, overall, environmental policy is a field that is rather preferred to be a EU competence, besides foreign policy, international aid, defense, immigration and currency (Cerniglia & Pagani, 2008, 2015; De Winter & Swyngedouw, 1999; Hooghe, 2003). Whereas for health, education and social (welfare) policies the state is preferred to be responsible (De Winter & Swyngedouw, 1999). Hooghe (2003) describes three mechanisms that could make people prefer competence for different policy domains at the one or the other level. As a functional logic, citizens prefer the dealing of issues at EU level, when

the nature of the problem is genuinely international and therefore to be solved effectively only in a joint effort. Also, when issues are risky to keep at the national level, especially in light of international capitalism and competition, the higher level is preferred. In contrast, complex issues with high government spending would be preferred at national level. Regarding the tremendous scope of environmental problems or the climate crisis more generally, the support for Europeanization should be expected to be rather high. Besides the rational logic that people may employ to determine preference formation, studies also find other individual level and macro factors that predict the inclination to Europeanization of competences, regardless of the issue at stake. On the country level, there is evidence that people in smaller countries are more likely to favor Europeanization because in these countries the capacities for effective problem tackling are less sufficient (De Winter & Swyngedouw, 1999). Additionally, the year of EU accession and thus the duration of membership has a positive effect, because in states that are longer already member of the EU, people and elites are used to compromise and authority transfer. Newer members may still struggle with the loss of sovereignty and democratic deficit. At the same time, however, countries that are net contributors to the EU budget prefer more decision-making at the national level (ibid.). Overall, Spain, Greece, Italy, Belgium and Portugal are found to be the most pro-Europeanization countries. In contrast, people from the Nordic countries and the UK mostly preferred national competence (ibid.; Cerniglia & Pagani, 2008, 2015). Interestingly, Sweden and Finland were the only countries not preferring environmental policies at the EU level. At the individual level, men, higher education, left political views, knowledge about the EU, low trust in national institutions and a generally positive stance toward the EU have a positive effect on Europeanization support. Mixed or no clear trends were found for age, dis- /satisfaction with national or EU democracy, and the perception of having benefitted from EU membership (Cerniglia & Pagani, 2008, 2015; De Winter & Swyngedouw, 1999). As some of these findings are 15 years and older, deductions to today must be drawn with caution only.

A number of more recent studies examine the support for European policy fields or instruments. Naturally inspired by research on general support for the EU, these studies largely draw on and confirm utilitarian cost-benefit and identity explanations, as well as the role of national context. In particular the Euro-crisis and related debates on bailouts have motivated researchers to study the support for EU economic and fiscal policy (very generally or for single ideas and instruments, as redistribution, Eurobonds, the Euro, etc.) (Armingeon, 2021; Bauhr & Charron, 2018; Daniele & Geys, 2015; Hobolt & Wratil, 2015; Kleider & Stoeckel, 2019; Kuhn &

Stoeckel, 2014; Nicoli, 2019; Vasilopoulou & Talving, 2020; Verhaegen, 2018). As for general attitudes toward the EU, there is no straightforward linear explanation for support for fiscal integration, but there are micro and macro factors, including interactions of both levels. On the value and identity dimension, cosmopolitan values have a generally positive effect on support for financial redistribution (Kuhn et al., 2018). Regarding the typical explanation of cost-benefit calculation, results are mixed. Daniele & Greys (2015) find supporting estimates (see also Vasilopoulou & Talving, 2020), whereas Kuhn & Stoeckel (2014) cannot confirm a positive effect for education or occupation. (Although the different results also may be due to the different outcome variables: fiscal solidarity in terms "financial help" to other member states versus the implications of economic governance at the EU level.) More consistent is the finding that support for EU economic policy (in general and individual level effects) varies between countries in accordance with institutional quality and economic development. In affluent countries, people are less likely to support joint economic governance as they rather see potential economic risks and losses, whereas people in less affluent countries welcome potential benefits (Kuhn & Stoeckel, 2014; Nicoli, 2019). Moreover, the macro and individually perceived economic situation condition the effects of ideology, values and identity. Firstly, the otherwise weak explanatory power of economic left-right orientation, increases when differentiating between high- and low-income class. In higher income class a left-wing oriented people are rather in favor of fiscal transfers, and for low income class the effect is negative (Kleider & Stoeckel, 2019). Similarly, having a European identity (in contrast to a primarily local or national identity) has a weaker positive effect on the support for fiscal solidarity in crisis-ridden countries (Verhaegen, 2018). More important than the economic conditions of the country, Bauhr and Charron (2018) find institutional quality to play a role. At least for explaining the support for financial aid to EU member states, people in countries with low corruption are more in favor of redistribution than citizens of more corrupt states.

To my best knowledge only a few studies have examined specific political support for the EU regarding other aspects and policy domains, such as a European social policy (Nicoli et al., 2020), support for the freedom of movement (Vasilopoulou & Talving, 2019), cooperation on immigration & terrorism (Erisen et al., 2020) or the integration of 'core state powers' (transfer of fiscal, coercive or administrative resources) (Bremer et al., 2020). Overall, research corroborates the role of identity and costs, which have stronger explanatory power in the more affluent member countries, so in the Nordic and Central European states (or EU founding states).

All these manifold findings show that there is no one storyline for explaining general and specific EU support. Though the general effects of individual level explanatories of costs vs. benefits and identity and value is repeatedly largely confirmed across different outcome studies, the magnitudes can starkly vary. In fact, the more it can be concluded that context matters, not only as an effect of its own, but also as a mediating and moderating factor regarding effects of individual disposition.

2.2.3 Interim Conclusion

From this range of previous research, assumptions for the support of joint EU environmental policies can be concluded. Firstly, it was shown that diffuse and specific are related but distinct. Therefore, being in favor of the EU more generally, does not automatically lead to support for environmental policies at EU level or vice versa. But it can be expected that pro-EU citizens should be more likely to support EU environmental policies. As apparently higher skills, education or more generally class increases the support for EU and presumably other kinds of specific support, a positive effect could also be hypothesized for EU environmental policies.

Research on support for fiscal solidarity and redistribution has also shown that the effects of socio-economic status can vary with regard to the specific policy content and the individual risks and chances. In fact, for the field of environmental policies, an estimation of potential personal costs and benefits seems hardly appropriate. In contrast to fiscal policies, bailouts, redistribution, or migration policies, environmental protection measurements would seldom impact individuals directly (also because many regulations come with a transition period). So are the consequences of ‘successful’ or insufficient or non-existent climate protection actions for the majority of people not immediately perceivable. On the other hand, there is the anticipation that environmental protection and climate change mitigation measurements are costly, as they require enormous efforts to restructure energy production and consumption. In terms of context, binding goals of environmental policies imply higher costs for some countries, e.g., in countries with high dependency on fossil resources, which is why people in these countries may prefer their government to find their own way, setting own goals, and having more time to adapt. Considering the regulative and redistributive nature of EU (environmental) policies, also the reverse scenario may be possible. People in countries with high environmental ambitions and standards may refuse to (financially) support countries that apparently missed to introduce changes.

In the cultural or identity dimension, there is no obvious link, why people should believe that a common European effort on environmental protection could be a threat to their national identity. Apart from the fact that a common EU policy always is a gash to national sovereignty. Beyond that, it must be asked in which value or ideology dimension the issue of environment falls or rather, how it is framed and politicized more generally and in context of the EU.

Additionally, the research introduced above has shown that for international problems, Europeans also prefer international (supranational) problem tackling. So as pollution and climate change are not produced in just one country and detrimental consequences do not stop at national borders, mitigation policies can play out more effectively in a joint effort. For this logic to play out, however, requires interest and knowledge, that people care about and comprehend the scope of the problem (De Winter & Swyngedouw, 1999). Based on the importance individuals attach to environmental and climate protection, further expectations on the preferences for political action can be formulated. The next chapter will elaborate on the correlation of environmental attitudes and socio-demographic markers, as well as the embdement of the issue in terms of political ideology and conflict structure.

2.3 Environmental Attitudes

Environmental issues, including the climate crisis – for a long time and still are, a contested field. Obviously, not even a basic consensus like that the loss of biodiversity or global warming are human-made can be take for granted. But only if people seriously care about environmental protection and climate change mitigation, they will form a preference and take an interest in effective policies and (counter-) action.

With the exception of some events and debates (e.g., sour rain, or the anti-nuclear movement), attitudes toward the environment used to be a rather ancillary issue in the past century. Only with more research insights and warnings by scientists about the consequences of pollution and climate change slowly raised public and political awareness. Severe weather anomalies, the loss of biodiversity and other consequences that become more directly perceived, do not only call civil protest groups into action, but do also increase the pressure for political action. Considering the climate crisis as the major challenge of our times, research on environmental attitudes can contribute in two ways. Firstly, in democracies public opinion is important for shaping policies and it could be shown that public preferences have an impact on the design of environmental policies (Fairbrother, 2017). Only political measurements that are possibly geared to people's concerns can secure compliance and be effective and successful. Secondly,

it helps to identify reasons for opposition, that will otherwise lead to failure. Studies in this field, focus not only on the explanation of pro-environmental attitudes (or recently rather climate change concern), but increasingly also on the acceptance of different mitigation policy instruments.

In the following, central insights on environmental attitudes in developed or particularly European countries are presented. This is important to mention since for other countries, left-right dimensions are not the same, such as economic dependencies, ways of energy production and consumption can largely differ. The catastrophes and consequences of climate change may be experienced much more directly in other parts of the world, leading to other awareness of the problem.

Pro-environmental attitudes are correlated with a number of individual features, concerning objective characteristics as well as subjective factors. Young people and women are found to be more pro-environmental or perceive climate change as more serious (Gifford & Sussman, 2012; McCright et al., 2016; Milfont & Schultz, 2018; Poortinga et al., 2019). Besides the fact that women naturally are thought to be more empathetic, the effects are explained by an interest of keeping the prevailing structures of males and elder people. Based on assumed material security and postmaterialist theory, higher socio-economic status is associated with higher concern and also action (Gifford & Sussman, 2012; Milfont & Schultz, 2018). Other 'objective' positive correlates include urban residence (in contrast to people in the village) (Echavarren et al., 2019; Gifford & Sussman, 2012; Stadelmann-Steffen & Eder, 2021); education (in general) and environmental knowledge (Gifford & Sussman, 2012) and parenthood (Milfont & Schultz, 2018). Environmental positions and values seem also embedded in political ideology. Though the correlation in Europe is not as strong as in the US, politically left and liberals are more pro-environmental (Fairbrother, 2017; McCright et al., 2016; Stadelmann-Steffen & Eder, 2021), as, for instance, right wing authoritarianist people believe in the superiority of humans over nature (Milfont & Schultz, 2018). A similar divide was found in the dimensions of cosmopolitan values ('versus' communitarians) (Weko, 2022).

On the country level environmentalist values or climate change concern are positively related to affluence and development, as the GDP or HDI (Crawley et al., 2021; Gifford & Sussman, 2012; Weko, 2022). The link is explained with higher values of individualism and post-materialism in higher developed countries, which are found to increase pro-environmentalist attitudes (Milfont & Schultz, 2018). There is mixed findings in the effect of democratic quality: While Pohjolainen et al. (2021) find such an effect, arguing that higher transparency and

institutional capacity leads to more progressive policies, Echavarren et al. (2019) cannot confirm such an effect. Another interesting finding of the latter authors, is the non-effect of political environmentalism on climate change concern. The authors assumed that more environmental issues in national party manifestos goes with increased discussions in parliament and debates in public more generally, therefore increasing public climate change awareness. Based on data of the Manifesto Project (Lehman et al., 2017), however, the authors could not identify such a correlation. Still, several studies emphasize large country differences for the environmental and climate change concern connected to the politicization of environmental and climate change problems. McCright et al. (2016) assert a lower salience of environmental issues in post-communist countries, which is why climate change concern is lower. Moreover, as it is less embedded in political conflict structure the effect of left-right political orientation is weaker in countries of East Europe, whereas individual demographic and socio-political factors are more pronounced in West and North Europe (Poortinga et al., 2019; Weko, 2022) (or see also Crawley et al., 2021, who identify this difference via national affluence).

Caring about the environment cannot be equated with supporting protection and mitigating policies. It is certainly a precondition, but the final support is still subject to further relevant factors. One major condition is obviously the specific type of policy that is debated. The chapter on EU environmental policies has shown that it operates mostly with regulatory instruments, by setting binding targets, limits and standards. But environmental policies can also include subsidy, bans and taxation. Especially the latter two fall in the category of being more coercive and costly. Moreover, environmental protection and climate change mitigation often implies the change of behavior, production and consumption in the industrialized world, which got used to a cheap lifestyle on the expense of global resources and less developed countries. When the consequences of non-action and the benefits of action are not directly perceived, policies that are costly for the citizens (in terms of financial costs, individual restrictions or waiving) are easily opposed, even if people claim to care about the environment. For these reasons, environmental attitudes or climate change concern certainly is a decisive explanatory, but does not account for the whole story. Regression models that aim at predicting policy support and contain covariates of environmental attitudes, still show positive effects for (high) education, (young) age, leftist ideology, and urban living place (Stadelmann-Steffen & Eder, 2021). The effect of political ideology is explained by the naturally interventionist nature of environmental policies, that is rather accepted by left-winged people. But there is again evidence that this effect can largely vary between countries (Harring et al., 2019). The list of individual level

determinants can be complemented by individual affects and emotions. Worry and hope predict support for climate change mitigation politics (Feldman & Hart, 2016). Moreover, the political institutions that are to implement the policies do play a major role, i.e., in most cases the state. Satisfaction and trust, not only in the government and related institutions, but in the societal system as a whole (including science and the media) make people believe in the appropriateness and effectiveness of political measurements (Fairbrother, 2017; Kulin & Johansson Sevä, 2021; Stadelmann-Steffen & Eder, 2021). Reversely, the 'typical' type of distrusters and dissatisfied – older, less educated, the left-behinds, and system-alienated, are more prone to think of these policies as serving the interests of the 'elites'.

The domestic political context is an important moderator in this regard. Just as for the issue of European integration, political parties follow different strategies of framing and politicizing or depoliticizing the issue. Whereas the environment is one main issue of the green party family, it is only a soft-pedalled or objected issue for conservatives or populist parties (Huber et al., 2021). While the Republicans in the US, in Europe it is right wing populist parties that drive climate change denialism or oppose mitigation policies. They frame climate change either as a science project of the cosmopolitan elite, or argue that other countries are the bigger polluters and the own effort alone will not change anything (Petri & Biedenkopf, 2021; Vihma et al., 2021). This is further pushed by the fears of new technologies, and adaptation measurements will lead to the loss of competitiveness and wealth. On national level and in the European Parliament, an overlap of Euroscepticism and climate denialism or climate conservatism can be observed, mostly in the programs of the right wing populist (Buzogány & Ćetković, 2021). Depending on the constellation of environmentalist versus climate change critics in the domestic political arena, individuals' awareness of the issue and policy preferences will form.

But also more 'objective' country level conditions could be hypothesized to have an effect on policy preferences. For instance, a high dependency on fossil energies could make people avoid significant industry and lifestyle changes. But evidence on this is mixed. For the European context Stadelmann-Steffen & Eder (2021) do not find such a link and assume a general low awareness of energy policy and dependencies. In contrast, Harring et al. (2019) find that, higher dependence on fossil fuel producing industry decreases the support for CO2 taxation when comparing Sweden & Norway to Australia & New Zealand.

Given that the character of ecological destruction and climate change suggest a multilateral effort, McGrath & Bernauer (2017) examine under what conditions people will support unilateral or international climate policies. Climate change mitigation policies are typically

costly and demand high effort. Thus, it could be assumed that, if the own country was the only acting, the engagement could be evaluated as senseless as the rest of the world apparently continues to pollute. The authors find that, the majority of people (60-70%) want their government to enact climate policies, regardless of what other countries do. However, under condition of internationally binding agreements, people are more likely to support measurements, to reduce GHG emissions and also to incentivize other countries to do so. Climate funding measurements are rather supported if the funds to go reliable countries and donator and recipient country make decisions jointly. This finding is interesting since for this study it suggests strong support for EU environmental policies. Firstly, decisions are taken jointly, i.e., consensual or by majority. Secondly, the implementation of these binding decisions is supervised by the EU, which largely guarantees the proper spending of funds and efficiency.

Lastly, there is indeed (to my best knowledge) one study that engages in environmental policy support in the EU. Lengfeld and Gerhards (2008) study the varying support between European member states for a EU that prioritizes environmental protection over economic growth or the reverse. In short, the authors firstly, find younger and higher educated to prefer the prioritization of environmental protection. Secondly, explaining via the potential costs of environmental protection, people in more affluent countries and with better environmental conditions, would also prefer environmental protection over economic growth as a EU guideline.

The publishing dates of the research literature showed that environmental attitudes and support for climate change mitigation policies is a relevant current issue. Although most research focuses on the US, quite a number of studies for the context of Europe could be found. And as was presented in this chapter, most (social) scientists in this field, to differentiate between environment and climate change, but partly use the terms interchangeably. That shows, that the climate crisis has become the top environmental issue, as it connects pollution, the question of resources and energy, biodiversity, weather catastrophes and other problems.

2.4 Research Question and Hypotheses

The overarching question this paper seeks to answer is *who supports environmental policy at EU level?* It asks about the preferred level of responsibility for this policy domain, that could either be a competence of the state or lie within the competence of the European Union.

Environmental issues, especially the climate crisis has become the major challenge of our times. And so did the EU slowly increase its influence in this field. When international summits and agreements fail to deliver (Erdmann, 2022; Milman, 2021), the EU as a supranational

organization can be one major player that is able to 'force' a number of states to implement the necessary measurements. As was demonstrated, the public support is important for the efficient implementation of policies, but it also influences political decision making, also in the context of the EU, since governments in the Council represent their country and the people's will. If the EU wants to proceed in its ambitions of climate change mitigation and adaptation, it is reliant on the benevolence and support of its members, in terms of governments but also citizens.

The preference of decision making at EU level can be assumed to be subject to two main aspects of individual attitudes: the general support for the EU and the concern about the environment and climate change.

Considering support for EU environmental policies as a type of specific support, it is related to general support, formulating the following hypothesis:

> *H1: People generally in favor of the EU are more likely to prefer joint EU decision-making in environmental policies.*

It has been said before, the nature of environmental problems as the climate crisis suggests a more adequate problem solving at larger scale, i.e., in a joint international effort. Following the functional logic, it can be expected that, people who really care for the issue at stake will prefer policies at the EU level:

> *H2: People who are more concerned about the environment are more likely to prefer joint EU decision-making in environmental policies.*

The literature review above, has shown that both dimensions, EU support and environmentalism, are have some individual level predictors in common, but also that some correlations may diverge. Higher socio-economic status (or higher education) and younger age increase the values for both. Though it could be expected that these attributes also increase the support for environmental policies at EU level, it will be interesting to see if they will still exert an effect when the variables of EU support and climate change concern are included in the analysis models. Previous research findings do not make a strong point about the effect of gender on EU support, but apparently females are more environmentalist. Thus, no hypotheses will be formulated for the effects of these variables. For the political left-right dimension clear

expectations are difficult to derive either. Though environmental attitudes and preferences for Europeanization are stronger for people left-wing oriented, EU sceptics are also found among the populist left. Finally, research has emphasized the varying magnitudes of the left-right divide, as well as the importance of context.

Just like for the fiscal policies during the Euro Crisis and other fields, environmental policies do not affect all EU members the same way. For countries with lower environmental standards, the common pursuit of environmental protection and climate change mitigation will demand much more effort. For instance, transition to renewable energies is more demanding (especially costly) for countries that are highly dependent from fossil energy resources. In contrast, countries more environmentally progressive have to "fear less".

> *H3a: People in countries that are less environmentally progressive, are less likely to prefer EU decision-making in environmental policies.*

On the other hand, there is the impression and experience that the mills of the EU grind slowly. For instance, despite qualified majority voting, countries form coalitions and block policy initiatives until (less ambitious) compromises are found (e.g., the conflict of declaring nuclear and gas power as sustainable in the EU taxonomy for sustainable activities; Thurm, 2022). Therefore, it could be expected that people in countries with effective environmental policies still prefer national environmental policies.

> *H3b: People in countries that are more environmentally progressive, are less likely to prefer EU decision-making in environmental policies.*

Context also refers to the domestic politicization of the issue. The salience and political positions toward environmental protection starkly vary across countries. Political elites appeal and react to public discourse and the electorate. A more pro-environmental political climate is related to a higher public awareness about environmental issues, and consequently may reinforce support for efficient environmental policies at EU level.

> *H4a: People in countries with higher political environmentalism, are more likely to prefer EU decision-making in environmental policies.*

On the other hand, it also seems plausible that when political discourse and positions of the political elites are not concerned about and prioritize economy over the environment, people will even more demand activity at EU level.

H4a: People in countries with low political environmentalism, are more likely to prefer EU decision-making in environmental policies.

Furthermore, it can be assumed that the hypothesized correlations are conditioned by the extent individuals are concerned about the environment. If individuals do actually not so much care about the environment, they may base their support for EU policies more on their general attitude toward the EU.

H5: Interaction: When individual environmental concern is low, preferences are stronger led by the general support for the EU, i.e., the effect of EU support increases.

The effect of environmental concern, in turn may vary with national context. Analog to a compensation mechanism, it may be that, people severely concerned about the environment and living in lagging countries, may support even more policies at EU level. In other words, the urgence of action to protect the environment and mitigate climate change is felt and demanded more strongly when the own state apparently is insufficiently acting.

H6: Interaction: In countries with low environmental protection policies, the effect of environmental concern is bigger than in countries that score higher in environmental protection measures.

A similar interaction is suggested for political environmentalism. In countries where the environment is not high on the agenda, people with high environmental concern have a particularly strong preference for EU action.

H7: Interaction: In countries with low political environmentalism, the effect of environmental concern is bigger than in countries that score higher in political environmentalism.

3. Methodology

3.1 Data & Variables

The foregoing discussion of general and more specific attitudes toward the EU did illustrate that there is an abundance of cross-country data on Europe and the European Union. And so does the paper at hand draw on a 2019 wave (92.4) of the Eurobarometer (European Commission, 2020). The Eurobarometer (henceforth EB) is a repeated cross-section survey in the member states (and candidates) of the EU on behalf of the European Commission. It is conducted regularly since 1973 and contains a repeated standard set of questions[11] (and 'standard' waves) as well as shifting special issues ('Special Eurobarometer'). The EB 92.4 includes the special topics of attitudes of Europeans toward the environment, corruption and digitalization of every-day lives. The dataset contains the data of 27498 respondents older than 15 years, from 28 member states of the European Union. The survey was conducted from 06 to December 19 2019, which is exactly the period when the president of the European Commission, Ursula von der Leyen announced the plans of the European Green Deal. Thus, the issue of the climate crisis and the EU ambitions in this field were particularly salient. In 2019 the UK is still part of the survey. In the original dataset East and West Germany are listed as two different countries. Also due to the fact that additional country level data are available for a united Germany only, the country and its observations were recoded and assigned to one Germany. For analyses, appropriate post-stratification and population size weights (that is also provided by the Eurobarometer online) are applied accordingly.

In general, the Eurobarometer was thought to track the attitudes of Europeans toward European integration. There is, however, also criticism that the EB, as it is by order of the Commission, was not working in an appropriate scientific matter, but instead manipulating questions, survey design, thus the 'resulting' public opinion to strengthen the EU's path of wider and deeper integration (Höpner & Jurczyk, 2012). Despite this criticism, much research (also cited in this paper) still draws on the EB for secondary data analysis, which is why the paper does so as well. Some caveats of the survey questions and items and potential consequences for interpretation of the results will have to be pointed out accordingly.

[11] Attitudes toward the EU, institutions; socio-political and demographic details.

In the following, central data and variables will be introduced. A complete overview of descriptive statistics of all variables can be found in the Appendix A (Tables A1 and A2).

To recall, the main interest of the research is the preference for environmental policy as a national matter or EU competence. To test this, the following question serves as the dependent variable:

> *"When it comes to protecting the environment, do you think that decisions should be made by the (NATIONALITY) government or made jointly within the EU?"* (European Commission, 2020: Variable qa8)

Answer options include "By the (Nationality) government", "Jointly within the EU", "Other (Spontaneous)" and "Don't know". The latter two outcomes were recoded as missing, resulting in a dichotomous variable of 27% who prefer environmental protection policies to be decided by their national government (coded 0), and 69% supporting joint decision-making on EU level (coded 1) (and 1038 missing cases). Figure 1 shows a quite large variation between countries, which ranges from 88% in Spain who prefer environmental decision-making on EU level, to 57% in Czech Republic. An important downside of the item to be discussed here, is the wording for EU decision-making. Though it clearly makes a difference between policy competence on national vis a vis EU level, the exact meaning of "joint" remains open. As outlined above, (besides the Parliament as a co-legislator) EU policies in the Council are either passed by majority or in unanimity. So technically, we do not know if respondents know and differentiate between joint decision-making in the sense that EU policies generally represent joint policies, or in the sense of preferred unanimity in the Council. The difference between both meanings is not negligible since unanimous policy adaption in the Council allows member states to veto and thus would imply more restrictive opportunities for policy-making. As this detailed differentiation, however, presumes substantive knowledge of the functioning of the EU, the variable is used in this research as a measure for the preference of environmental policy competence on national 'versus' EU level. Eventually, other authors proceeded in the same way before: Hooghe (2003) or Cerniglia & Pagani (2008) use a very similar item from the EB to study the policy competence preferences across different policy domains.[12] For an easier formulation and understanding, and also to corroborate the pro-European attitude that is

[12] E.g., the original wording of the paper by Hooghe (2003): "For each of the following areas, do you think that decisions should be made by the (nationality) government, or made jointly within the European Union?" (EB 54.1, 2001).

underlying a preference for joint decision making at EU level, the outcome will also be phrased as preference for *Europeanization*, such as the authors mentioned do.

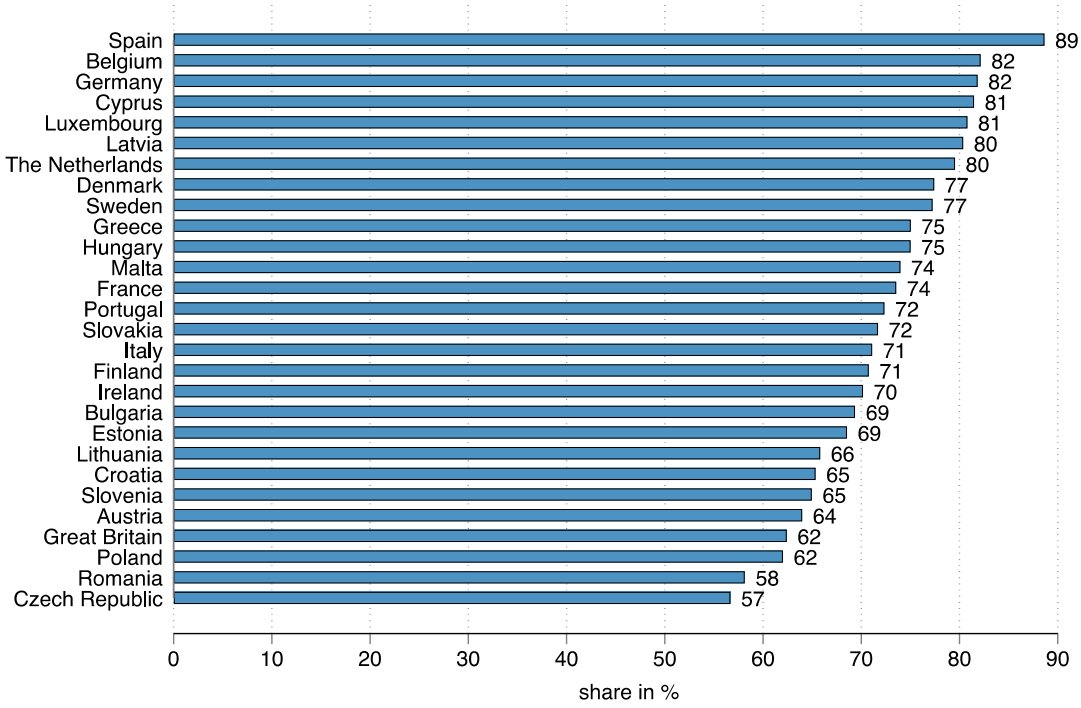


Figure 1: Environmental decisions should be made on EU level, by country.

Independent Variables

First central independent variable at the individual level is general support of the EU. The question whether the EU "conjure[s] up" a rather *positive or negative image* are used to measure individuals' attitudes toward the EU. The variable is coded from 1 to 5, five indicating a "very positive" image of the EU. A sample mean of 3.3 indicates a rather neutral image of the EU. Admittedly, the question may be rather vague and the opinion on EU membership and further integration would have been insightful either, but unfortunately the EB does not provide for more items. Nevertheless, the EU image does still provide as a reliable measure (among and highly correlated to others) (Hobolt & Tilley, 2014a) as has been used in previous studies (e.g., Cerniglia & Pagani, 2015).

The second main predictor variable at individual level is climate change concern, based on the question "[How] serious a problem do you think climate change is at this moment?", coded

from 1 “not at all a serious problem” to 10 “an extremely serious problem”.[13] The variable is an mean index of the two items of climate change concern in the respondent’s country and in the European Union (Cronbach’s alpha = .91). A mean of 7.9 indicates rather high climate change concern. Climate change concern is considered as an equally appropriate measure for environmental attitudes since the climate crisis is the dominating environmental issue (see below) and also in recent research both terms are used equivalent (e.g., Kulin & Johansson Sevä, 2021).

Important moderator in a benchmarking mechanism, has shown to be the satisfaction with national government. Again, the indicator is not perfect, but to test and control for this, the recent dissatisfaction with the country as well as the EU are included as dichotomized variables coded 1 when respondents think that “Things are going in the wrong direction in the country / the EU”.

The discussion above has shown that environmental concern and attitude toward the EU – both factors that are hypothesized to impact the preference for environmental policy level – are correlated with sociodemographic and ideological characteristics. Therefore, a set of standard controls are included in the analyses: Gender, age, education, (self-ascribed) social class, place of residence, frequency of political discussions on EU issues and self-placement on the left-right ideological scale. Age is included as metric variable, ranging from 15 to 98 years.[14] Education is based on the age at which respondents stopped full-time education, in the original dataset ranging from 2 to 80. As this measurement is quite cumbersome it was recoded into three categories (following the example of Vasilopoulou & Talving, 2019): (1) low education for respondents who finished at the age of 15 or younger, (2) medium education for respondents who finished between 16 and 19 years old, (3) high education for respondents who finished at the age of 20 or above. Respondents still studying were categorized based on their actual age, and respondents without full-time education into the lower education category. Subjective social class is coded in three categories (low, middle, high), arguing that three categories are sufficient as these characteristics are not of main interest. Place of residence controls for the effect that people living in the city and in the country side may have diverging opinions

[13] This item was preferred over the item of importance of environmental protection to the individual (ranging 1 to 4), as the former was found to be more sensitive (also due to the scale), with higher variance since the vast majority (more than 93%) stated a fairly or very high environmental importance.
[14] An additional squared term to account for non-linearity was tested as well, but did not show any correlation.

concerning the EU and environmental priorities (coded 1 “rural area”, 2 “small/middle sized town”, 3 “large town”). The frequency of political discussion on EU issues controls for the cognitive engagement in the field (3 categories, 1 ”never”, 2 “occasionally” and 3 “frequently”). Finally, political orientation on the left-right scale is included as a 10-point metric plus the squared term to check for non-linear effects.

For all variables at individual level, missing cases (typically “Don’t knows”, Refusals or “Other”s) were coded to missing.

To test for context-effect, five country-level variables are tested in the analysis. As the EB survey was conducted in December 2019, country-level indicators for the same year where available, or from 2018 are integrated.

For environmental progressiveness of a country, the *Environmental Performance Index* (*EPI*) of 2018 is used.[15] The EPI ranks 180 countries on their implementation and achievement on central environmental protection policies (Wendling et al., 2018). The EPI is published every two years by the Yale Center for Environmental Law & Policy and thought as an orientation for policymakers to improve on their way to reach the UN Sustainable Development Goals. Under the two top policy objectives environmental health and ecosystem vitality, subdivided in 10 weighted categories (for the 2018 release, e.g., air quality, forests and climate & energy), 24 weighted indicators (e.g., exposure to fine particles, tree cover loss and carbon dioxide emissions in tonnes per unit of GDP) are aggregated to a final score that theoretically ranges from 100 (for top performance) to 0 (worst performance. The data is provided from international organizations, research and academic institutions and government agencies, whose numbers are based for instance on monitoring stations, surveys, statistical models, industry and government reports. For better illustration, Figure 2 gives the EPI ranking of 2018 for the 28 countries included in the study. In short, France scores rank 1, followed by West and South EU member states. The bottom ranks are placed by Eastern EU countries including the Baltic states. (As an additional information, in the overall ranking of 180 countries: Only Switzerland scores higher than France.) Worldwide, the first 16 ranks of the EPI are placed by

[15] Originally, it was hypothesized and planned to test CO2 emissions (per capita) and the share of renewable energies in the overall consumption (in %) as indicators for the dependency on fossil fuels and thus approximate the progressiveness in environmental policies. For both measures, however, no effect was found. “But” finally, both are included in the EPI as well.

European countries. Poland, which is at the lowest rank of EU member states, ranks position 50 in the global ranking.

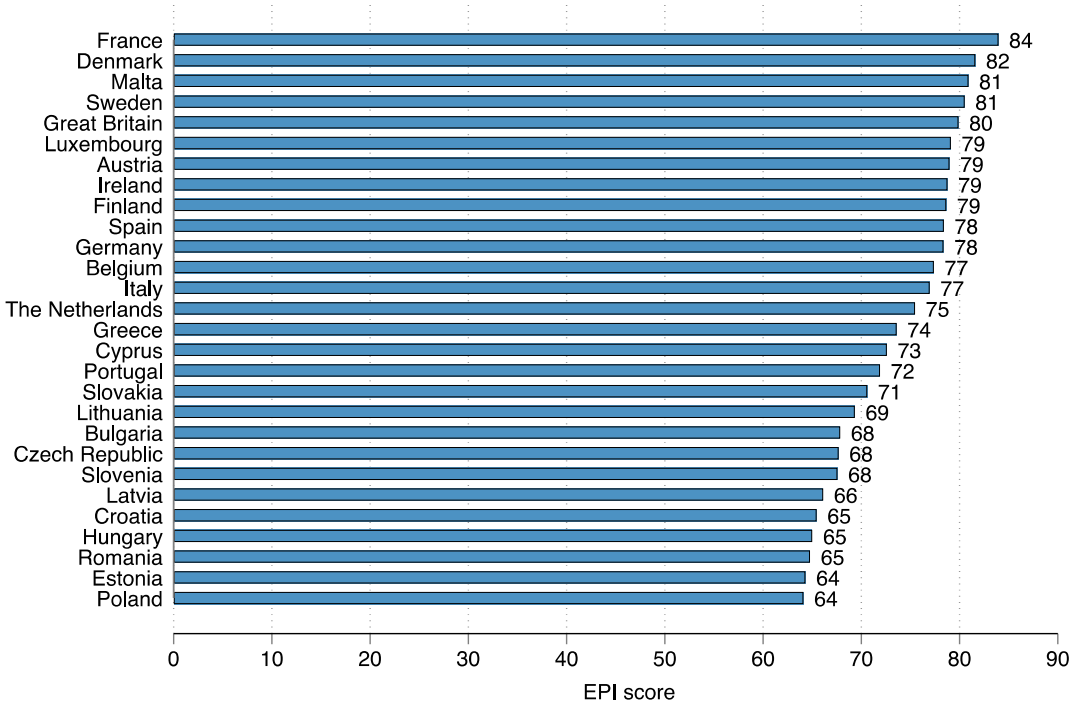


Figure 2: Environmental Performance Index Score 2018.

Next, a variable to measure the countries' political position on the environment is included, henceforth called *Political Environmentalism*. It should reflect whether environmental protection is a politically salient issue and whether political positions are rather pro environmental or not. Based on the political parties in parliament, their seat share and their position on environmental issues as well as their salience, a country measure was built that ranks higher the more salient and more pro-environmentalist a countries elected parliament is. For calculation, seat shares of the parties in parliament elected in the last election before December 2019 from the ParlGov database (Döring & Manow, 2021) were matched with the parties' position on environmental sustainability and the salience of the issue. The parties' positions are imported from the 2019 Chapel Hill Expert Survey (Bakker et al., 2020), which asks experts about the ideology of European parties and their position in several issues and policy fields. The original variables include the parties' position on environmental sustainability (0 – "strongly support environmental protection even at the cost of economic growth" to 10 – "strongly support economic growth even at the cost of environmental protection") and the relative salience the party publicly attaches to the environmental sustainability (0 – no importance to 10 – great importance). The measure was calculated by

firstly recoding environmental position for each party to -5 to 5, positive value indicating pro-environmentalism, so it could be multiplied with the parties' salience value. The theoretical range lies between -50 to 50. The higher the value (if positive) the more pro-environmentalist and the more salient the issue for the party. A negative value indicates the superiority of the economy over the environment, and the lower the value, the more salient this position is asserted in public. Secondly, for each country the mean of the parties' environmental position was created, weighted for the share of seats a party achieved in the past parliamentary elections. That way the position of parties with more seats in parliament are better reflected, since it is assumed that larger parties (that in most cases also form the government) receive more attention, have more influence, and finally, were elected by more people. Figure 3 gives an overview in a ranking order over the countries' political environmentalism in parliament.

There is a downside to this measure though that needs to be kept in mind. As it not only condenses two dimensions (salience and position) into one, but additionally weights according to seat share it can only approximate political environmentalism of the countries. Firstly, the countries largely vary in their voting and party systems, such as traditional cleavages that these parties may fill in. For instance, in Spain the value is the composite of 21 fractions in the parliament, whereas for Malta only 2 parties (that score quite negatively) are averaged. In Italy, the score is driven to large extent by the Five Star Movement (scoring 19 points) that had 36% of the seats in parliament after 2018 elections. Secondly, there is many other domestic dynamics that can influence national discourse, parties' positions and perception in public, that are not covered by this item. Still, and even though this measure is very simplistic, it is argued to capture the broader cross-national differences when it comes to the political discourse on environmental protection.

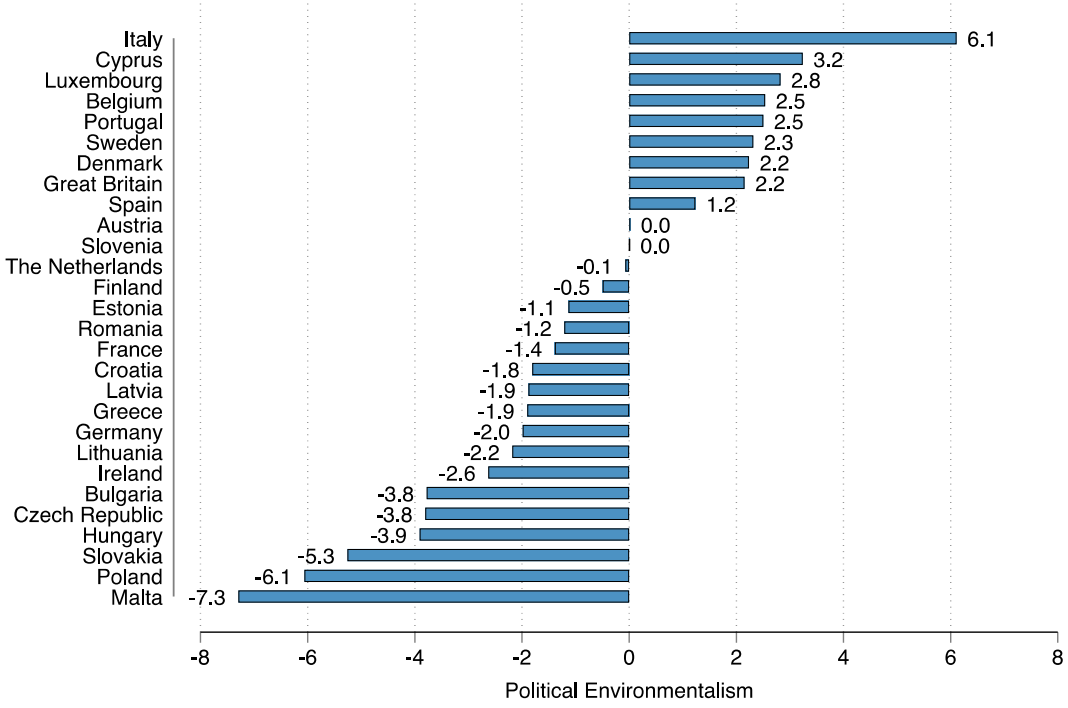


Figure 3: Political environmentalism, i.e., the average parliamentary position and salience of environmental sustainability.

Three more country level variables are included for supplementary analyses. Firstly, a countries affluence has proved to be a powerful predictor in many instances. For this, the gross domestic product (GDP) per capita of 2019 is tested. The logged GDP per capita is used to account for the non-linearity of economic growth and improve comparability. Secondly, environmental policies can be costly, and the Euro crisis has left the categories of contributors and beneficiaries of EU budget that became also mentally rooted. A potential effect is tested with a variable for net contribution (EU budget contribution minus revenue).[16] Finally, to make sense of common country grouping, the year of EU accession is tested as a categorical.

All (metric) country-variables are centered at their mean, so the constant of the regression model refers to (an individual in) a country with the mean value of the variable and coefficients describe the effect of one unit above (or lower than) the mean.

All original country-level data are accessible online. Web addresses are provided in the Appendix.

[16] The variable was not aligned to per capita contribution to avoid Luxembourg as an outlier.

3.2 Logistic Multilevel Analysis

The aim of the study is to explain preference for decision-making at EU-level in environmental issues. More precisely, not only individual-level factors, as socio-demographic factors and attitudes, but also to examine potential effects of contextual factors. That is, the structures, individuals are embedded in, that play a role in shaping individual perceptions and attitudes. As discussed above, it is not only individual-level markers that explain attitudes and preferences. But there is good reason to assume that contextual factors, such as a countries economic prerequisites or policies, have an influence on individual-level outcome. In contrast to analyses on individual or aggregate level only, multilevel regression analysis allows to integrate micro and macro level and thus to overcome the restrictions of a too individualistic perspective.

A main feature of multilevel analysis is, that it deals with hierarchical data structure, i.e., objects of a lower level (usually individuals) are nested in groups of one or more higher levels (countries, classes, or also time points as for panel data). As in the case of cross-country research as in this research, individuals are clustered in countries. This complex data structure is important because of the assumption or precondition that are usually made for simple (one-level) regression: the independence of observations. This assumption usually holds for random samples. In cross-country surveys, however, individuals interviewed are typically not random and independent from each other, but are nested in countries, which is why observations tend to be more similar within their country-cluster (*intraclass correlation*). If this fact was not accounted for, standard errors estimates are biased (typically too small) and effects misleadingly significant. This design effect can be "corrected" via statistical means (e.g., cluster robust standard errors). However, as was implied above, variables that are measured at different levels should be included in one model, which makes things more complex. Following the assumption that the outcome variable not only varies between individuals and but also between groups (here countries), multilevel analysis (theoretically) allows to disentangle within-cluster effects (outcome differences due to individual characteristics) from between-cluster effects (outcome differences due to country characteristics).

Due to the fact that the outcome variable of interest is binary (0 or 1) the analysis does not follow a linear regression model, but a logistic regression which produces the conditional probability of the outcome 1 for a particular value of the explanatory.

The analysis below follows the "convention" of a bottom-up approach, that starts with a simple model and stepwise adds and tests explanatory variables (e.g, Hox et al., 2017; Langer, 2010; Rabe-Hesketh & Skrondal, 2021; Tausendpfund, 2020).[17] Starting with *null model*, variables (first at individual level, second at country level) are added incrementally in *fixed effect models*. Based on model fit criteria and variance components, their overall effects can be discussed and their contribution to explain country level variance. *Random slope models* test if effect sizes for single variables vary between the countries. And finally, *interaction effects*, of individual level effects, but also across context are tested.

The analysis is conducted with STATA (version 17). The multilevel models are ran with the command *melogit*, and integration points set to 100 to increase accuracy of the estimates (at the cost of computational time, which is bearable since the dataset is not extensively large and the models not overly complex).

[17] In contrast to the top-down approach which starts as a full-model, with a maximum of variables of fixed and random effects and stepwise removes non-significant variables.

4. Analysis

4.1 Descriptive Insights

Before regression analysis, a brief descriptive analysis is presented to gain a better insight and understanding of the data, that also allows for preliminary conclusions.

As was illustrated above the average country preference of environmental protection policies to be made at EU level ranges from 57% in Czech Republic to 89% in Spain, which is a quite substantial difference of more than 30 percentage points. The field of environmental issues is quite broad so it can be insightful to understand what issues people actually link to environmental protection. From a list of 10 environmental issues, the EB asks respondents to pick the four issues they consider as the most important. Figure 4 shows, that climate change is the top environmental issue, followed by waste and air pollution. In fact, the categories provided by the EB are somewhat questionable, since drought, floods and water shortage are consequences of climate change, such as waste and pollution are linked. Still the numbers confirm the link and salience of climate change and thereby confirm that environmental protection means climate change mitigation in the first place.

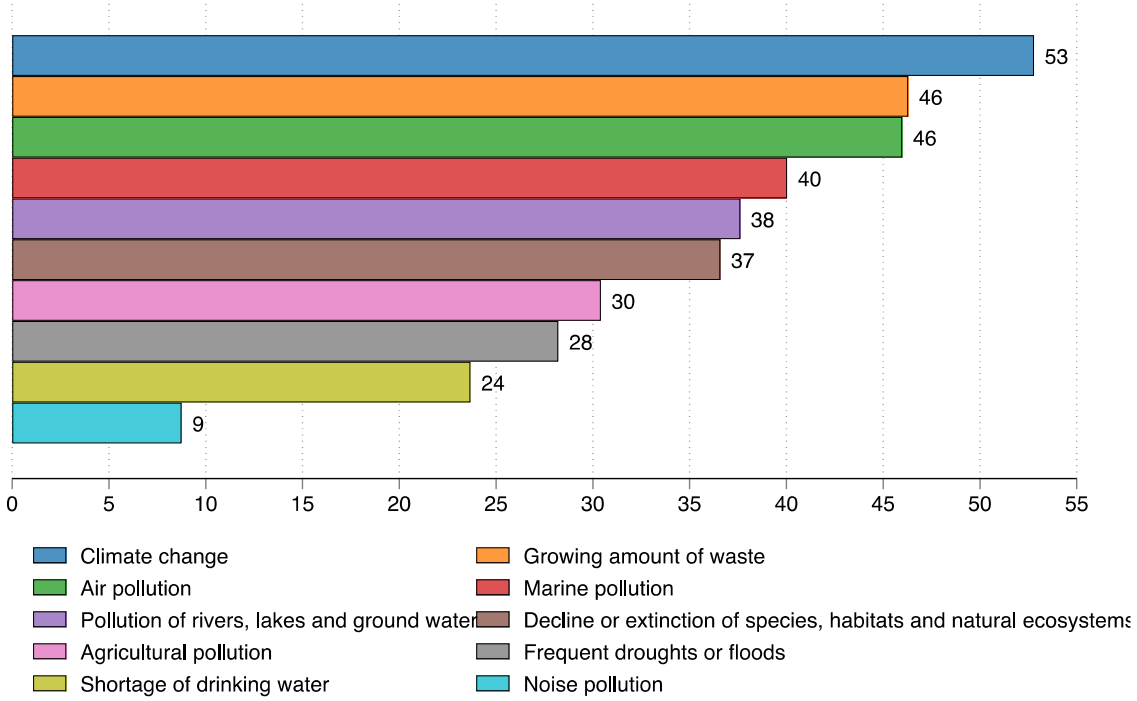


Figure 4: The most important environmental issues.

Considering the variance of support for EU decisions and the hypothesis put forward, it could be assumed that, countries ranking higher in their preference for EU decisions are also countries where people are more concerned about climate change. For instance, Spaniards, Belgians and Germans would be more concerned about climate change than Romanians. This is, however, not the case. On average, respondents in all countries consider climate change to be a rather serious problem. As one can see from figure 5, neither is there a large variance in average climate change concern across the countries (coefficient of variation (CV) over countries = 0.06), nor are Germans more concerned about the climate crisis than Romanians. A similar pattern can be observed for the importance attached to environmental protection (CV over countries = 0.04) (see Appendix B, figure B1). For instance, do British or Slovenians (on average) claim higher environmental importance than Belgians or Germans.

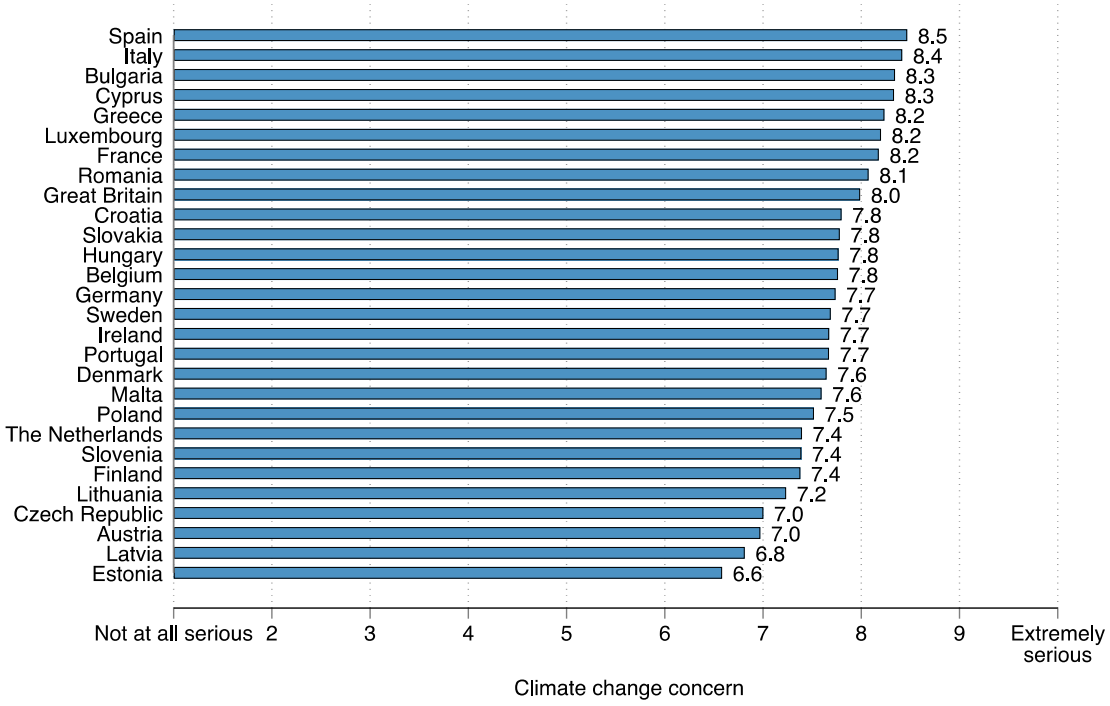


Figure 5: "Climate change is a … problem" by country, 1 – 10.

Interestingly, when it comes to pro-environmental behavior, on aggregate level, countries that rank quite high in climate change concern, do not necessarily appear to be the most active (figure 6). The coefficient of variance over country means of 0.24 implies a larger country variation for action than for attitudes.

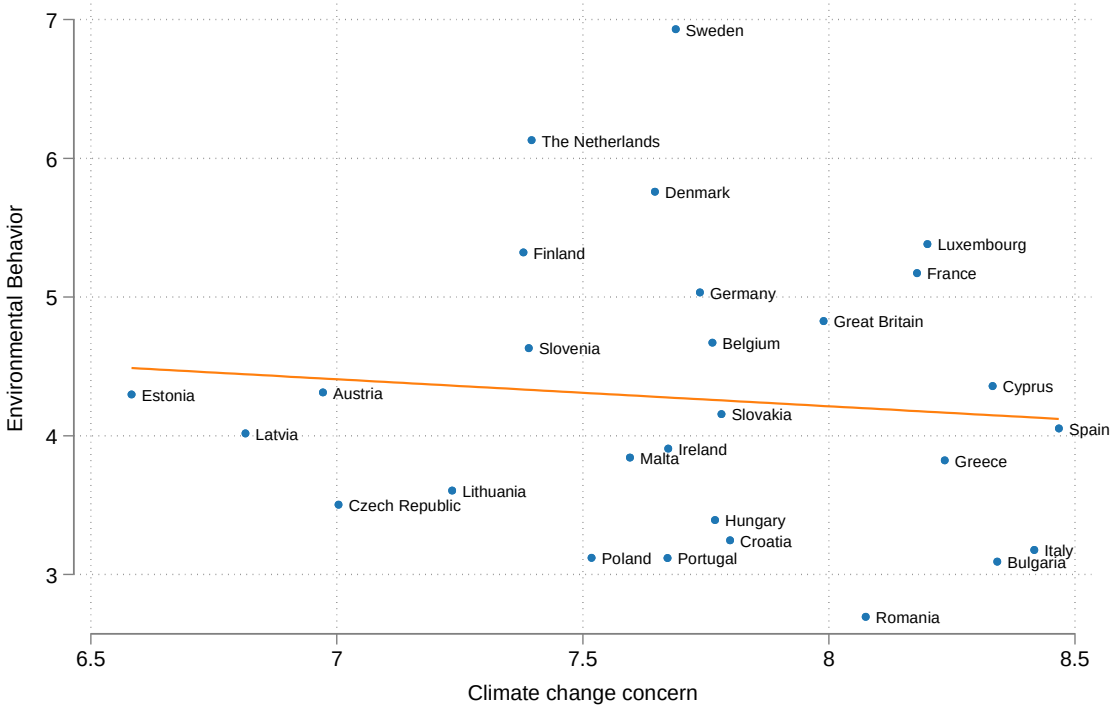


Figure 6: Country means of climate change concern (1-10) and pro-environmental behavior (0-14).

Comparing country-groups (to reduce complexity and simplify comparison) Southern European countries rank highest in climate change concern. Yet, in terms of individual behavior and actions to preserve the environment, South Europeans are hardly more engaged than people from Eastern Europe (3.5 & 3.2 in contrast to 6.2 in North Europe) (Appendix B, figure B2 & B3). This difference between self-reported environmental concern and individual action points to the assumed overreporting of environmental attitudes in connection with social desirability in survey research (Gifford & Sussman, 2012; McGrath & Bernauer, 2017; Milfont & Schultz, 2018).

Another interesting insight is, that people from Spain as well as other Southern European countries are more critical about their country, saying the *government* is not doing enough for environmental protection (83%), than other countries or country-groups (figure 7). In contrast, 'only' 62% of people in Scandinavian countries say so about their government (CV over countries = 0.16). Reversely, Scandinavians are much more critical about the EU: More than 80% say the EU was not doing enough. 79% in South Europe say so, and – the lowest rank – 57% in the Baltic states (CV over countries = 0.17). Two messages can be taken from these figures: Firstly, Europeans, no matter in which country, see both authorities' actions on environmental protection rather critical as insufficient. Moreover, it can be concluded, that

people in Europe can distinguish between environmental protection policies on national and on EU level.

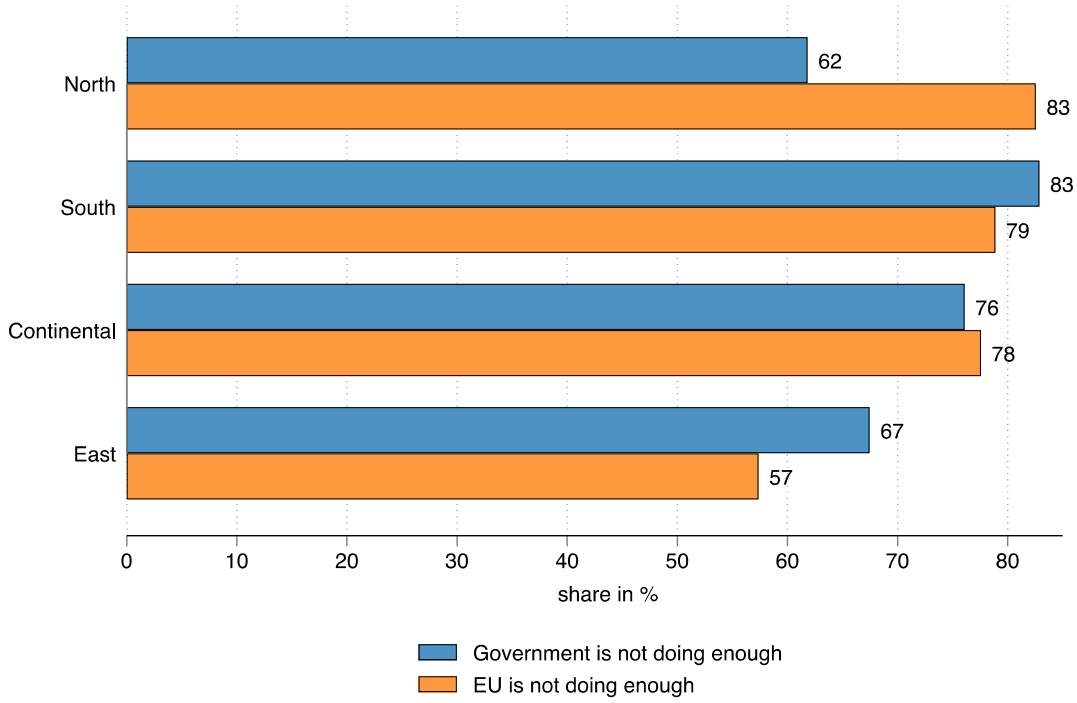


Figure 7: Dissatisfaction with governmental and EU action to protect the environment by country-group.

Overall, it can be concluded that Europeans in all countries claim rather high importance of environmental protection and are concerned about climate change. There is no clear pattern observable, but somewhat higher rates in Southern, Continental and Northern Europe than in Eastern Europe. In terms of individual behavior for pro-environmental action and judgement of the EU's and national action, countries differ more.

But how is that about attitudes toward the European Union? A very general question in this regard provided by the EB is the question if the EU "conjure[s] up […] a very positive, fairly positive, neutral, fairly negative or very negative image?" for the respondent. Figure 8 provides the country means. Bulgaria and Ireland score as the countries with the most positive image (3.7), whereas people in France and Czech have on average the most 'negative', in the sense of neutral image. (Note that the category 5 "Very positive" is not shown in the graph.) Overall, Europeans have a rather neutral stance toward the EU, with a slight trend to a more positive image. Here again, the differences between countries are not huge (CV over countries = .05). This becomes obvious when plotting the same question over country groups as above (Appendix B, figure B4), where the mean for all country groups is 3.2 or 3.4. Somewhat more

specific questions on the EU countries again show some larger country differences (Appendix B, figure B5 & B6). The question if things are going in the wrong or right direction in the EU, can be interpreted as the satisfaction with current and prospective policies and programs. In short, in terms of country-groups (to simplify) people from countries in the South, Continental and North Europe see the EU rather steering the wrong course, whereas people in the East and the Baltics are rather neutral (CV over countries = 0.13). In contrast, the item of whether the own voice counts in the EU targets at the democratic principles and organization of the EU. Here people in North and Continental Europe rather agree that their voice counts in the EU, whereas people in the South and East rather disagree with that (CV = 0.14). Though the differences are not huge, it can be said that country groups differ in this, more specific, regard.

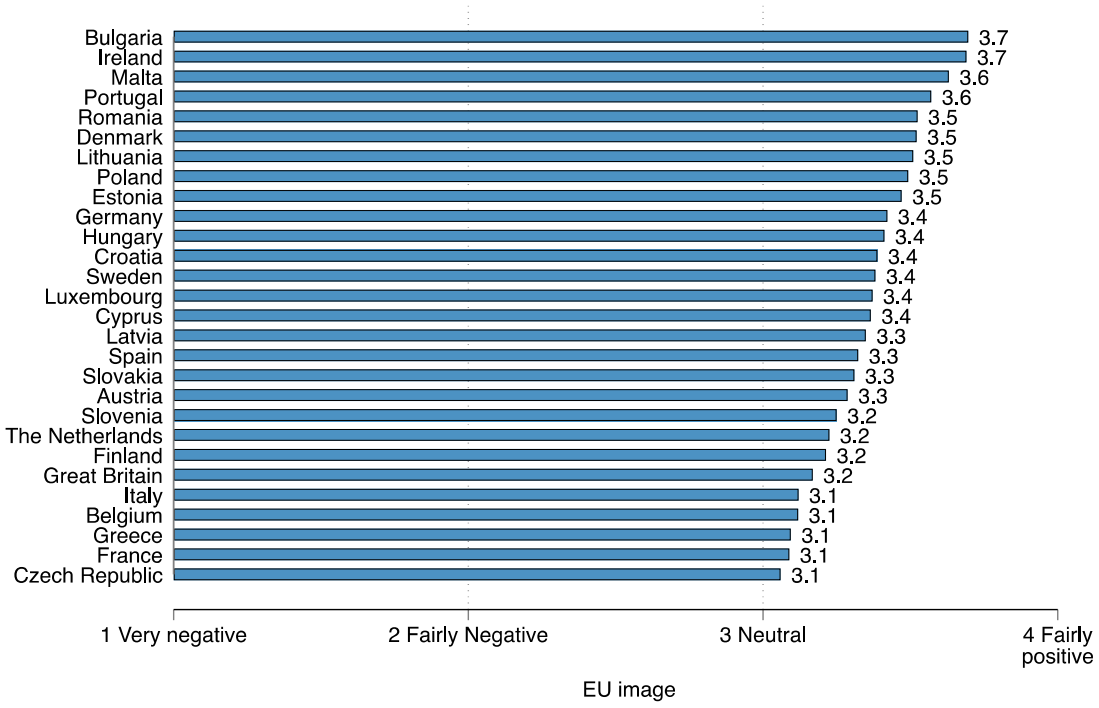


Figure 8: Image of the EU by country, 1 – 5.

The variances presented here on a country level, can be found on the individual level as well. That is, for the importance of environmental protection and EU image, coefficients of variation are the lowest, whereas they are higher for individual pro-environmental behavior or satisfaction with EU direction etc. One reason why these differences are discussed here, is to descriptively show why these maybe seemingly similar variables related to environmental attitudes or EU support are not used to calculate indexes. More precisely, the indicators in within both dimensions suggest only little to moderate correlations (Appendix B, Table B1 & B2). Neither does Cronbach's suggest an index solution. Instead, the many facets of both

phenomena can be observed: Saying environmental protection is important is one thing but acting accordingly pro-environmentally or expect so from the government or the EU is quite another. Having a generally positive image of the EU is one thing, being content with the way it works is quite another.

All the more, the descriptive analysis of country means has shown the limitations or typical trap for the analysis of aggregate data. That is, on aggregate level (in terms of country-means) there is apparently no correlation between the support for Europeanization and attitude toward the EU or climate change concern (figure 9 & 10).

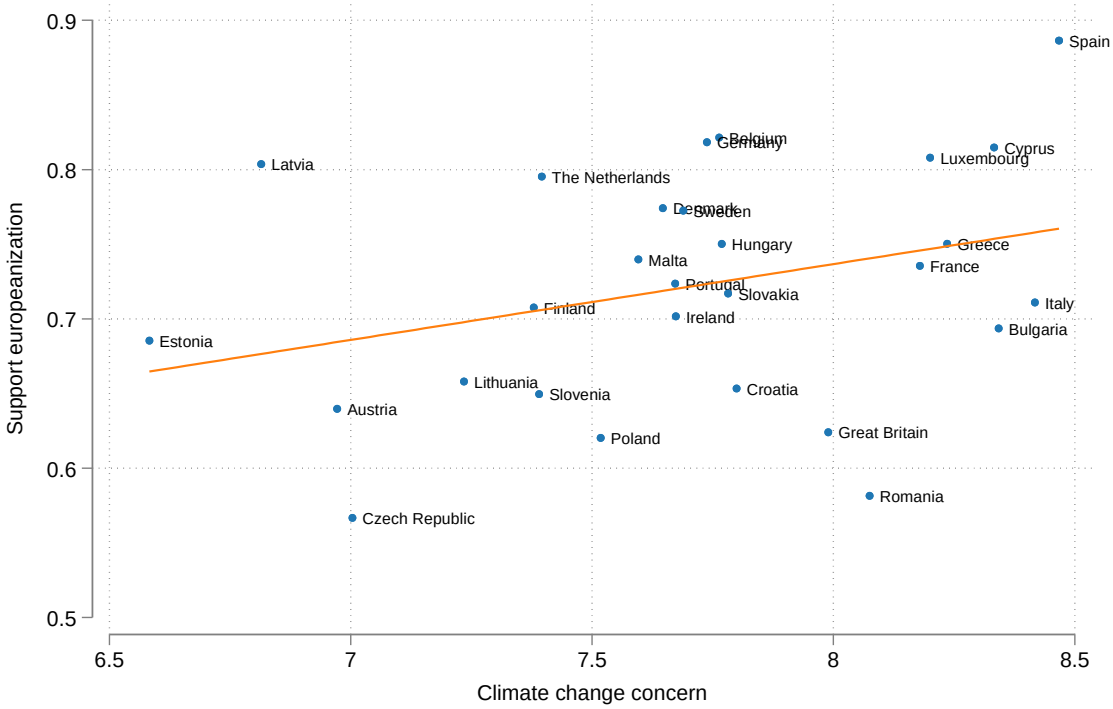


Figure 9: Country means for climate change concern & support for Europeanization, linear regression fit and 95% CI.

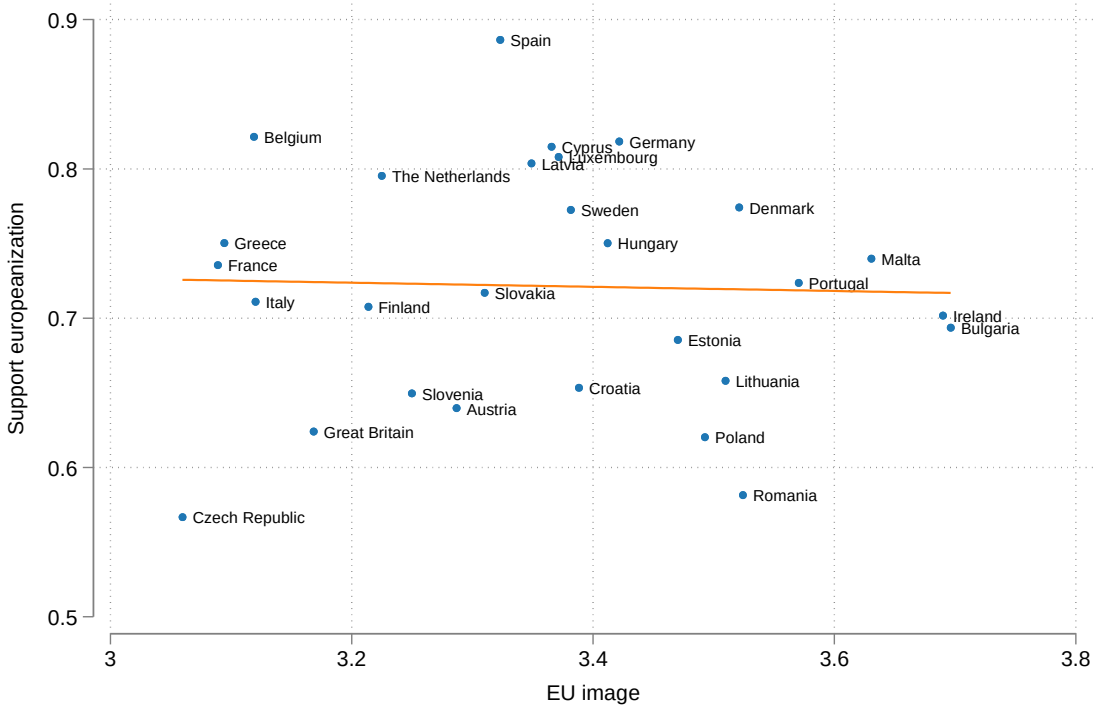


Figure 10: Country means for EU image & support for Europeanization, linear regression fit and 95% CI.

4.2 Multilevel Analysis

As was briefly introduced above, the analysis and presentation start with the null model that should serve as a base. Stepwise, in random intercept models, individual, then country level variables are added and discussed. Finally, random slope and interaction effect models are tested. Table 1 provides the coefficients of the null model and random intercept fixed effect models. The reported coefficients are the log-odds (or logit of the odds). Positive values can be interpreted as increasing the probability for the outcome to equal 1 (over 0), negative values the opposite. For a more practicable use, the predicted probability for the outcome 1 can be converted with equation $P(y=1) = \frac{e^{(logit)}}{1+e^{(logit)}}$, or written as full equation $P(y=1) = \frac{e^{(\beta_0 + \beta_1 * x_1)}}{1+e^{(\beta_0 + \beta_1 * x_1)}}$; where in simple logistic regression terms β_0 denotes the constant and β_1 the coefficient for Variable x_1. Relevant results will be described in predicted probabilities (marginal means) and average marginal effects, as they are also produced by the *margins* command in Stata.[18]

[18] To be exact, as the results of logistic regression imply, whenever it is written that x increases y, the increased probability of outcome y=1 is meant.

Starting with the *null model* (or *intercept only model*), which contains only the dependent variable and the identifier for the higher level. Firstly, the null model provides the regression intercept (γ_{00}) which is the mean of the dependent variable, and a term for the variance of the country intercepts (u_{0j}) (Equation 1).

$$logit(odds) = \gamma_{00} + u_{0j} \text{ (Eq. 1)}$$

The constant of 0.977 (M0, Table 1) means a predicted probability of 72% for supporting joint decision making at EU level for an average individual in an average country. Secondly, the null model provides the country level variance which shows how much the intercept varies across countries (random intercept variance). The variance value, firstly, serves as a baseline to track how much additional variables in subsequent models help to decrease and explain country level variance and secondly, is used for the calculation of the intra-class correlation (ICC). The ICC is calculated on the basis of the two variance components at individual and contextual level. In the special case of multilevel *logistic* regression, however, the residual at individual level is not necessary or mentioned since the model does not try to predict a value (but probabilities). The outcome can only be 0 or 1 which is why it takes a binomial distribution. Therefore, the ICC for multilevel logistic regression is calculated: $ICC = \frac{\sigma^2_{u_{0j}}}{\sigma^2_{u_{0j}} + (\frac{\pi^2}{3})}$. Theoretically, the ICC can range from 0 to 1 and gives the share of variance of the outcome variable that can be explained by cluster differences. The ICC of the null model here is 0.047, which means that 4.7% of the variance of the dependent variable can be explained by country differences. Researchers suggests an ICC of minimum 0.05 (5%) as meaningful enough, to proceed analysis and explore the effects of context differences. However, this is not a binding threshold. As low ICCs typically are low in surveys of social sciences, Tausendpfund (2020) suggests to continue also with a low ICC value if there is good theoretical reason. As has been tried to show above, the countries quiet differ in their preference for joint decision making in environmental questions, but less in the typical explanatories of general EU or environmental attitudes (on aggregate level), which is why it is argued to justify further analysis on the basis of a multilevel model.

Furthermore, the null model serves as a baseline model. It provides first values that are be used as a reference to track the model improvement in the course of the analysis as additional variables are added. In contrast to R-squared in simple linear or Pseudo R-squared in logistic regression, multilevel regression does not provide such a rather straightforward indicator of model fit. Instead, what is typically used is the deviance difference test (or likelihood ratio (LR)

test), the Akaike's Information Criterion (AIC) and the Bayesian Information Criterion. Here as well, there is no binding rule which statistic to use. In general, the smaller the Log Likelihood (LL) the better. For the LR test, the LL values of the two (nested) models are used to calculate the deviance, which can be tested with a chi-square distribution with the number of degrees of freedom that the nested models differ in (e.g., having added one predictor from the first to the latter model, df = 1).[19] If the deviance difference is significant, then it can be concluded that the model has improved with the additional parameter(s). For regression analysis the model fit typically improves as more variables are added. Often is intended to reduce complexity and explain phenomena in a parsimonious way, instead of achieving highest precision. The Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) are alternative criteria. They are also based on the LL but include the number of variables in the equation, and thus penalize for adding variables (Hox et al., 2017; Rabe-Hesketh & Skrondal, 2021). (The difference between the AIC and BIC is, that the latter applies a higher penalty.) All three values are provided in Table 1, and serve as reference values.

[19] formula deviance: $-2 * (LL)$; $LR_{\chi^2}(df) = deviance_{previous\ model} - deviance_{larger\ model}$

Table 1: Logistic multilevel regression results Europeanization support: null model (M0) and fixed effect models (M1 – M8), logistic regression coefficients

	M0	M1	M2	M3	M4 + EPI	M5 + Pol Env	M6 + GDP	M7 + Budget	M8 + Acc. Yea
Image of the EU (1-5)		0.493***		0.415***	0.416***	0.416***	0.416***	0.415***	0.416***
		(0.066)		(0.060)	(0.060)	(0.060)	(0.060)	(0.060)	(0.060)
CC Concern (1-10)		0.131***		0.117***	0.117***	0.117***	0.117***	0.117***	0.116***
		(0.021)		(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Gender (ref. male)			0.072	0.016	0.016	0.016	0.016	0.016	0.016
			(0.052)	(0.050)	(0.049)	(0.050)	(0.050)	(0.050)	(0.050)
Age			-0.006***	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Education (ref. < 15 / no)									
16-19 years/still studying			-0.019	-0.038	-0.037	-0.036	-0.037	-0.038	-0.030
			(0.090)	(0.089)	(0.089)	(0.089)	(0.089)	(0.089)	(0.090)
>=20 years/still studying			0.049	-0.048	-0.049	-0.046	-0.050	-0.048	-0.039
			(0.139)	(0.118)	(0.118)	(0.118)	(0.118)	(0.118)	(0.119)
Class (ref. low)									
Middle			0.188***	0.092	0.091	0.091	0.090	0.091	0.091
			(0.051)	(0.054)	(0.055)	(0.055)	(0.054)	(0.055)	(0.054)
High			0.392***	0.196*	0.193*	0.194*	0.192*	0.194*	0.193*
			(0.095)	(0.082)	(0.082)	(0.082)	(0.082)	(0.082)	(0.080)
Frequ. pol discuss (ref. never)									
occasionally			0.221**	0.183*	0.184*	0.184*	0.183*	0.183*	0.186*
			(0.070)	(0.073)	(0.073)	(0.073)	(0.073)	(0.073)	(0.072)
frequently			0.191*	0.068	0.067	0.068	0.067	0.067	0.071
			(0.080)	(0.074)	(0.074)	(0.074)	(0.074)	(0.074)	(0.073)
Left-right ideology			0.069	0.130	0.130	0.130	0.130	0.130	0.130
			(0.094)	(0.071)	(0.071)	(0.071)	(0.071)	(0.071)	(0.070)
Left-right squared			-0.012	-0.013*	-0.013*	-0.013*	-0.013*	-0.013*	-0.013*
			(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Place of residence (ref. rural area / village)									
Small / middle-sized town			0.059	0.045	0.043	0.043	0.044	0.043	0.043
			(0.072)	(0.086)	(0.087)	(0.087)	(0.086)	(0.086)	(0.087)

Large town			0.116	0.070	0.069	0.069	0.070	0.069	0.071
			(0.081)	(0.092)	(0.092)	(0.092)	(0.092)	(0.092)	(0.093)
Left-right ideology				0.355*	0.357*	0.355*	0.358*	0.355*	0.358*
				(0.147)	(0.147)	(0.147)	(0.147)	(0.147)	(0.147)
Left-right squared				-0.287**	-0.290**	-0.288**	-0.289**	-0.288**	-0.290**
				(0.102)	(0.101)	(0.102)	(0.102)	(0.101)	(0.102)
EPI					0.033**				
					(0.011)				
Political Environm.						0.057*			
						(0.027)			
GDP logged							0.344**		
							(0.106)		
Net budget contribution								0.000*	
								(0.000)	
Accession year (ref. 1958)									0.000
1973									-0.345
									(0.178)
1981									-0.217
									(0.123)
1986									0.387
									(0.324)
1995									-0.261
									(0.211)
2004									-0.461**
									(0.175)
2007									-0.866***
									(0.187)
2013									-0.596***
									(0.128)
Constant	0.977***	-1.625***	0.951**	-1.567***	-1.578***	-1.576***	-1.570***	-1.564***	-1.317***
	(0.084)	(0.327)	(0.319)	(0.406)	(0.410)	(0.407)	(0.413)	(0.417)	(0.380)
Country level variance	0.160**	0.177***	0.150**	0.169***	0.125***	0.147***	0.129**	0.152**	0.072***
	(0.050)	(0.046)	(0.050)	(0.046)	(0.037)	(0.039)	(0.046)	(0.048)	(0.017)
Observations	26460	25921	21060	18543	18543	18543	18543	18543	18543
N Cluster	28	28	28	28	28	28	28	28	28

AIC	29778.126	27811.326	23557.957	19916.348	19912.106	19914.312	19912.050	19915.968	19908.877
BIC	29794.493	27843.977	23669.329	20057.249	20060.835	20063.041	20060.779	20064.697	20088.917
Log Likelihood (LL)	-14887.063	-13901.663	-11764.979	-9940.174	-9937.053	-9938.156	-9937.025	-9938.984	-9931.438

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.2.1 Random Intercept

In the second step, *random intercept* (or *fixed effect*) models are ran. First individual level (Table 1, M1 – M3), secondly, country level variables are added (M4 – M8). Instead of reporting the log odds that are provided in the regression table, results will be described in terms of probabilities and marginal effects for easier understanding.

Individual level effects

Moving from the null model (M0) to Model 1 to 3, which include individual level variables only, the LL, AIC and BIC naturally largely decrease. Model 1 includes the hypothesized main explanatories of EU image and climate change concern and Model 2 the socio-demographic and ideological orientation. Both steps are presented to firstly, see the general effect of EU support and climate change concern, and secondly, see the preliminary effects of sociodemographic factors and ideology when EU support and climate change concern are *not* included. The contrast to Model 3 then illustrates to what extent sociodemographic and political orientation predict EU image and / or climate change concern, and if or how much explanatory power of these variables remains. For instance, Model 2 suggests significant effects for age, class and the frequency of political discussions on the EU. That is, just looking at sociodemographic factors, younger people, people of (self-reported) higher class, and who more often engage in discussions on the EU are more likely to support the Europeanization of environmental policies. In Model 3 these effects largely diminished or have gone. Firstly, this supports (if only roughly) the sociodemographic explanatories for EU support and environmentalism that has been found in previous research. Which, secondly, are mediated by EU support and climate change concern, and that age, social class and the frequency of political discussions still exert an own effect. (Separate regressions on EU support and climate change concern can be found in Appendix C, Table C1.) Similarly, the effects of EU image and climate change concern do decrease comparing Model 1 and Model 3. The latter further contains dummy variables for the dissatisfaction with the national conditions and the EU, as both were found to largely improve model fit. Interestingly and different than from what expected, there is no effect for higher education in neither Model. Whereas, Model 2 with a linear term for left-right orientation only (no squared term), would show a highly significant negative effect, i.e., left-wing people being more supportive. This version is not presented here because it also dissipated and a curvilinear effect fared better in the subsequent analyses.

Finally, moving to the interpretation of Model 3 more detailed: Equation 2 gives the mathematical notation of the fixed effect model with individual level variables only.

$$logit(odds) = \gamma_{00} + \gamma_{10} * x_{ij} + u_{0j} \text{ (Eq. 2)},$$

where in addition to the constant and country variance as above, x_{ij} refers to the individual level variable(s) for individual *i* in *j* country, and γ_{10} to the fixed effect of that variable. The log odd of the constant converted into probability tells that an individual in an average country, with all individual level markers at 0, has an about 17 % probability of preferring joint EU decision-making in environmental questions over national decision making. The practical implication of the constant in these models, however, is only limited since variables (expect gender, country and EU dissatisfaction) start with value 1 as a reference. Regarding the effect of individual level characteristics, it clearly can be said that, controlled for sociodemographic markers, pro-EU attitudes and climate change concern increase the probability of supporting joint EU decision making, which lends support for H1 and H2. More precisely, a one-point increase of climate change concern (scaled 1 to 10) increases the probability for support of joint decision making *on average* for 2.1 percentage points (pp).[20] A one-point increase in the image of EU (scaled 1 to 5) brings a 7.6 pp. probability increase on average. Model 3 also contains the benchmarking variable of general dissatisfaction with the government ("Things are going in the wrong direction"), and the additional dissatisfaction with the EU, to control for the outcome not merely to be an expression of dissatisfaction with the one or the other. People that are dissatisfied with their national government are also more likely (6.3 pp.) to prefer joint EU environmental policies (at 5% significance). Which supports the idea of benchmarking national circumstances against the EU. Even though it cannot be concluded here, that this is due to dissatisfaction with national *environmental* policies, but more general dissatisfaction. In contrast, dissatisfaction with the EU also decreases preference for environmental EU policies (5.3 pp.). Apparently, people who consider themselves belonging to the higher class (in contrast to the lowest) are more likely to support Europeanization of environmental policies (xx pp. increase, though for the latter this a result at 'only' 95% confidence.) Unlike people who never talk about political matters regarding the EU, those who occasionally discuss related issues are more likely to prefer environmental EU decisions, whereas this cannot be said for sure for people frequently engage in this. There is no obvious reason why (only) the middle category of

[20] Strictly speaking, is the effect not linear, which is why the averaged effect is emphasized.

political discussions on the EU has a positive effect. It nicely illustrates though, that `political discussions' per se do not increase knowledge and competence, but it must be differentiated at which level, with whom, and the direction of the discussions people engage in. There is no clear evidence for an effect of political orientation in the left-right dimension. By trend, the numbers suggest a curvilinear relationship in the shape of an inverted-U. That is, people that place themselves at the edges of the political left and right, are more negative toward environmental policies at EU level, than people in the more 'moderate' middle. In terms of significance, this relationship is to handle with care. However, the pattern resembles that of general EU support, where people on the very left and right are generally more skeptical toward the EU, which finds expression in EU-skeptical parties of the radical left (rather in South Europe) and radical right (more prominent in Central and North Europe) (e.g., De Vries, 2018). There is no effect for gender, age, education and place of residence.

One remark on missing cases: As can be seen from Table 1 adding individual level variables substantially decreases the number of observations, mostly due to the ideological left-right variable which contains almost 5000 missing cases. It could be assumed that the loss of almost 8000 cases reduces power of the calculations. To check the possible influence of this loss, robustness tests were conducted in which missing values were replaced with the corresponding country mean. Running the same regression models again, did not lead to considerable modifications. This is also confirmed by methodological literature on multilevel analyses, which generally emphasizes the number of cases at higher levels as more decisive than the number of cases at the first level (Braun et al., 2010).

Country level effects

In the next step, still in random intercept / fixed effect model, country level variables are added (Table 1, Model 4 – 8). The variables are added individually, one at a time, to better follow the changes of country level variance and model fit. As the country level variables EPI, political environmentalism and GDP are centered, the constants of these models (M4 – M6) can be interpreted as the probability (or log odds) of Europeanization support for an individual from a country of the mean of the country level variable, but all individual level variables at value 0. The interpretation of the constant in this regard, again is of limited meaning. Starting with the EPI (Table 1, M4), that should indicate how well a country performs in several fields of

environmental protection, the coefficient indicates a positive relationship at 99% confidence.[21] The log odd, and predicted probability can be calculated with the equation 3:

$$logit(odds) = \gamma_{00} + \gamma_{10} * x_{ij} + \gamma_{01} * X_j + u_{0j} \text{ (Eq. 3),}$$

which is equation 2 complemented by higher level country level effects: X_j denotes the variable (e.g., EPI) for j country and γ_{01} the effect. Controlled for the individual level variables discussed above, a one-point increase of the EPI (centered -9.3 to 10.5) brings on average an increase of 0.6 pp. in the probability of preferring joint decision making at EU level. Or in other words, average people (regardless their individual predisposition) in the country with the lowest EPI have a predicted probability of 66% of preferring joint EU decision making and people in the country with the highest EPI a probability of 78% (figure 11). Model 4 therefore lends support for H3a: People in more environmentally progressive countries, are more likely to prefer EU decision making. When it comes to the magnitude of the effect, however, it cannot be said, that a country's environmental performance exerts a huge effect, also when considering the fact that European countries range from 57% to 89% in their average of preferring Europeanization of environmental policies. Looking at the country level variance of Model 4, Environmental Performance contributes to explain roughly 26% of the country level variance that resulted from Model 3.[22] As the AIC (if slightly) decreased and the chi-square test of the deviance proves significant[23], it can be concluded that adding the EPI at the country level improves the model fit, although this cannot be said for the BIC. To conclude, environmental progressiveness as measured with the EPI, has a small but positive effect on preferences for Europeanization.

[21] Originally, the countries' share of renewable energies and carbon emissions per capita where hypothesized to have an effect. Both variables are still in the dataset. Due to non-effects and the better suitability of the EPI, results are not presented.

[22] Formula share of explained country level variance: $1 - \frac{Country\ level\ variance\ new\ model\ \sigma^2_{u_{0j}}}{Country\ level\ variance\ previous\ model\ \sigma^2_{u_{0j}}}$, example for this case: $1 - (\frac{0.125}{0.169}) = 0.26$

[23] To provide one example calculation $19880.3 - 19874.1 = 6.2$. A Chi-square value of 6.2 with 1 degree of freedom ($19 - 18 = 1$) is significant at $p < 0.001$.

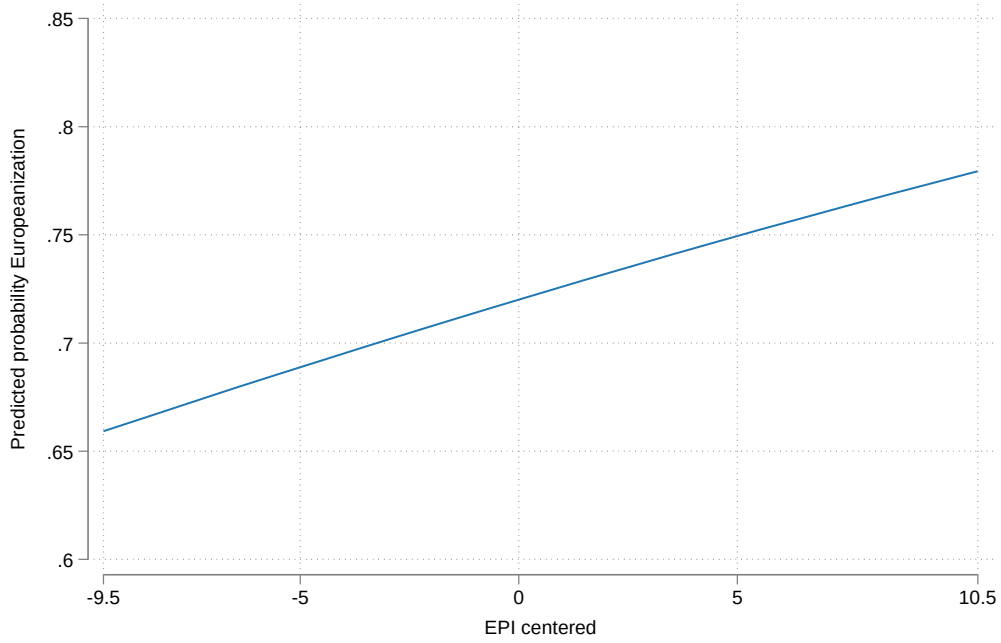


Figure 11: EPI predictive margins for support of Europeanization, 95% CI (based on table 1, M4).

Testing the second hypothesized macro level effect, Model 5 presents the random intercept for political environmentalism. The positive coefficient allows the conclusion (with > 95% certainty), that in countries where environmental protection is more salient and positively treated in parliament, people are more likely to support Europeanization of the domain. Which is why Hypothesis 4b tentatively can be confirmed. More precisely, a one-point increase on the scale (centered -6.5 – 6.9) brings a 1.0 pp. increase in the probability of support for Europeanization, i.e., a probability of 64.7% for the country with the lowest, and 87.7% for the country with the highest value of political environmentalism (figure 12). In terms of magnitude, political environmentalism similar explanatory power as the EPI, so is still not overwhelming. It can reduce 13% of the country variance (in contrast to Model 3), which is less than for the environmental performance model. Similarly, the AIC and deviance are slightly smaller than for Model 3[24], but still larger than for Model 4. The stricter measure BIC, however, still suggests a better fit of Model 3.

[24] Chi-square test of deviance: $p < 0.00$.

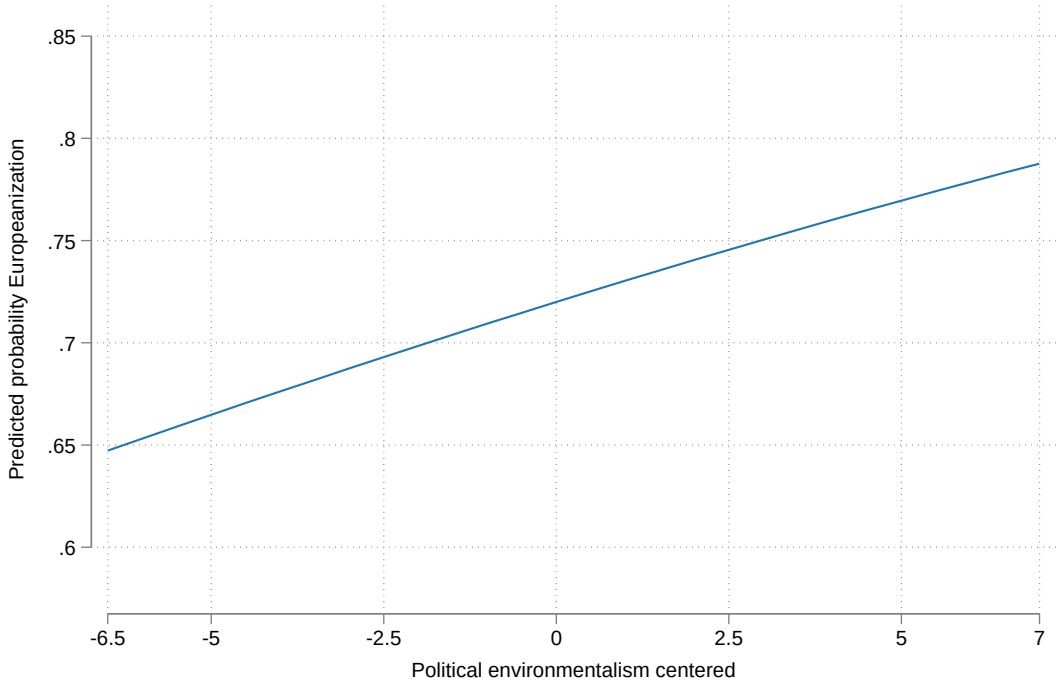


Figure 12: Political environmentalism predictive margins for support of Europeanization, 95% CI (based on table 1, M5).

Finally, Model 6 to 8 test for the effects of GDP per capita, net budget contribution and accession year. Firstly, it can be said that with a country's affluence the probability of people in these countries supporting Europeanization increases (with > 99% certainty). A one-point increase in (logged) GDP pc means a 6.2 pp. probability increase. All three model fit indicators suggest a very similar fit to the EPI model (M5). But the EPI predictor explains more country level variance than the GDP. In comparison to Model 3, GDP can explain about 24% of country level difference.

A country's net contribution to the EU budget has a positive effect on Europeanization support (at < 5% significance) (Model 7). The more a country contributes to the EU budget (more than receiving) the more people are pro-europeanization. The variables contribution to explain country level variance, however, is quite small (10%) nor is the fit substantially improved.

The largest context level effect is the year of accession to the EU (Model 8). In reference to the six founding members (1952/1958), almost all country that joined the EU in 2004 and later have a lower probability of preferring environmental decision-making at EU level. The year of EU accession accounts for 42.3% of country level variance, and so do deviance chi-square test and AIC (but not BIC) suggest a significant model improvement. It must be said though, that the measure is a little tricky, since some years contain only very few or one country (e.g., 1981

Greece, 2013 Croatia) and thus resembles the strategy of adding countries as dummies. The accession year still does not depict a particular country feature itself, i.e., the accession year by itself does not explain the outcome differences. Still, it gives a valuable insight on country groups that apparently have a significantly different position toward the Europeanization. As was implied in literature (see above), countries from East Europe (often grouped and explained as post-soviet countries including the Baltic states) differ from the founding or earlier accession members, in their disposition toward the EU. (Without going too much into detail) This is typically explained in terms of a post-communist heritage in (political) culture and eco-nomic conditions, which in turn correlates with national affluence (as GDP) or cleavages and party systems.

For the country level factors that prove to have a significant effect as well as improved model fit in reference to Model 3 (at least based on AIC and LR test), country level variables were added jointly in a next step (EPI and political environmentalism were tested together in one model, EPI and GDP and so on). No combination of country level variables could improve the model fit, nor did effects remain significant (results reported in Appendix C, Table C2), although they naturally explain more country level variance.

Here two more remarks: The first with regard to the statistical nature and requirements of multilevel analysis itself. Literature on multilevel analysis emphasizes the number of observations at the higher level over the number of observations at the lower level. That is, a high number of countries is more important than the group size itself, especially for logistic regressions. 50 macro units minimum are suggested for reliable estimations (Hox et al., 2017; Sommet & Morselli, 2017). In the case of cross-country studies, where the number of countries is limited and for Europe even lower, independent country level variables should be added in tentative way. Mehmetoglu (2016) suggests a minimum of 10 macro observations for each independent variable at the higher level as a guideline. This means a maximum of two country level variables for the analysis of 28 countries. Moreover, it should be noted that, although the inclusion of context effects is generally appreciated in social sciences, significant context effects are seldom found (Tausendpfund, 2020). A second remark refers to the country level variables used here and the problem of multicollinearity. The environmental performance index is moderately positively correlated with political environmentalism ($r = 0.4$), and highly positively correlated with GDP ($r = 0.8$ for the logged GDP). Accordingly, political

environmentalism is moderately positively correlated with GDP (r = 0.5 for the logged GDP).[25] The year of EU accession is negatively correlated with the EPI and GDP. That is, 'newer' member states have lower EPI and GDP than the founding members, with exception of the countries of accession year 1995 (Austria, Finland, Sweden) (tested in regression, R-squared > 0.6 and 0.7). For political environmentalism, only countries accessed in 2004 have significantly lower values than the founding members (and countries accessed in 1986 – Portugal and Spain). The partly strong intercorrelation, explains why explanatory power and significance of the single explanatory variables is reduced. It shows also, however, how things are linked. It is self-evident that environmental progressiveness (measured in objective terms as the EPI) is not possible without some extent of environmental awareness also at the political level (political environmentalism). The relation of both, however, is rather stable as they develop over time. A quite imaginable exception could be a larger shift of majorities in parliament, after a parliamentary election. The correlation of GDP and EPI, on the other hand, reveals that environmental standards and protection policies are also a matter of affluence, as at least can be concluded for the member states of the European Union (figure 13). The GDP of the younger member states, namely countries of the Eastern and Baltic group (apart from Malta and Cyprus), is much lower than that of the older member states. These linkages do not make a perfect correlation and explanation, especially since the countries of Southern Europe turn out as a distinct case, with lower GDP but still higher rates in political environmentalism and environmental performance. But it shows that, beyond individual level factors, there is a more 'objective' side of macro level conditions that are part of the explanation.

[25] A Variance Inflation Factor (VIF) of 2.6, however, did not indicate a severe problem of multicollinearity.

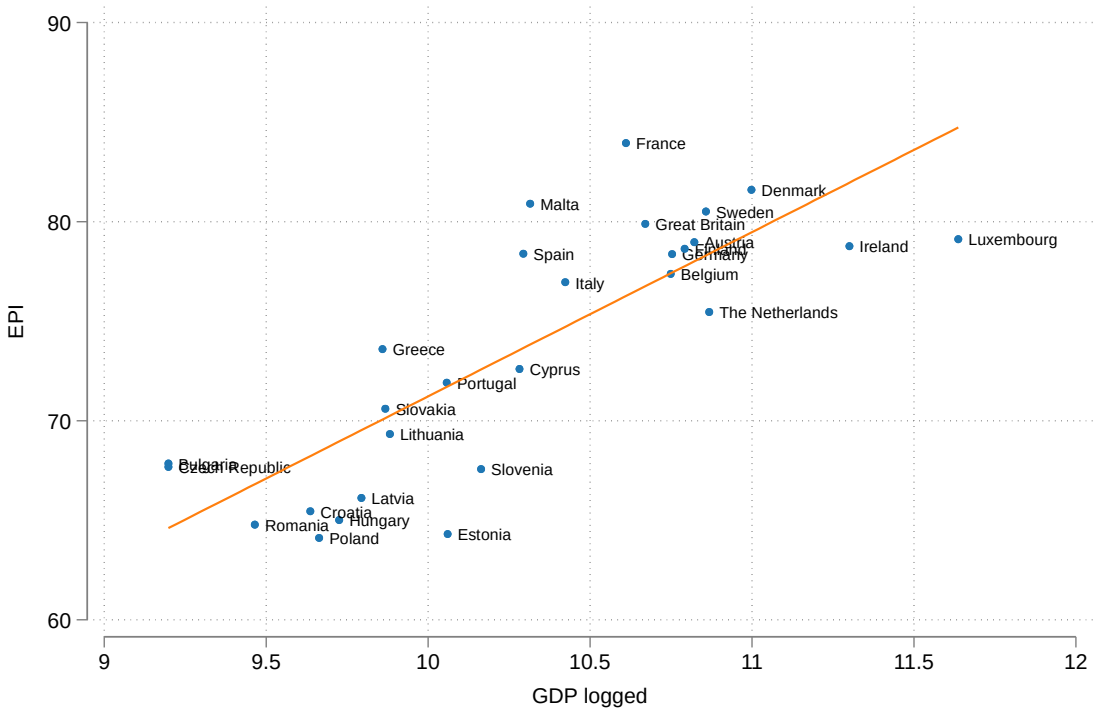


Figure 13: GDP & Environmental Performance Index, country scatter plot and regression fit, 95% CI.

Another important observation is that the effects of the individual level predictors do not substantially change moving from Model 3 to a model with higher level variable(s). That is, an individual's support of the EU as well as the importance attributed to environmental protection has a significant effect on the support for Europeanization of environmental protection policies. Once both these variables plus the current dissatisfaction with the national and EU conditions are controlled for, there is no more clear consistent effect of sociodemographic characteristics. figure 14-16 illustrate the effects as margins plots on the basis of Model 4. The model with the country level effect of environmental performance (EPI) was the model with the best fit (AIC and deviance, besides the GDP model) and most explained country level variance.

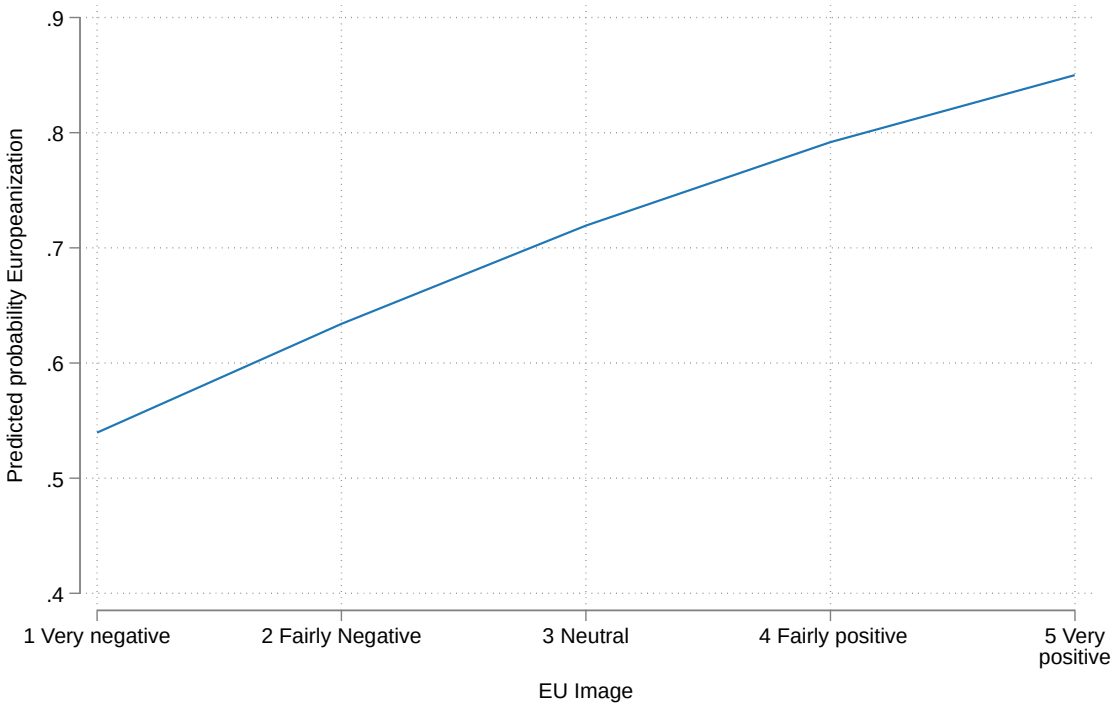


Figure 14: Predictive margins of Europeanization for EU image. 95% CI.

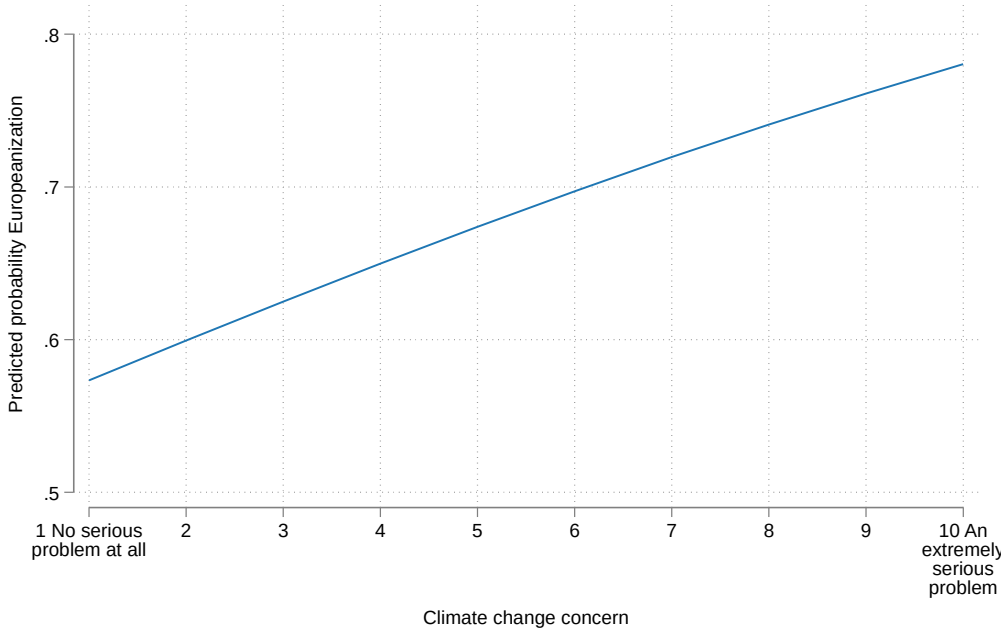


Figure 15: Predictive margins of Europeanization for climate change concern. 95% CI.

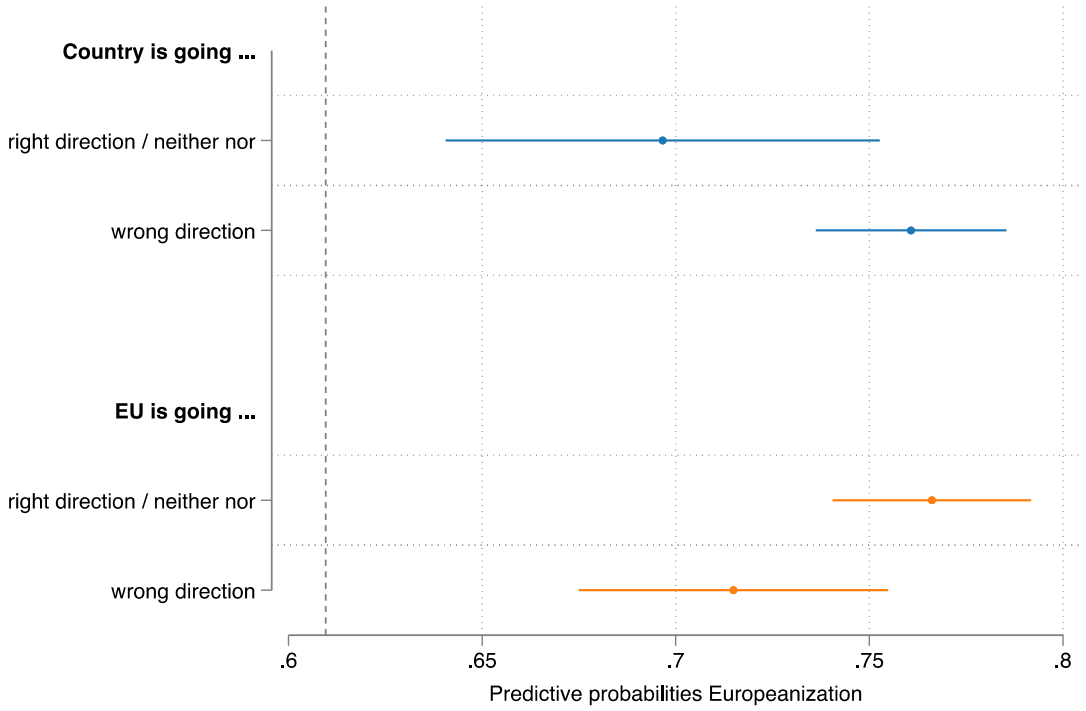


Figure 16: Predictive margins of Europeanization for country & EU dissatisfaction. 95% CIs.

4.2.2 Random Slope

The random intercept models above allowed for varying intercepts for countries depending on the country average of the independent (individual level) variables. The effect sizes, however, were assumed to be the same for all countries (the effects were *fixed*). As could be shown, on average across countries, the effects of a positive EU image and climate change concern seem to be quite robust, whereas there is no evidence for effects of age, class or political orientation. Nevertheless, it is imaginable that the effects of the individual level variables vary between countries, not only in magnitude but may be negligible in some countries even. For instance, in some countries, the implications of joint decision making at EU level more generally (regardless of the issue) may be more important than the actual policy domain, which is why EU support could exert a large effect but not the importance of environmental protection. In the next step, the multilevel model can be extended to random slopes to test for varying effects across countries.

Equation (4) gives the technical denotation of the random slope model:

$$logit(odds) = \gamma_{00} + \gamma_{10} * x_{ij} + \gamma_{01} * X_j + u_{0j} + u_{1j} * x_{ij} \quad \text{(Eq. 4)}$$

The formula of the fixed effect model (Eq.3) is extended by a random part, in which u_{1j} denotes the random residual error term (which is different for every group) for the individual level variable x_{ij}.

Table 2 shows the random intercept model (M0, which is M3 from Table 1 – the fixed effect model with individual level variables only) as a baseline, and three models including random effects for EU support (M1), climate change concern (M2) and age (M3).[26] For all three models, all three fit indicators suggest a model improvement. Yet, the variance term for climate change concern is not significant. Figures 17 – 19 provide the visualization, each line representing the effect for a country. The random slope model for EU image (M1), indicates a covariance of intercept and the EU image. A negative covariance term suggests a pattern of slopes fanning in, which means that variance at the intercept is high and the slopes converging with increasing values of EU image. The visualization (figure 17) makes the confirmation of this pattern difficult. But it can be seen that apparently there is no or even negative effect of EU image in a few countries, whereas it is strongly positive in others. The graph does not provide confidence intervals, so certainly not all visualized effects can be confirmed. But at least it can be concluded that the effect of a positive EU image varies across countries.

[26] To limit the time of computation, random slope models were run with the STATA default integration points (7). Country level variables (as EPI) were no more included, since some regression models did not converge. For every model covariance of constant and independent variable was also tested.

Table 2: Random Slope Models

	M0 Fixed effect (reference)	M1 EU image	M2 Climate change concern	M3 Age
Image of the EU (1-5)	0.415***	0.347***	0.412***	0.416***
	(0.060)	(0.053)	(0.060)	(0.061)
CC Concern (1-10)	0.117***	0.116***	0.122***	0.117***
	(0.018)	(0.018)	(0.020)	(0.018)
Gender (ref. male)	0.016	0.015	0.017	0.015
	(0.050)	(0.048)	(0.048)	(0.049)
Age	-0.004	-0.004	-0.004	-0.005**
	(0.002)	(0.002)	(0.002)	(0.002)
Education (ref. < 15 / no)				
16-19 years/still studying	-0.038	-0.047	-0.035	-0.042
	(0.089)	(0.089)	(0.090)	(0.096)
>=20 years/still studying	-0.048	-0.061	-0.045	-0.062
	(0.118)	(0.117)	(0.120)	(0.128)
Class (ref. low)				
Middle	0.092	0.090	0.091	0.092
	(0.054)	(0.053)	(0.056)	(0.055)
High	0.196*	0.208*	0.202*	0.197*
	(0.082)	(0.085)	(0.083)	(0.083)
Frequ. pol discuss (ref. never)				
occasionally	0.183*	0.180*	0.184*	0.185*
	(0.073)	(0.074)	(0.072)	(0.072)
frequently	0.068	0.052	0.059	0.058
	(0.074)	(0.078)	(0.072)	(0.075)
Left-right ideology	0.130	0.141*	0.127	0.122
	(0.071)	(0.062)	(0.071)	(0.069)
Left-right squared	-0.013*	-0.014*	-0.013*	-0.013*
	(0.006)	(0.005)	(0.006)	(0.006)
Place of residence (ref. rural area / village)				
Small / middle-sized town	0.045	0.053	0.047	0.044
	(0.086)	(0.085)	(0.086)	(0.084)
Large town	0.070	0.069	0.069	0.075
	(0.092)	(0.095)	(0.092)	(0.092)
Country wrong direction	0.355*	0.315*	0.355*	0.354*
	(0.147)	(0.124)	(0.145)	(0.151)
EU wrong direction	-0.287**	-0.278**	-0.287**	-0.283**
	(0.102)	(0.098)	(0.101)	(0.104)
Constant	-1.567***	-1.355***	-1.584***	-1.500***
	(0.406)	(0.366)	(0.414)	(0.399)
Country level variance	0.169***	0.753*	0.176*	0.160**
	(0.046)	(0.362)	(0.083)	(0.060)
Variance EU image		0.043*		
		(0.017)		
Covariance EU image & constant		-0.162*		
		(0.073)		
Variance CC concern			0.002	
			(0.002)	
Variance Age				0.000*
				(0.000)
Observations	18543	18543	18543	18543

N cluster	28	28	28	28
AIC	19916.348	19838.447	19894.763	19899.937
BIC	20057.249	19995.004	20043.492	20048.666
Log-Likelihood (LL)	-9940.174	-9899.223	-9928.382	-9930.968

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The model with random effect for climate change concern (M2) generally also points to an improvement over the fixed effect model. The variance coefficient, however, is rather small and not significant. Additionally, figure 18 confirms the impression, that the slope runs quite parallel in most of the countries, with very few exceptions of course. Thus, it can be concluded that, the exact magnitude of climate change concern naturally varies, but overall, the positive effect is similar across countries.

Though the reference model did not suggest a significant effect of age, a random slope model and visualization indicate that countries vary in this regard. It gives reason to suspect varying effects of sociodemographic variables and political orientation, as is conducted below (Chapter 4.3).

Researchers have already addressed several problems of mixed models as with (logistic) multilevel models, especially in social sciences with (not random) limited number of countries (e.g., Möhring, 2012). The 'conventional' approach of multilevel analysis proposes to proceed with including interaction models after an improved model fit with random effect was found. However, random effects should be included only parsimoniously and with good theoretical reason. Too complex models easily lead to problems of non-convergence and overparameterization that make results uninterpretable (Bates et al., 2018).The test for random slopes at this point was rather of explorative nature and for illustrative purpose. To avoid computational time, analysis proceeds with testing interaction effects on the basis of the random effect model. This and following simple logistic regression will take up the issue of varying effects across countries and country groups again.

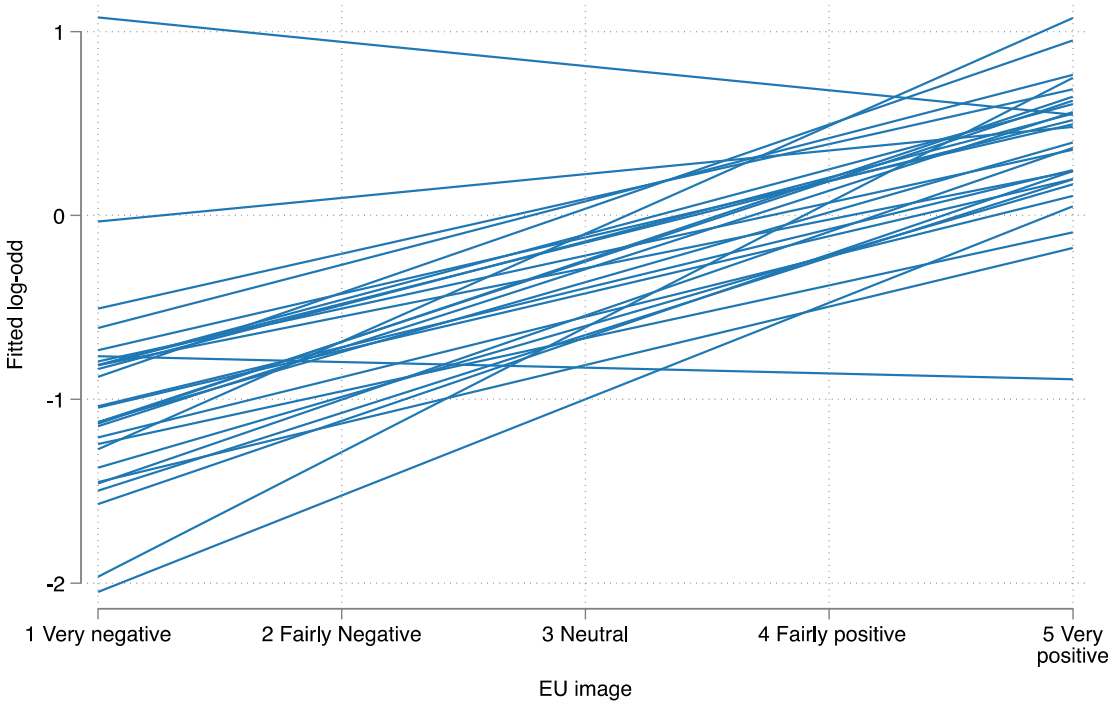


Figure 17: Random slopes for effect of EU image.

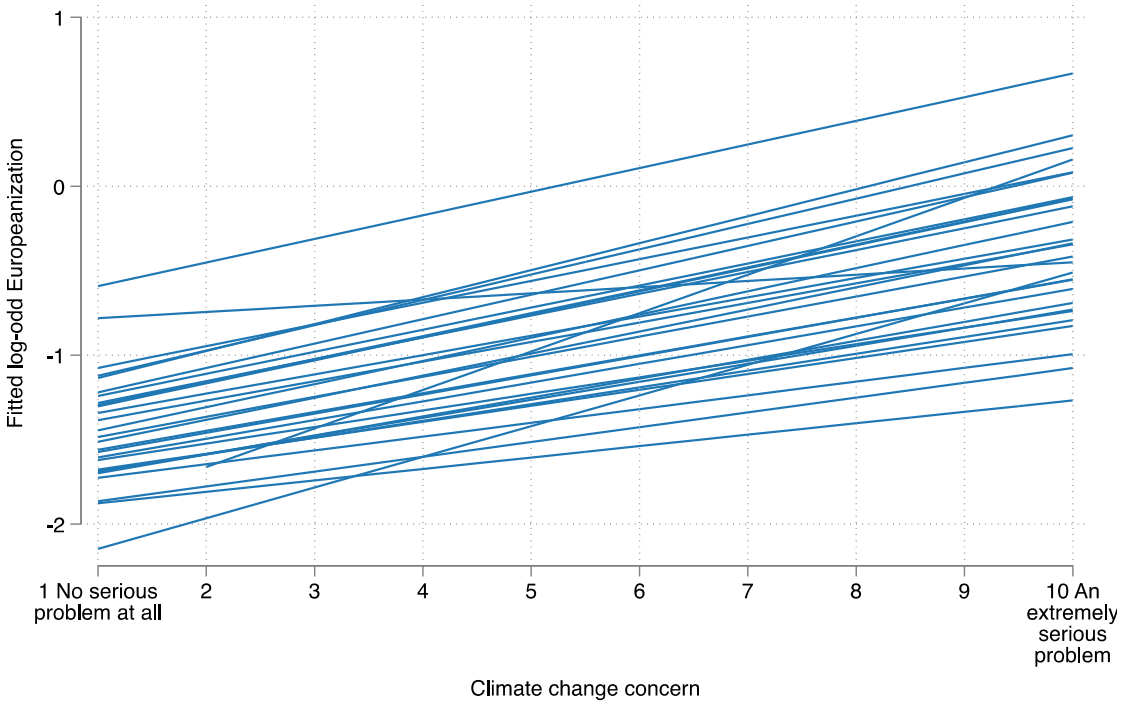


Figure 18: Random slopes for effect of climate change concern.

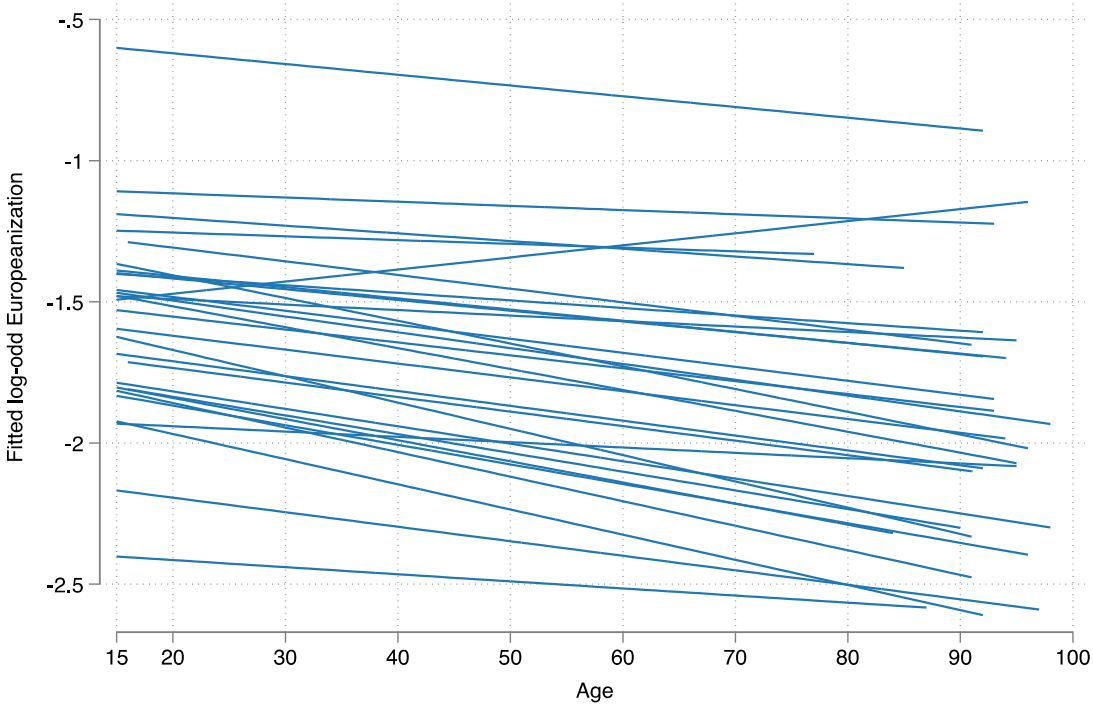


Figure 19: Random slopes for effect of age.

4.2.3 (Cross-level) Interactions

Effects can vary not only across countries, but also with different values of covariates. The following section presents the results of such presumed interactions. Table 3 presents the interaction effect models for H5 to H7.[27]

[27] As a reference, the fixed effect M4 (with EPI) and M5 (political environmentalism) (Table 1) were used.

Table 3: Interaction Effect Models (H5-H7)

	M0a Reference	M1a Interaction H5	M2a Interaction H6	M0b Reference	M1b Interaction H7
Image of the EU (1-5)	0.416***	0.301***	0.416***	0.416***	0.418***
	(0.060)	(0.086)	(0.060)	(0.060)	(0.060)
CC Concern (1-10)	0.117***	0.072	0.116***	0.117***	0.114***
	(0.018)	(0.037)	(0.014)	(0.018)	(0.017)
Gender (ref. male)	0.016	0.018	0.016	0.016	0.015
	(0.049)	(0.049)	(0.049)	(0.050)	(0.050)
Age	-0.004	-0.004	-0.004	-0.004	-0.004
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Education (ref. < 15 / no)					
16-19 years/still studying	-0.037	-0.038	-0.037	-0.036	-0.034
	(0.089)	(0.088)	(0.087)	(0.089)	(0.090)
>=20 years/still studying	-0.049	-0.050	-0.049	-0.046	-0.046
	(0.118)	(0.117)	(0.118)	(0.118)	(0.119)
Class (ref. low)					
Middle	0.091	0.090	0.091	0.091	0.088
	(0.055)	(0.055)	(0.055)	(0.055)	(0.055)
High	0.193*	0.191*	0.193*	0.194*	0.197*
	(0.082)	(0.083)	(0.082)	(0.082)	(0.084)
Frequ. pol discuss (ref. never)					
occasionally	0.184*	0.185*	0.183*	0.184*	0.185*
	(0.073)	(0.072)	(0.072)	(0.073)	(0.075)
frequently	0.067	0.064	0.067	0.068	0.070
	(0.074)	(0.074)	(0.070)	(0.074)	(0.074)
Left-right ideology	0.130	0.130	0.130	0.130	0.129
	(0.071)	(0.070)	(0.072)	(0.071)	(0.071)
Left-right squared	-0.013*	-0.013*	-0.013*	-0.013*	-0.013*
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Place of residence (ref. rural area / village)	0.000	0.000	0.000	0.000	0.000
Small / middle-sized town	0.043	0.043	0.043	0.043	0.045
	(0.087)	(0.087)	(0.086)	(0.087)	(0.086)
Large town	0.069	0.070	0.069	0.069	0.069
	(0.092)	(0.093)	(0.092)	(0.092)	(0.091)
Country wrong direction	0.357*	0.355*	0.357*	0.355*	0.354*
	(0.147)	(0.146)	(0.148)	(0.147)	(0.145)
EU wrong direction	-0.290**	-0.290**	-0.290**	-0.288**	-0.285**
	(0.101)	(0.102)	(0.101)	(0.102)	(0.100)
EPI	0.033**	0.033**	0.031		
	(0.011)	(0.011)	(0.024)		
Image of the EU X CC Concern		0.015			
		(0.011)			
CC Concern X EPI			0.000		
			(0.003)		
Political Environm.				0.057*	0.005
				(0.027)	(0.035)
CC Concern X Political Environm.					0.007
					(0.005)
Constant	-1.578***	-1.227**	-1.574***	-1.576***	-1.569***
	(0.410)	(0.401)	(0.405)	(0.407)	(0.403)

Country level variance	0.125***	0.125***	0.125***	0.147***	0.149***
	(0.037)	(0.037)	(0.037)	(0.039)	(0.039)
Observations	18543	18543	18543	18543	18543
N cluster	28	28	28	28	28
AIC	19912.106	19911.048	19914.074	19914.312	19909.305
BIC	20060.835	20067.605	20070.631	20063.041	20065.862
Log-Likelohood (LL)	-9937.053	-9935.524	-9937.037	-9938.156	-9934.653

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The first interaction effect hypothesized is a growing effect of EU support when individuals attach less importance to environmental protection (H5). Following the idea of a 'group-serving attribution bias, it is imaginable that when people do not care about the issue at stake (as the environment), they will more rely on their general EU attitude to form a preference for Europeanization. Model 1a in Table 3 presents the interaction coefficients and figure 20 visualizes the marginal effects of EU image for the values of environmental concern. Going by the numbers, AIC and deviance indicate a minimally improved fit. But as interaction coefficients are not significant, obviously, H5 is not supported. Despite a slight curve and narrowing confidence intervals, the line in figure 20 suggests an almost constant effect of EU image. Additionally, figure 21 illustrates the interaction in terms of two dummies (split sample), where the upper line shows the effect of EU image for people with high climate change concern (values > 5), and the lower line the effect of EU image for people with low climate change concern (values ≤ 5). The graph shows that for both groups the probability of support for Europeanization increases with a more positive EU image. The almost parallel gradient of both lines suggest that the effect of EU image is the same for people with high and low climate change concern. Therefore, it can be concluded that the effect of EU support does not vary with high, low or no climate change concern.

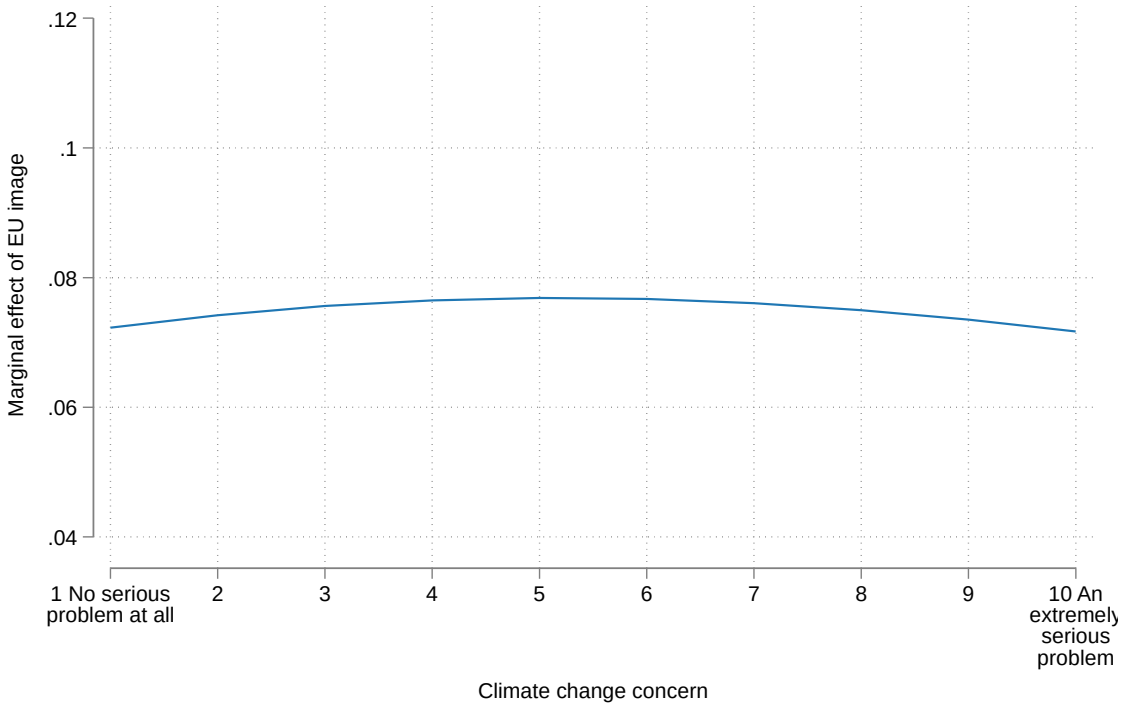


Figure 20: Average marginal effects of EU image on the predicted mean of Europeanization, with varying climate change concern. 95%CIs.

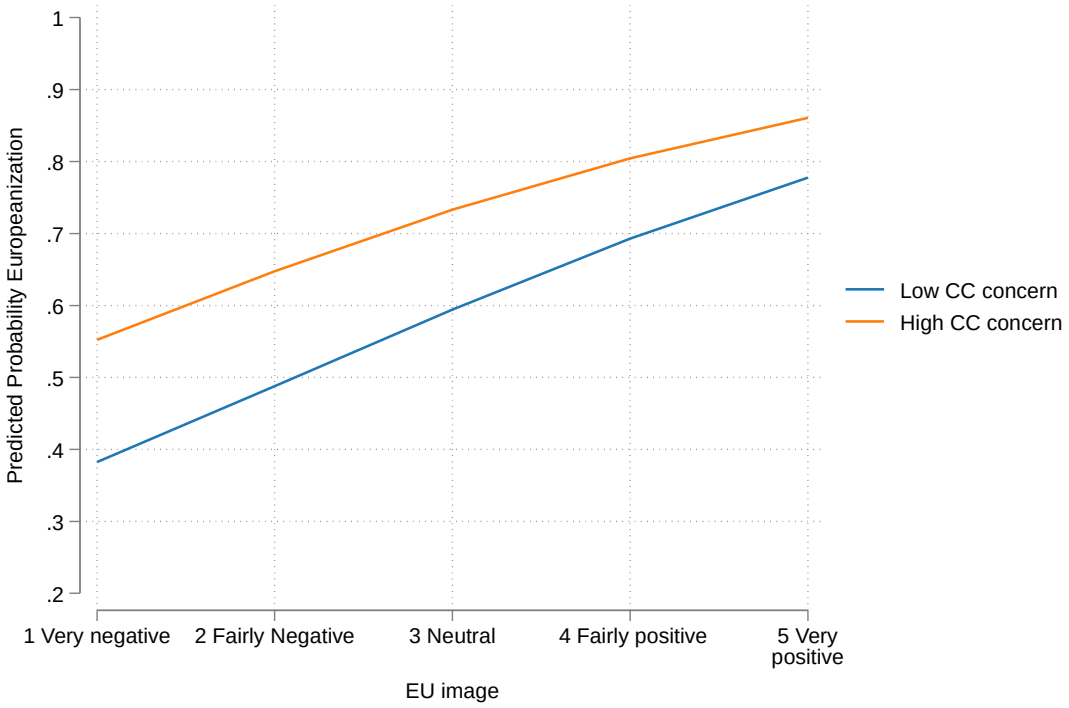


Figure 21: Predicted Probability of Europeanization by EU image, split in high and low climate change concern sample. 95% CIs.

As a specific feature of multilevel analysis, interaction effects can also be tested across levels. That is, when individual level effects are suspected to change with the values of a country level property. One such cross level interaction is hypothesized for the effect of individual climate change concern that is expected to be higher when environmental performance (EPI) is low (H6). Model 2a (Table 3) presents the coefficients of the interaction terms and figure 22 illustrates the average marginal effect of climate change concern for the (lowest to highest) values of environmental performance. The almost straightly horizontal line and the 95% confidence intervals suggest that there is no interaction effect and H6 to be rejected. In other words, there is no compensation mechanism, in the sense that highly climate change concerned people in low EPI countries would prefer Europeanization to make up for the lacking environmental engagement of their own state. For all values of the EPI, no matter if high or low, a one-point increase of climate change concern increases the probability of Europeanization support for ca. 2.0 to 2.5 pp. on average. Considering the confidence intervals, the values also may be somewhat higher or lower, but either way, the overall effect is small. Alternatively, figure 23 shows the effects of climate change concern for the countries with low EPI (< 73.6, split according to the mean) and high EPI (≥ 73.6). The probability of support for Europeanization increases with climate change concern, but the almost parallel lines show, that

this effect does not vary between both groups. What can be seen, however, how the predicted probabilities of Europeanization is higher the country group with higher political environmentalism.

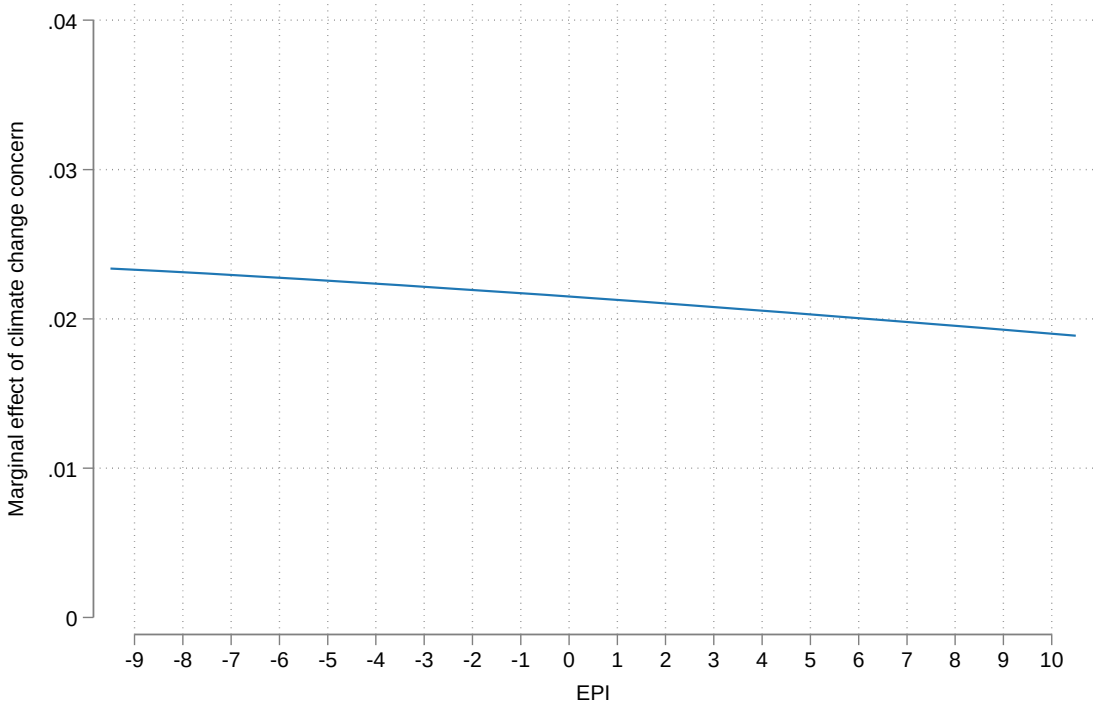


Figure 22: Average marginal effects of climate change concern on the predicted mean of Europeanization, with varying environmental performance. 95% CIs.

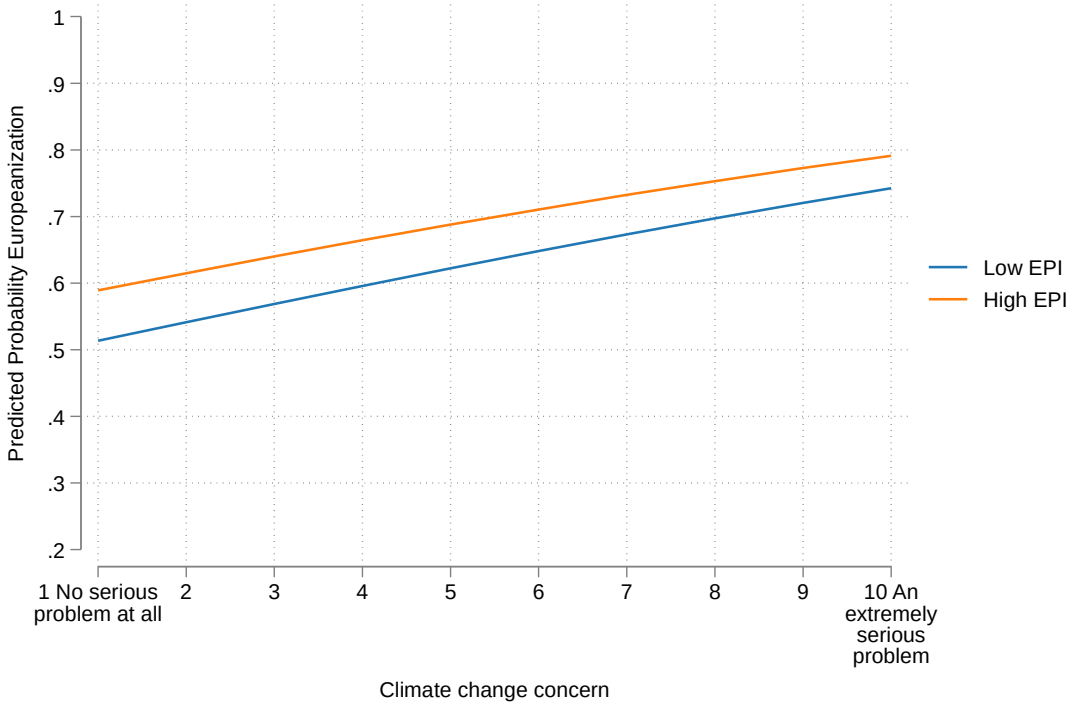


Figure 23: Predicted Probability of Europeanization by EU image, split in high and low climate change concern sample. 95% CIs.

A somehow similar effect was suspected for political environmentalism (H7). That is, in countries with low political environmentalism, the effect of importance is larger. Figure 24 shows the average marginal effect of climate change concern from lowest to highest political environmentalism, Model 1b gives the interaction coefficients. Visually, the line of the connected estimates suggests the reverse effect than hypothesized, i.e., the effect of climate change concern increases with higher political environmentalism. Alternatively, the dummy split interaction graph (split according to mean -0.77, figure 25) also shows a steeper slope for the group of countries with higher political environmentalism. A possible interpretation could be that individual environmental awareness in a context of higher political salience and progressiveness toward the issue results in a self-reinforcing cycle, so people want environmental policies to be a common European project. However, as the confidence intervals overlap, neither interaction effect can be confirmed, sticking to the null hypothesis of no different effect of climate change concern with high or low political environmentalism.

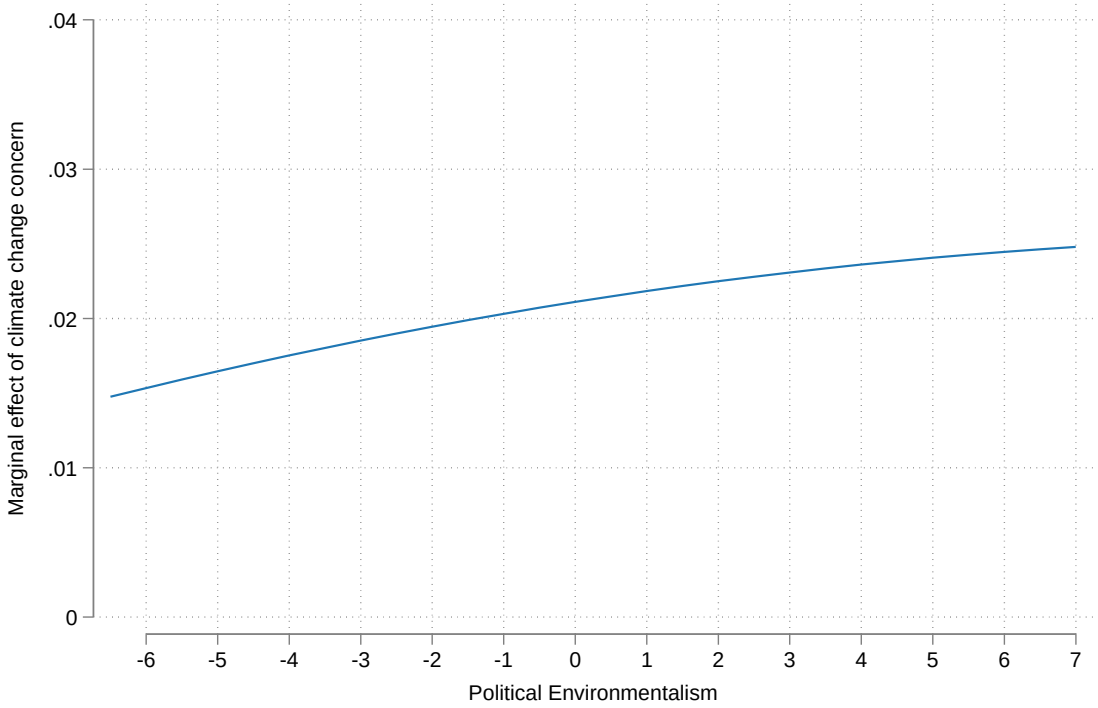


Figure 24: Average marginal effects of climate change concern on the predicted mean of Europeanization, with varying political environmentalism. 95%CI.

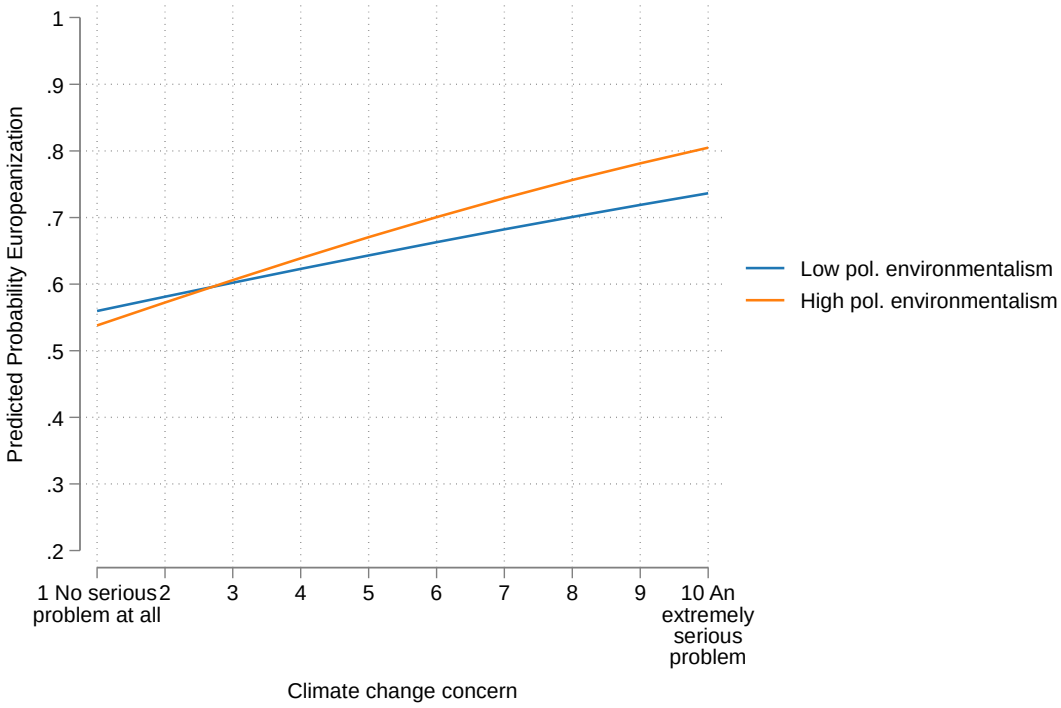


Figure 25: Predicted Probability of Europeanization by EU image, split in high and low climate change concern sample. 95% CIs.

4.3 Single country and country group regressions

So far, the analyses above have shown some main effects to explain the preference for a Europeanization of environmental policies, a positive EU image and climate change concern are factors at the individual level increasing the probability. At the country level better environmental performance (EPI) and a countries affluence (GDP), which are also related to higher political importance and salience (political environmentalism), increase support for the environmental decisions at EU level. Comparing the model(s) without and with country level variables (M3 – M8, Table 1) the individual level effects hardly change, which shows that the explanatory power of the country level variables is limited. The random slope models also demonstrated, that the effect of EU support itself, must be assumed to significantly vary across countries, such as there seems to be a pattern of country groups (identified via accession year), in which preference for Europeanization seems to be substantially lower.

Single Country Regressions

To delve a little deeper in varying effects and country differences of individual level variables, supplemental regression models will be presented. First, Tables C3 – C5 (Appendix C) show a set of logistic regression models in which the same individual level variables were tested as

above, for each country individually. In contrast to a multilevel model, in which individual level (fixed) effects are averaged across countries (still accounting for within and across cluster differences), the single country models allow to compare the estimates (or slopes) between countries, and therefore provides a better comprehensible approach then the multilevel random slope model. Not going too much into detail, the table should give an impression of the extent to which the effects of EU support, climate change concern, or other socio-demographic markers, etc. vary across European countries. It strikes at first sight, that the two effects of main interest (EU image and climate change concern) enormously vary. Just for the purpose of illustration, figure 26 shows the 'extreme' cases, of the two countries with the lowest or non-effect (Romania and Spain) and the two countries with highest effect (Sweden and Great Britain) of a positive EU image on the probability of supporting Europeanization. While a very positive EU image in contrast to a very negative image increases the probability by almost 50 pp. in Sweden, EU image has no effect or rather seems to be negative even (without significance) in Romania.

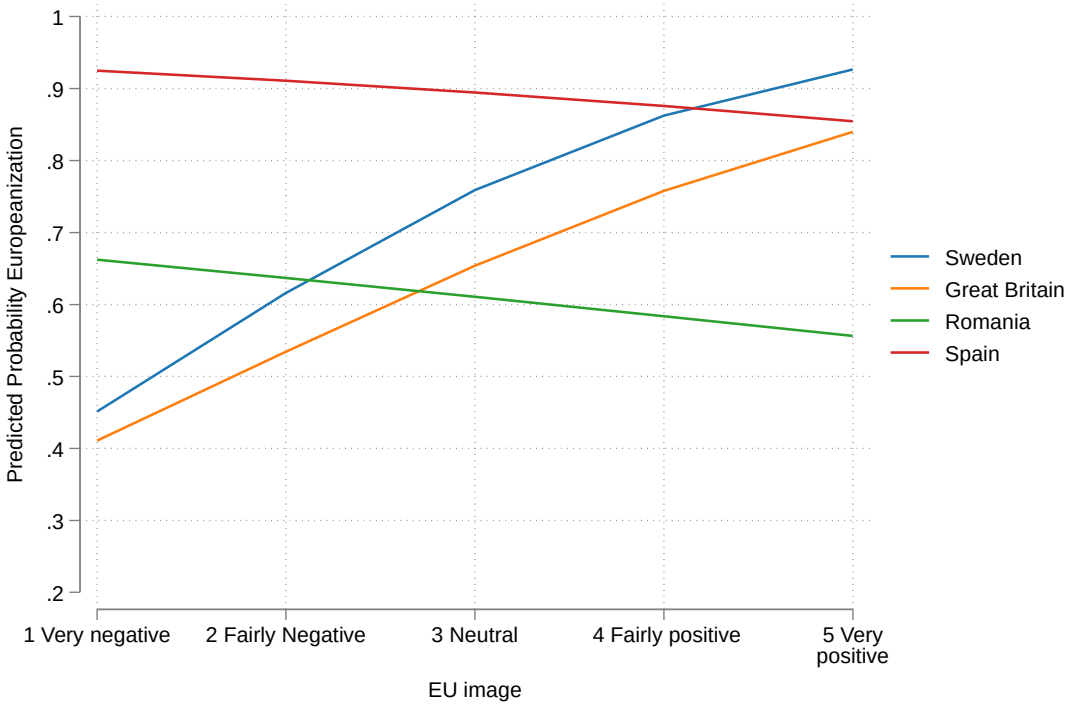


Figure 26: Predictive Probability of support for Europeanization by EU image; Sweden, Great Britain, Romania, Spain. 95% CIs.

igure 27 presents the same for the effect of climate change concern. Portugal and Great Britain as the (former) member(s) with the highest effects, and France and Slovenia with the lowest or rather non-effect. Portugal stands out as the country with the largest effect of climate change

concern: Portuguese who consider climate change as an extremely serious problem have an 80 pp. higher probability of preferring Europeanization than people with no concern, regardless their image of the EU(!), age, education, etc. Among the British, no and extreme climate change concern can make a difference of more than 20 pp.

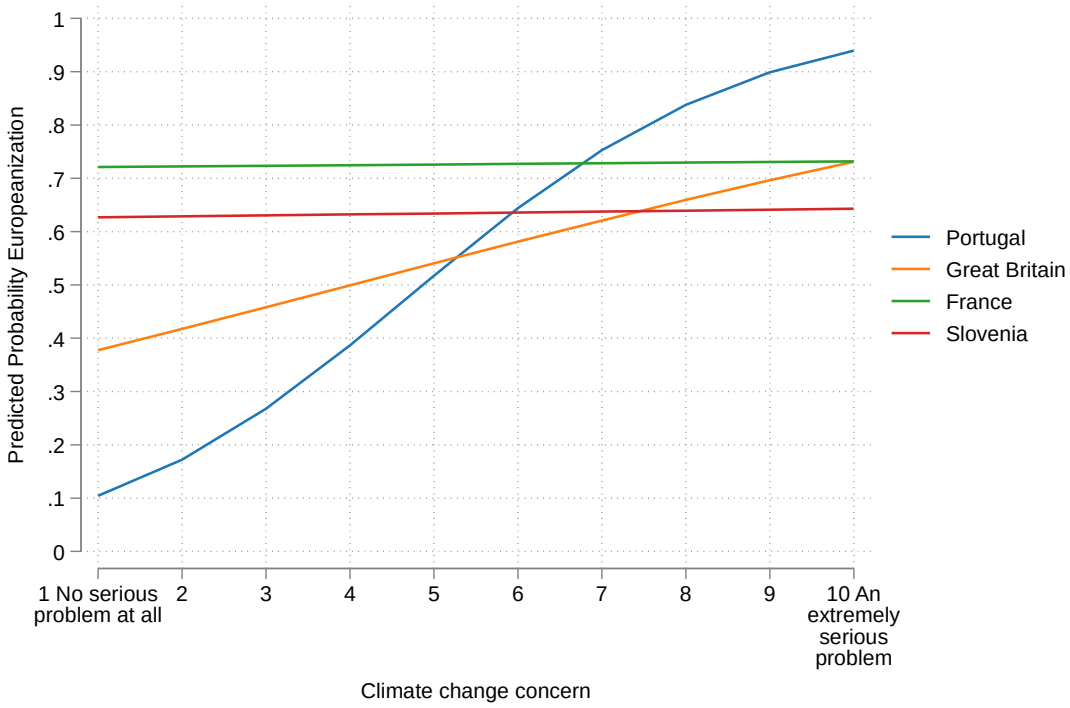


Figure 27: Predictive Probability of support for Europeanization by climate change concern; Portugal, Great Britain, France, Slovenia. 95% CIs.

The results of the single country regressions show that, although there is overall effects for the Europeans, they may not be found in all countries. As for this study, a more positive image of the EU increases support for Europeanization in most countries, but not all. The same for climate change concern. For eleven countries a significant effect (at 95% confidence or higher) was found.[28] Consequently, for some countries H1 & H2 can be confirmed (e.g., Great Britain), for others only the effect of EU image (e.g., Greece), for some only climate change concern (e.g., Portugal), for some countries neither (e.g., Spain).

Further diverging, even contrary effects can be found for the dissatisfaction with the own country. Whereas dissatisfied people in Croatia or Great Britain are more likely to support

[28] Although the regression results for Luxembourg, Cyprus and Malta should be regarded with caution, as they are based on less than 300 respondents.

Europeanization of environmental policies, with the country dissatisfied Latvians or Bulgarians are less likely (at 95 and 99% confidence) (figure 8). These diverging effects are interesting, since it confirms both theories, the congruence and compensation mechanisms of EU support. The former predicted lower EU support when satisfaction with the national conditions is also low, whereas the latter suggest higher EU support when satisfaction with the government is low.

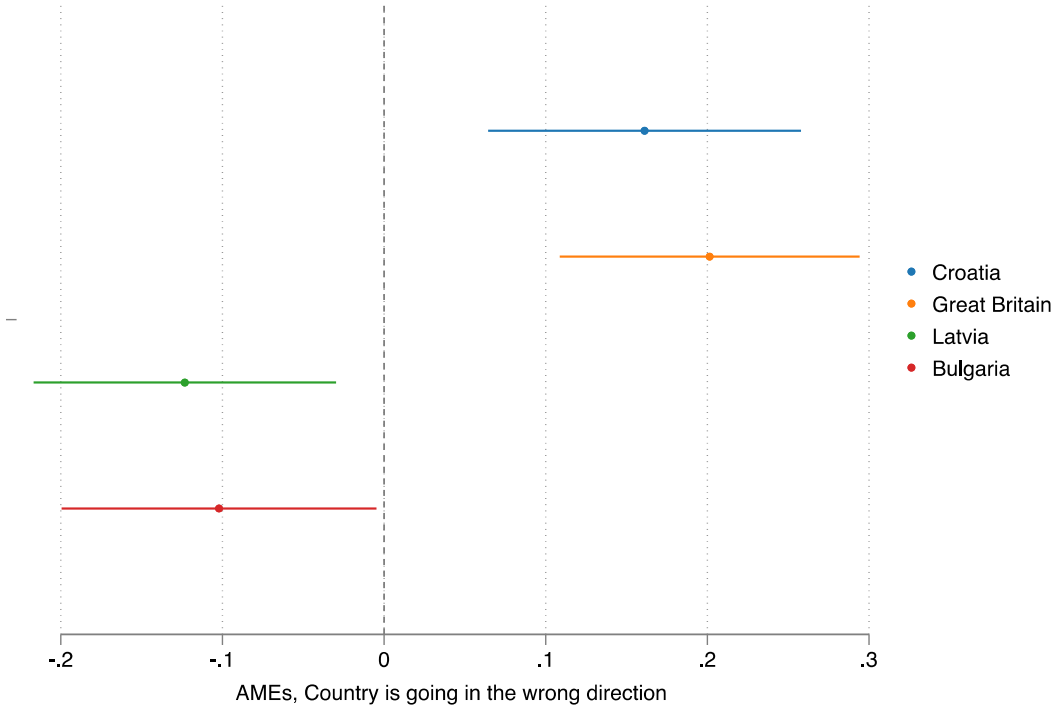


Figure 28: Average marginal effects for dissatisfaction with current country situation. 95% CIs.

Separate Country Group Regressions

Testing for more systematic differences, social science literature on European societies commonly works with country groups to account for regional divides. Country groups in this regard, do not only correspond to geographical location. But, as is often shown, countries geographically closer to each other, often resemble each other also with regard to political culture, or more broadly values, political and welfare system, naturally also related to their historical heritage. The multilevel model including year of EU accession (Table 1, M8), already showed significantly lower support for Europeanization of environmental policies in the later accession countries (mostly Eastern European countries) than in the founding states or the 1986 accession countries (Spain and Portugal). Table 4 gives the regression results for the four

European regional groups Continental, Southern, Northern and Eastern Europe.[29] The approach of single regressions was preferred to fixed effect or multilevel models with country group interactions, to allow for more variation; not only of single effects, but also in combination with other covariates. Yet, at the expense of accounting for the unobserved country level variance within the regions.

[29] Countries in continental group: France, Belgium, The Netherlands, Germany, Luxembourg, Ireland, Great Britain, Austria
Southern Europe: Italy, Greece, Spain, Portugal, Cyprus, Malta
Northern: Denmark, Finland, Sweden
Eastern Europe: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia, Bulgaria, Romania, Hungary

Table 4: Country Group Regressions

	(1) Continental	(2) South	(3) North	(4) East
Image of the EU (1-5)	0.482***	0.417***	0.588***	0.238***
	(0.058)	(0.077)	(0.062)	(0.036)
CC Concern (1-4)	0.110***	0.158***	0.101***	0.075***
	(0.022)	(0.032)	(0.028)	(0.013)
Gender (ref. male)	-0.057	0.070	0.139	0.076
	(0.092)	(0.118)	(0.106)	(0.053)
Age	0.001	-0.013**	-0.000	-0.007***
	(0.002)	(0.004)	(0.003)	(0.002)
Education (ref. <15 y / no)				
16-19 years/still studying	-0.009	-0.190	-0.139	0.007
	(0.134)	(0.168)	(0.220)	(0.098)
>=20 years/still studying	0.045	-0.059	-0.128	-0.023
	(0.145)	(0.185)	(0.206)	(0.107)
Social Class (ref. low)				
Middle	0.233*	-0.304*	0.120	0.101
	(0.100)	(0.130)	(0.130)	(0.056)
High	0.465**	-0.370	0.055	0.260
	(0.174)	(0.282)	(0.166)	(0.136)
Frequ. pol. discuss (ref. never)				
Occasionally	0.193	0.279*	0.339*	0.264***
	(0.107)	(0.132)	(0.134)	(0.061)
Frequently	-0.019	-0.035	0.163	0.271**
	(0.138)	(0.197)	(0.160)	(0.091)
Left-right ideology	0.195*	0.009	0.066	0.170***
	(0.088)	(0.112)	(0.095)	(0.046)
Left-right squared	-0.020*	-0.006	-0.008	-0.016***
	(0.008)	(0.010)	(0.009)	(0.004)
Residence (ref. rural area / village)				
Small or middle sized town	0.100	-0.216	-0.151	-0.106
	(0.111)	(0.145)	(0.128)	(0.062)
Large town	0.013	-0.091	0.304*	0.040
	(0.126)	(0.163)	(0.151)	(0.067)
Country wrong direction	0.573***	0.155	0.272*	0.150*
	(0.119)	(0.188)	(0.129)	(0.061)
EU wrong direction	-0.471***	-0.039	-0.281*	-0.257***
	(0.128)	(0.188)	(0.131)	(0.065)
Constant	-2.058***	-0.435	-1.780***	-0.887***
	(0.413)	(0.510)	(0.460)	(0.254)
Observations	6013	3123	2365	7042
Pseudo R^2	0.076	0.053	0.082	0.028

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

To start in the 'usual' order, figure 29 presents the effects of EU image on the probability of Europeanization preference by country group, which is positive for all country groups. The effect is particularly stronger in the Northern European countries. A person with a very positive image of the EU has a more than 40 pp. higher probability of supporting Europeanization than a person with a very negative image. The effects for Northern and Southern Europeans are somewhat weaker. In Eastern Europe, a positive EU image still has much power to increase Europeanization support, but not as much as in other regions of Europe.

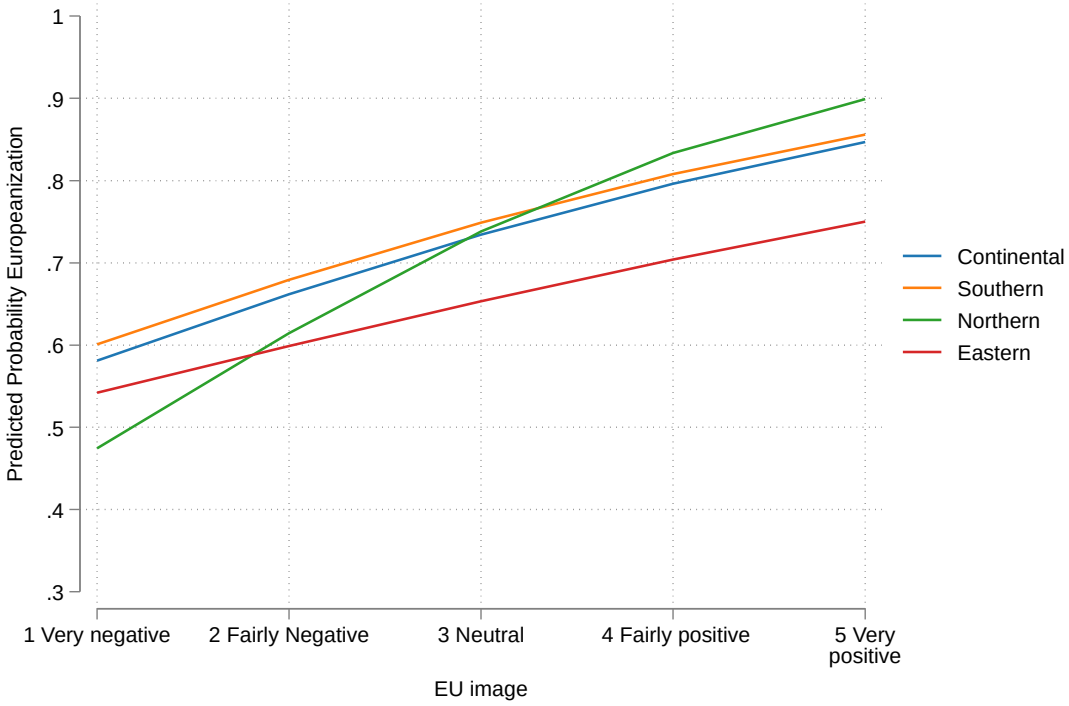


Figure 29: Predictive Probability of support for Europeanization by EU image; by country group. 95% CIs.

In contrast, the effect of climate change concern is the strongest in Southern Europe, almost the same for the Northern and Continental group, and the flattest for Eastern European countries (figure 30). For instance, from no to extreme concern, the probability of supporting Europeanization increases for almost 40 pp. in Southern Europe, for 'only' roughly 15 pp. in Eastern Europe. Comparing the effects of EU image and climate change concern across country groups (controlled for group varying covariates), it can be concluded that both and in all four European regions have a positive effect but vary in magnitude. While a positive EU image particularly increases the specific support for Europeanization among Northern Europeans, a high concern about climate change increases specific support the most for Southern Europeans. One explanation could be that, the Southern European countries are more vulnerable to the

detrimental consequences of climate change (European Environment Agency, 2020), which is why a high awareness and concern of the problem enhances the preference for the (supposedly) most effective solution. Northern Europeans, in turn, are typically EU critical, attaching importance to their national sovereignty and going their own way (e.g., the Swedish and Danish opt out from the Euro as common currency). Thus, a positive EU image in these countries will have a stronger effect on Europeanization, than in countries that are generally more pro-European. It is also plausible that due to high institutional quality and more progressive policies, people in the Northern countries (with high climate change concern or not) can feel certain that ('otherwise') their government will act adequately, which is why their preference is stronger induced by their general EU support.

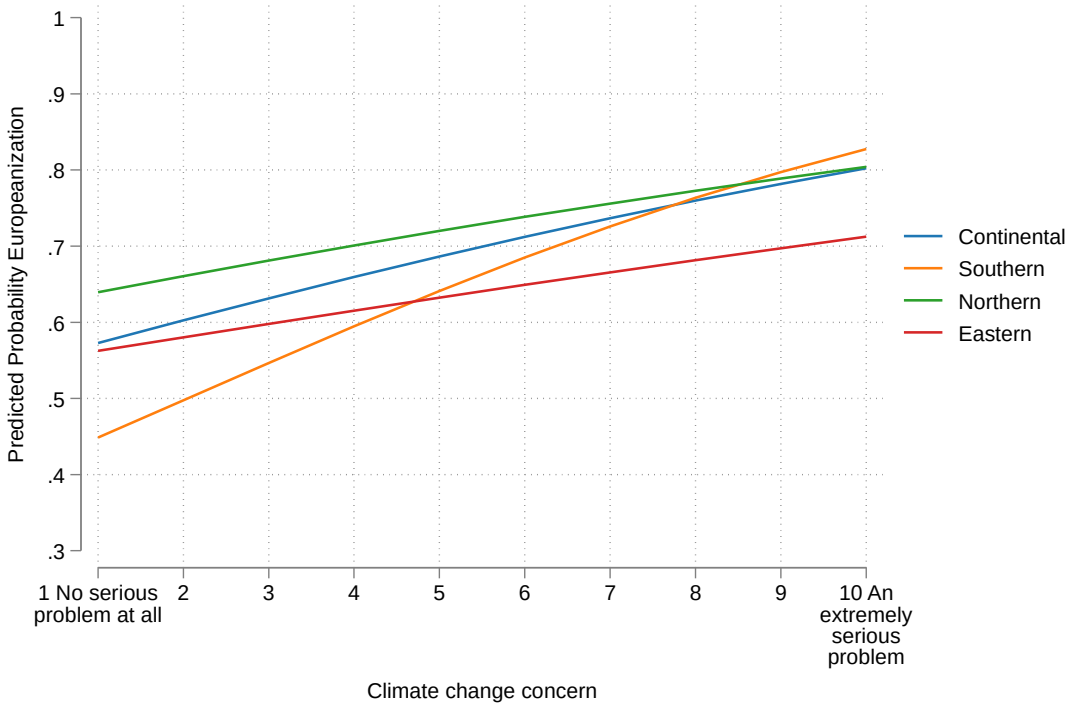


Figure 30: Predictive Probability of support for Europeanization by climate change concern; by country group. 95% CIs.

Regarding the dissatisfaction with the own national government, a compensation effect finds support for the regions of Continental, Northern and Eastern Europe (figure 31). Especially for Continental Europe the effect of cue-taking or negative spillover in terms of dissatisfaction with the country or the EU is particularly strong: Dissatisfaction with national conditions increases Europeanization support on average for more than 7pp.; dissatisfaction with the EU decreases the Europeanization support on average for more than 5pp. This becomes even more interesting as the dissatisfaction with the one or the other has no effect on the probability of

Europeanization support for people in Southern Europe. This once more suggests, that Southern Europeans do not or less orient their preference on general experience and support for the EU or their national government, but some other factor like the functional logic that, common European policies for environmental protection and climate change mitigation rationally should be the more effective approach.

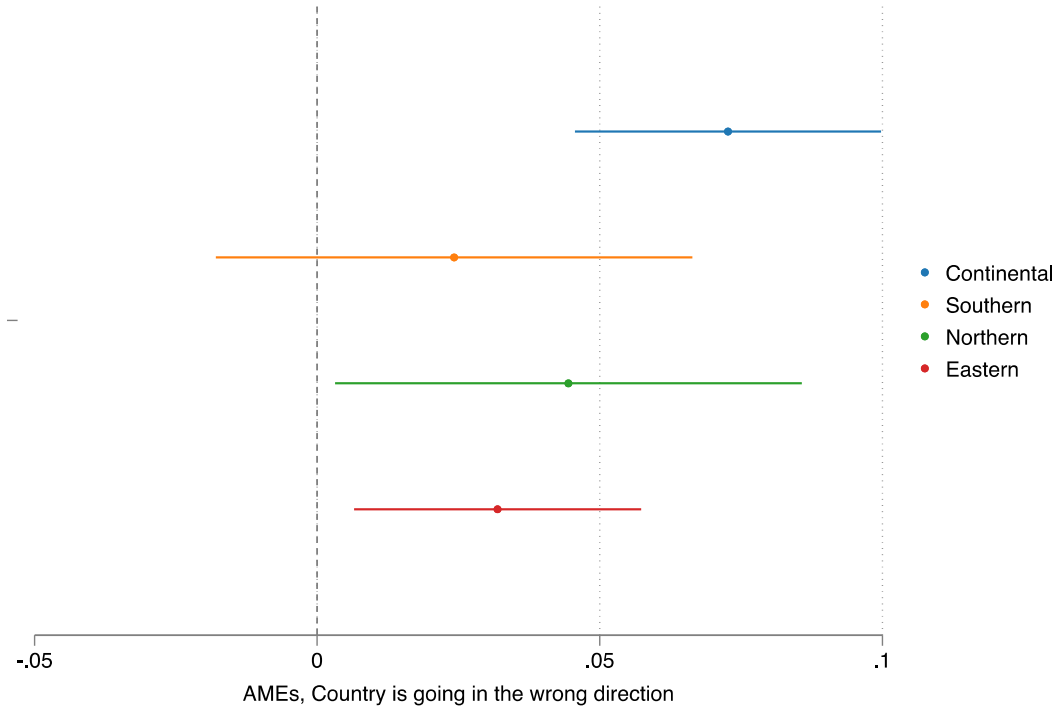
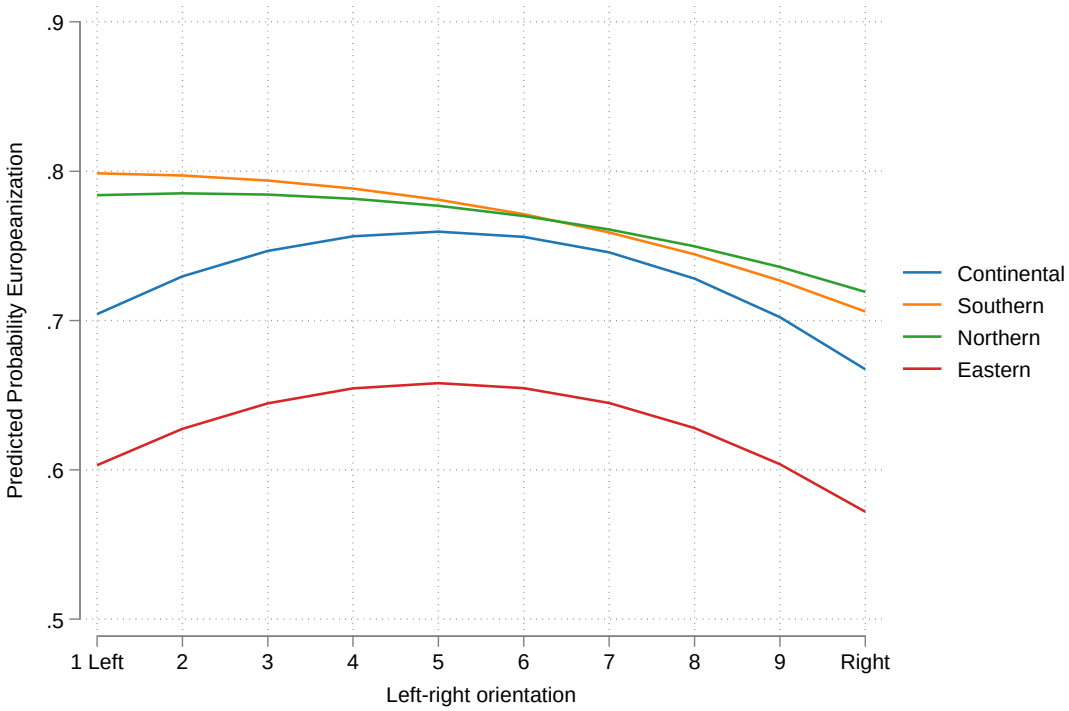


Figure 31: Average marginal effects for dissatisfaction with current country situation by country group. 95% CIs.

Another interesting difference concerns the effect of political ideology. Literature suggested a more pro-environmental and pro-EU for left-wing oriented people, but also that this may not apply to post-Soviet countries. To get a better understanding, figure X, the upper graph shows a curvilinear model (using interaction-terms) of left-right orientation across country groups and the lower a linear function. It may not be perfectly visible at first glance, but regression results support a curvilinear effect for Eastern Europe and Continental, i.e., people on the left and the right are less likely to prefer joint European environmental policies than people who placed themselves in the political middle. In contrast, for Southern and Northern Europe there is no clear curve, rather the linear modelling implies a negative effect for right-wing people. A person from Southern Europe, ascribing her/himself as leftist has an 81% probability of supporting Europeanization, a person from the very right, 72% probability (regression results not presented). For Northern Europe, however, neither effect can be confirmed. Still, the data to

some extent support previous findings. That is, for Southern Europe political left orientation is positively correlated with environmental attitudes, a pro-European stance and even more, a fusion of both, support for European environmental policies. For Eastern and Continental Europe, environmental attitudes and EU support or skepticism do not fit a classic left-right divide. While this was maybe anticipated for the East, this finding is more surprising for Central Europe.



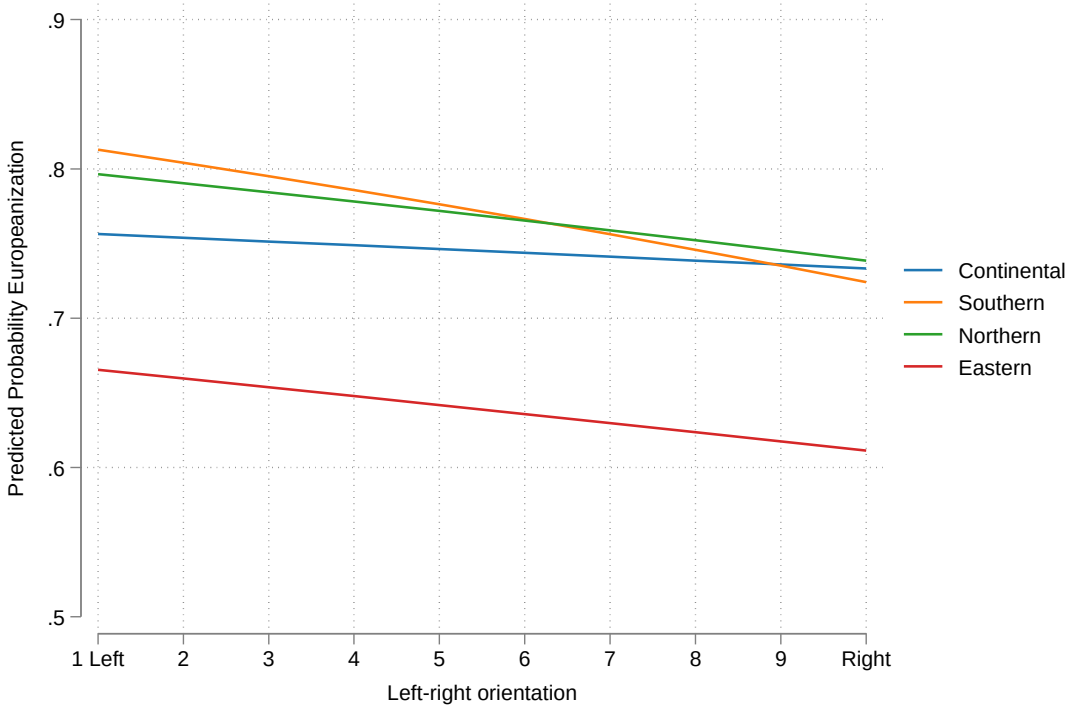


Figure 32: Predictive Probability of support for Europeanization by left-right political orientation, by country group. top graph: curvilinear; bottom graph: linear effect. 95% CIs.

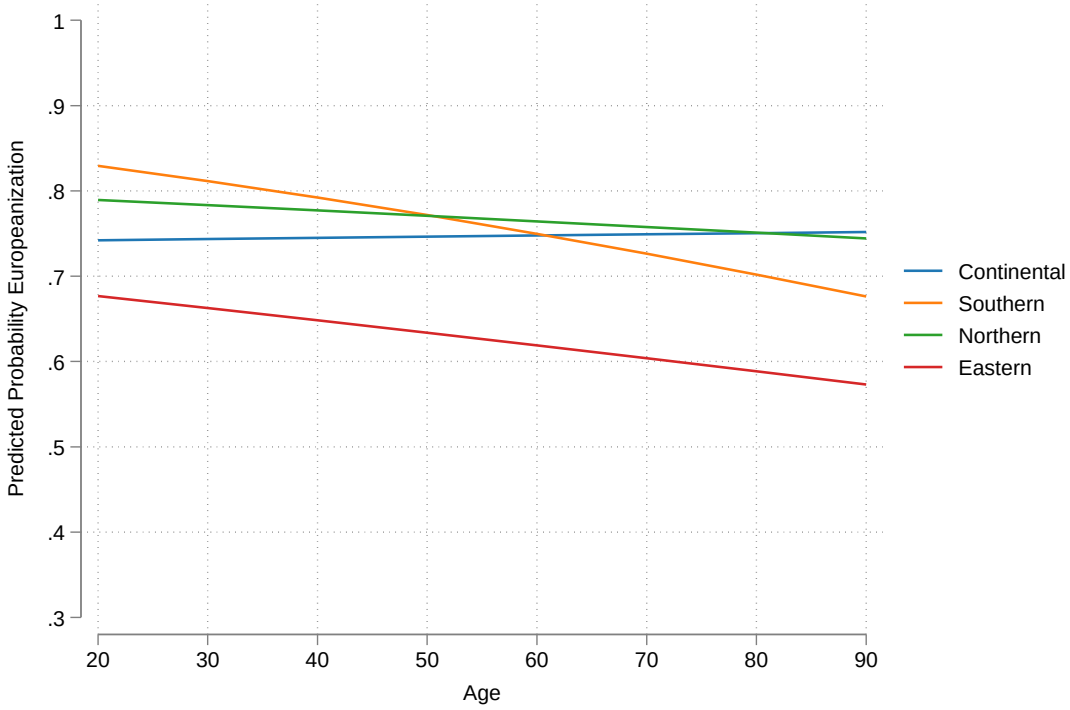


Figure 34: Predictive Probability of support for Europeanization by age, by country group. 95% CIs.

Finally, figure 33 presents one more varying effect, that of age. As for the overall results in the multilevel model, support for Europeanization does not decrease or increase with age in Continental and Northern Europe. In Southern and Eastern Europe, however, there older age is related to decreasing support for Europeanization. Other regional differences are found for (self-ascribed) social class, which only in for Continental Europe increases Europeanization support; and for the engagement in political discussion on EU issues, which is only for Eastern Europe found to be positively correlated.

5. Discussion

While the prospects of climate change get worse and Europe and the world keep busy with a set of other crises, the urgency of a united action to encounter the climate crisis also keeps increasing.

Overall, the majority of European citizens appreciates environmental protection policies within the framework of the European Union. The results of the analysis have shown that, as expected, by and large support for a Europeanization of environmental policies increases with general support of the European Union and also with people's concern about the climate change. In these regard, two main mechanisms of previous research can be confirmed: Firstly, the spill over from general to specific support. Secondly, the fact that higher climate change concern increases Europeanization also confirms that Europeans' preferences conform to a functional logic, i.e., people acknowledge or expect more effective environmental protection policies at EU level. Once accounting for both these attitudes, other typical explanatories carry little weight.[30]

But there are regional differences, that also connect to countries' dispositions in engaging in the issue of environmental protection more generally. In countries that set up more measurements to protect the environment, support for joint EU policies is higher. This relation must be considered against the background that, typically (as for Europe), countries with higher environmental standards are also more affluent, and the awareness for environmental problems such as climate change is higher also in the political arena. Although the multilevel analysis revealed that there is no one main explanatory for the effect of context, it can be concluded that context matters. One central insight is, that higher environmental progressiveness (in terms of policies and in political debate) leads to support for more. In other words, regardless of individual attitudes, it is *people in countries that already are* more progressive in this field that also prefer environmental protection at EU level, and not the other way around (people in countries with lower environmental standards and less policies wanting more on EU level). This is different than what research has shown for support of European fiscal policies or similar and explanations of costs and benefits. Apparently, for environmental policies the pattern of more affluent, more efficient or budget contributor countries being more critical toward

[30] Such as political orientation or sociodemographics. Although it was also discussed that these are the precursors of both attitudes.

European policies does not apply. Rather the cost (-benefit) argument works another way around for the domain of environmental policies: Presuming climate change mitigation and adaptation policies as complex and costly, people in countries that lag the most in environmental protection are the most critical regarding joint EU policies. After all, in these countries, the transition to renewable energies demands the most efforts. Ámon (2020) analyses how countries of Central Eastern Europe stick to conventional fossil fuel intense energies, ignore pollution limits and attempt to block ambitions of European climate neutrality (especially the "Visegrad Group" – V4 – Poland, Hungary, Czech and Slovakia). What is described on the country level and for the political elites, also holds for the citizens. Even though reported environmentalist attitudes are not substantially lower than in other European countries, it is argued that environmental issues simply are not as embedded in the post-soviet cultures (Poortinga et al., 2019). On the basis of postmaterialist theory, it is also argued that people in these countries are still rather concerned about economic prosperity (ibid.). Additionally, even though Eastern European citizens are on aggregate level rather pro-Europeans, a positive EU image has only small spillover effect on the support for EU environmental policies in these countries. Limited effect of EU image and dissatisfaction with the country or EU was also found for people in Southern Europe. A possible (contextual) reason already mentioned was, that the detrimental effects of global warming are perceivable there the most (heat, droughts, wildfires), which pushes preference for the most effective solutions. This may correlate with previous explanations according to which, smaller countries (Cyprus, Malta, Portugal) could prefer policies on a larger scale, as well as or in combination with the argument of institutional quality.

Besides the practical insights that an improved EU image and higher climate change awareness will increase the Europeans' support for the Green Deal and similar, it became obvious that the main obstacles on the way to an emission free European continent is not primarily budget considerations of its more affluent members. But it can be assumed to be fossil energy dependencies, economic fears and unwilling political elites in the Eastern European countries (despite their high general EU support). To increase support, the EU should therefore not only rely on regulations and restrictions (emission caps, bans and deadlines) but also design policies that are more pro-actively and more (financially) incentivize. (Knowing that this is of course easier said, than done.) Finally, Ukraine war and subsequent energy crisis has revealed dependencies (from Russia & fossils) and the more European countries need each other. Instead of falling back to coal, importing gas and building new nuclear power plants, hope remains that

the EU and its citizens take the crisis as a chance to massively expand renewable energies and restructure economy, production and consumption in a sustainable way.

One major limitation of the study was certainly variables and measurements that did not ideally fit. A number of additional or more precise variables could substantially improve explanatory power. Regarding the variables provided in this release of the EB, more precise items on EU support, values and identity would have been insightful, firstly to get a more fine-grained idea of people's opinion on the EU, and secondly, to interpret results also in the dimension of identity and values. Finally, as discussed above, the dependent variable itself leaves room for interpretation. So as we do not know, what respondents know about environmental protection policies, how they experience and attribute (causal) responsibility - at national level and EU level. While some people may connect environmental policies to more life quality others may primarily think of restrictions and costs – as was also discussed, the range of environmental policies is huge. In terms of context variables, it is always difficult to gauge if and how much individuals are aware of some factors. The non-effect of emissions and share of renewables that was very originally assumed, could be explained by the fact, that such factors are not directly perceived by the public (see also, Pohjolainen et al., 2021; Stadelmann-Steffen & Eder, 2021). Similarly, artificial measurements of political environmentalism may not be sensitive enough but also volatile with elections. Media framing and ideological embedment of the issue remain major unknown factors. Successful countermobilization on different levels is only one explanation why countries act so slow even though the publics seem in favor of more environmental protection efforts (McGrath & Bernauer, 2017).

Finally, the data stem from December 2019, the week when the European Commission announced the European Green Deal. It can be said that the climate crisis rightly gained salience ever since. Yet, on the political agenda the issue had to 'compete' with the COVID 19 pandemic, and more recently the consequences of Ukraine war. The crises do not only challenge peoples' commitment to climate change mitigation, but also European solidarity. In light new chances but also backlashes in terms of trade-offs with economic competitiveness, preferences largely may have changed since 2019. More and updated research therefore can be insightful to understand peoples' perceptions, the risks and chances.

References

Ámon, A. (2020). Will the EU overcome the EastWest divide? In R. Holzmann, D. Ritzberger-Grünwald, & H. Schuberth, *30 Years of Transition in Europe* (pp. 185–195). Edward Elgar Publishing. https://doi.org/10.4337/9781839109508.00026

Anderson, C. D. (2006). Economic Voting and Multilevel Governance: A Comparative Individual-Level Analysis. *American Journal of Political Science*, *50*(2), 449–463. https://doi.org/10.1111/j.1540-5907.2006.00194.x

Anderson, C. J. (1998). When in Doubt, Use Proxies: Attitudes toward Domestic Politics and Support for European Integration. *Comparative Political Studies*, *31*(5), 569–601. https://doi.org/10.1177/0010414098031005002

Anderson, C. J., & Reichert, M. S. (1995). Economic Benefits and Support for Membership in the E.U.: A Cross-National Analysis*. *Journal of Public Policy*, *15*(3), 231–249. https://doi.org/10.1017/S0143814X00010035

Arceneaux, K. (2005). Does Federalism Weaken Democratic Representation in the United States? *Publius*, *35*(2), 297–311.

Ares, M., Ceka, B., & Kriesi, H. (2017). Diffuse support for the European Union: Spillover effects of the politicization of the European integration process at the domestic level. *Journal of European Public Policy*, *24*(8), 1091–1115. https://doi.org/10.1080/13501763.2016.1191525

Armingeon, K. (2021). Fiscal solidarity: The conditional role of political knowledge. *European Union Politics*, *22*(1), 133–154. https://doi.org/10.1177/1465116520967752

Arnold, C., Sapir, E. V., & Zapryanova, G. (2012). Trust in the institutions of the European Union: A cross-country examination. *European Integration Online Papers*, *2012–008*. https://doi.org/10.1695/2012008

Bakker, R., Hooghe, L., Jolly, S., Marks, G., Polk, J., Rovny, J., Steenbergen, M., & Vachudova, M. (2020). *2019 Chapel Hill Expert Survey. Version 2019.3.* NC: University of North Carolina, Chapel Hill. Retrieved February 23, 2022, from https://www.chesdata.eu/2019-chapel-hill-expert-survey

Bates, D., Kliegl, R., Vasishth, S., & Baayen, H. (2018). *Parsimonious Mixed Models* (arXiv:1506.04967). arXiv. https://doi.org/10.48550/arXiv.1506.04967

Bauhr, M., & Charron, N. (2018). Why support International redistribution? Corruption and public support for aid in the eurozone. *European Union Politics*, *19*(2), 233–254. https://doi.org/10.1177/1465116518757702

Bobzien, L., & Kalleitner, F. (2021). Attitudes towards European financial solidarity during the Covid-19 pandemic: Evidence from a net-contributor country. *European Societies*, *23*(sup1), S791–S804. https://doi.org/10.1080/14616696.2020.1836669

Bornschier, S. (2010). *Cleavage politics and the populist right: The new cultural conflict in Western Europe*. Temple University Press.

Braun, D., Seher, N., Tausendpfund, M., & Wolsing, A. (2010). *Einstellungen gegenüber Immigranten und die Zustimmung zur Europäischen Integration*. 61.

Bremer, B., Genschel, P., & Jachtenfuchs, M. (2020). Juncker's Curse? Identity, Interest, and Public Support for the Integration of Core State Powers. *JCMS: Journal of Common Market Studies*, *58*(1), 56–75. https://doi.org/10.1111/jcms.12980

Bundesumweltministerium. (n.d.). *Environment Action Programmes*. Bundesministerium Für Umwelt, Naturschutz, Nukleare Sicherheit Und Verbraucherschutz. Retrieved August 5, 2022, from https://www.bmuv.de/en/topics/europe-international/europe/environment-action-programmes

Burns, C., Eckersley, P., & Tobin, P. (2020). EU environmental policy in times of crisis. *Journal of European Public Policy*, *27*(1), 1–19. https://doi.org/10.1080/13501763.2018.1561741

Buzogány, A., & Ćetković, S. (2021). Fractionalized but ambitious? Voting on energy and climate policy in the European Parliament. *Journal of European Public Policy*, *28*(7), 1038–1056. https://doi.org/10.1080/13501763.2021.1918220

Cerniglia, F., & Pagani, L. (2008). The European Union and the Member States: An Empirical Analysis of Europeans' Preferences for Competences Allocation. *CESifo Economic Studies*, *55*(1), 197–232. https://doi.org/10.1093/cesifo/ifn033

Cerniglia, F., & Pagani, L. (2015). Political Knowledge and Attitudes towards Centralisation in Europe: Political knowledge and attitudes towards centralisation in Europe. *Fiscal Studies*, *36*(2), 215–236. https://doi.org/10.1111/1475-5890.12049

Consolidated version of the Treaty on the Functioning of the European Union, C 326/47 154. Retrieved August 2, 2022, from https://eur-lex.europa.eu/resource.html?uri=cellar:9e8d52e1-

2c70-11e6-b497-01aa75ed71a1.0006.01/DOC_3&format=PDF#page=87

Crawley, S., Coffé, H., & Chapman, R. (2021). Climate Belief and Issue Salience: Comparing Two Dimensions of Public Opinion on Climate Change in the EU. *Social Indicators Research*. https://doi.org/10.1007/s11205-021-02842-0

Cutler, F. (2004). Government Responsibility and Electoral Accountability in Federations. *Publius, 34*(2), 19–38.

Daniele, G., & Geys, B. (2015). Public support for European fiscal integration in times of crisis. *Journal of European Public Policy*, *22*(5), 650–670. https://doi.org/10.1080/13501763.2014.988639

De Vries, C. E. (2018). *Euroscepticism and the Future of European Integration*. Oxford University Press.

De Wilde, P., & Zürn, M. (2012). Can the politicization of European integration be reversed? *JCMS: Journal of Common Market Studies*, *50*, 137–153. https://doi.org/10.1111/j.1468-5965.2011.02232.x

De Winter, L., & Swyngedouw, M. (1999). The Scope of EU Government. In H. Schmitt & J. Thomassen (Eds.), *Political Representation and Legitimacy in the European Union* (pp. 47–69). Oxford University Press. https://doi.org/10.1093/0198296614.003.0003

Döring, H., & Manow, P. (2021). *Parliaments and governments database (ParlGov): Information on parties, elections and cabinets in modern democracies. Development version—14 September 2021*. Retrieved September 20, 2022, from https://www.parlgov.org/data-info/

Easton, D. (1965). *A framework for political analysis*. Prentice-Hall.

Easton, D. (1975). A Re-Assessment of the Concept of Political Support. *British Journal of Political Science*, *5*(4), 435–457.

Echavarren, J. M., Balžekienė, A., & Telešienė, A. (2019). Multilevel analysis of climate change risk perception in Europe: Natural hazards, political contexts and mediating individual effects. *Safety Science*, *120*, 813–823. https://doi.org/10.1016/j.ssci.2019.08.024

Erdmann, E. (2022, June 28). G7-Gipfel: Ein Klimaclub, der schon an seinen eigenen Zielen scheitert. *Die Zeit*. Retrieved September 21, 2022, from https://www.zeit.de/wissen/umwelt/2022-06/klimaschutz-g7-gipfel-klimaclub-olaf-scholz-ziele?utm_referrer=https%3A%2F%2Fwww.google.com%2F

Erisen, C., Vasilopoulou, S., & Kentmen-Cin, C. (2020). Emotional reactions to immigration and support for EU cooperation on immigration and terrorism. *Journal of European Public Policy*, *27*(6), 795–813. https://doi.org/10.1080/13501763.2019.1630470

European Commission. (2020). *Eurobarometer 92.4 (2019): Attitudes of European citizens towards the Environment, Corruption, and Attitudes towards the impact of digitalisation on daily lives: Attitudes of European citizens towards the Environment, Corruption, and Attitudes towards the impact of digitalisation on daily lives* (1.0.0) [Data set]. GESIS Data Archive. https://doi.org/10.4232/1.13652

European Commission. (2022, July 26). *8th Environment Action Programme* [Text]. European Commission. Retrieved August 8, 2022, from https://ec.europa.eu/commission/presscorner/detail/en/IP_22_4667

European Environment Agency. (2020, November 23). *Impacts, vulnerability and risks* [Page]. Retrieved September 27, 2022, from https://www.eea.europa.eu/themes/climate-change-adaptation/impacts-vulnerability-and-risks

European Union. (n.d.). *Glossary of summaries: Opting out*. Retrieved July 26, 2022, from https://eur-lex.europa.eu/EN/legal-content/glossary/opting-out.html

Fairbrother, M. (2017). Environmental attitudes and the politics of distrust. *Sociology Compass*, *11*(5), e12482. https://doi.org/10.1111/soc4.12482

Farmer, A. M. (Ed.). (2012). *Manual of European Environmental Policy* (p. 9). Routledge. https://ieep.eu/uploads/articles/attachments/74389e41-868c-4906-9bdc-3f04addd0bf0/1.5_Environment_in_the_treaties_-_final.pdf?v=63664509873

Feldman, L., & Hart, P. S. (2016). Using Political Efficacy Messages to Increase Climate Activism: The Mediating Role of Emotions. *Science Communication*, *38*(1), 99–127. https://doi.org/10.1177/1075547015617941

Follesdal, A., & Hix, S. (2005). Why There is a Democratic Deficit in the EU: A Response to Majone and Moravcsik. In *European Governance Papers (EUROGOV)* (No. 2; European Governance Papers (EUROGOV)). CONNEX and EUROGOV networks. https://ideas.repec.org/p/erp/eurogo/p0002.html

Gabel, M. J. (1998a). Economic Integration and Mass Politics: Market Liberalization and Public Attitudes in the European Union. *American Journal of Political Science*, *42*(3), 936–953. https://doi.org/10.2307/2991736

Gabel, M. J. (1998b). *Interests and Integration: Market Liberalization, Public Opinion, and European Union* (Illustrated edition). University of Michigan Press.

Gifford, R., & Sussman, R. (2012). *Environmental Attitudes: Vol. The Oxford Handbook of Environmental and Conservation Psychology* (S. D. Clayton, Ed.). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199733026.013.0004

Gravey, V., & Jordan, A. (2021). New policy dynamics in more uncertain times? In A. Jordan & V. Gravey (Eds.), *Environmental policy in the EU: actors, institutions and processes* (4th ed., pp. 334–354). Routledge.

Harring, N., Jagers, S. C., & Matti, S. (2019). The significance of political culture, economic context and instrument type for climate policy support: A cross-national study. *Climate Policy*, *19*(5), 636–650. https://doi.org/10.1080/14693062.2018.1547181

Heinkelmann-Wild, T., Kriegmair, L., & Rittberger, B. (2020). The EU Multi-Level System and the Europeanization of Domestic Blame Games. *Politics and Governance*, *8*(1), 85–94. https://doi.org/10.17645/pag.v8i1.2522

Hewstone, M. (1990). *Causal attribution: From cognitive processes to collective beliefs*. B. Blackwell.

Hobolt, S. B., & de Vries, C. E. (2016). Public Support for European Integration. *Annual Review of Political Science*, *19*(1), 413–432. https://doi.org/10.1146/annurev-polisci-042214-044157

Hobolt, S. B., & Tilley, J. (2014a). *Blaming Europe?: Responsibility Without Accountability in the European Union*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199665686.001.0001

Hobolt, S. B., & Tilley, J. (2014b). Who's in charge? How voters attribute responsibility in the European Union. *Comparative Political Studies*, *47*(6), 795–819.

Hobolt, S. B., Tilley, J., & Wittrock, J. (2013). Listening to the Government: How Information Shapes Responsibility Attributions. *Political Behavior*, *35*(1), 153–174. https://doi.org/10.1007/s11109-011-9183-8

Hobolt, S. B., & Wratil, C. (2015). Public opinion and the crisis: The dynamics of support for the euro. *Journal of European Public Policy*, *22*(2), 238–256. https://doi.org/10.1080/13501763.2014.994022

Hofmann, A. (2021). Making EU environmental policy more legitimate? In A. Jordan & V. Gravey (Eds.), *Environmental policy in the EU: actors, institutions and processes* (4th ed., pp. 317–333). Routledge. https://doi.org/10.4324/9780429402333-18

Hooghe, L. (2003). Europe Divided?: Elites vs. Public Opinion on European Integration. *European Union Politics*, *4*(3), 281–304. https://doi.org/10.1177/14651165030043002

Hooghe, L., & Marks, G. (2001). *Multi-Level Governance and European Integration*. Rowman & Littlefield Publishers. https://rowman.com/ISBN/9780742510203/Multi-Level-Governance-and-European-Integration

Hooghe, L., & Marks, G. (2005). Calculation, Community and Cues: Public Opinion on European Integration. *European Union Politics*, *6*(4), 419–443. https://doi.org/10.1177/1465116505057816

Hooghe, L., & Marks, G. (2009). A Postfunctionalist Theory of European Integration: From Permissive Consensus to Constraining Dissensus. *British Journal of Political Science*, *39*(1), 1–23. https://doi.org/10.1017/S0007123408000409

Hooghe, L., & Marks, G. (2017). Cleavage theory meets Europe's crises: Lipset, Rokkan, and the transnational cleavage. *Journal of European Public Policy*, *25*(1), 109–135. https://doi.org/10.1080/13501763.2017.1310279

Hooghe, L., Marks, G., & Wilson, C. J. (2002). Does Left/Right Structure Party Positions on European Integration? *Comparative Political Studies*, *35*(8), 965–989. https://doi.org/10.1177/001041402236310

Höpner, M., & Jurczyk, B. (2012). Kritik des Eurobarometers: Über die Verwischung der Grenze zwischen seriöser Demoskopie und interessengeleiteter Propaganda. *Leviathan*, *40*(3), 326–349.

Hox, J. J., Moerbeek, M., & Schoot, R. van de. (2017). *Multilevel analysis: Techniques and applications* (Third edition). Routledge.

Huber, R. A., Maltby, T., Szulecki, K., & Ćetković, S. (2021). Is populism a challenge to European energy and climate policy? Empirical evidence across varieties of populism. *Journal of European Public Policy*, *28*(7), 998–1017. https://doi.org/10.1080/13501763.2021.1918214

Hutter, S., & Kriesi, H. (2019). Politicizing Europe in times of crisis. *Journal of European Public Policy*, *26*(7), Article 7. https://doi.org/10.1080/13501763.2019.1619801

Hüttmann, M. G., & Fischer, Th. (n.d.). *Föderalismus und EU*. bpb, kurz & knapp. Retrieved July 26, 2022, from https://www.bpb.de/kurz-knapp/lexika/das-europalexikon/176982/foederalismus-und-eu/

Joint Research Centre (European Commission), Olivier, J. G. J., Guizzardi, D., Schaaf, E., Solazzo, E., Crippa, M., Vignati, E., Banja, M., Muntean, M., Grassi, G., Monforti-Ferrario, F., & Rossi, S. (2021). *GHG emissions of all world: 2021 report*. Publications Office of the European Union. Retrieved September 27, 2022, from https://data.europa.eu/doi/10.2760/173513

Kleider, H., & Stoeckel, F. (2019). The politics of international redistribution: Explaining public support for fiscal transfers in the EU. *European Journal of Political Research*, *58*(1), 4–29. https://doi.org/10.1111/1475-6765.12268

Knill, C., & Liefferink, D. (2021). The establishment of EU environmental policy. In A. Jordan & V. Gravey (Eds.), *Environmental policy in the EU: actors, institutions and processes* (Fourth Edition, p. Chapter 2). Routledge.

Kriesi, H., Grande, E., Lachat, R., Dolezal, M., Bornschier, S., & Frey, T. (2006). Globalization and the transformation of the national political space: Six European countries compared. *European Journal of Political Research*, *45*(6), 921–956. https://doi.org/10.1111/j.1475-6765.2006.00644.x

Kriesi, H., Grande, E., Lachat, R., Dolezal, M., Bornschier, S., & Frey, T. (2008). Globalization and its impact on national spaces of competition. In *West European Politics in the Age of Globalization* (1st ed., pp. 3–22). Cambridge University Press. https://doi.org/10.1017/CBO9780511790720

Kritzinger, S. (2003). The Influence of the Nation-State on Individual Support for the European Union. *European Union Politics*, *4*(2), 219–241. https://doi.org/10.1177/1465116503004002004

Kuhn, T., Solaz, H., & van Elsas, E. J. (2018). Practising what you preach: How cosmopolitanism promotes willingness to redistribute across the European Union. *Journal of European Public Policy*, *25*(12), 1759–1778. https://doi.org/10.1080/13501763.2017.1370005

Kuhn, T., & Stoeckel, F. (2014). When European integration becomes costly: The euro crisis and public support for European economic governance. *Journal of European Public Policy*, *21*(4), 624–641. https://doi.org/10.1080/13501763.2013.867892

Kulin, J., & Johansson Sevä, I. (2021). Who do you trust? How trust in partial and impartial government institutions influences climate policy attitudes. *Climate Policy*, *21*(1), 33–46. https://doi.org/10.1080/14693062.2020.1792822

Kurrer, C. (2021). *Environment policy: General principles and basic framework*. 5.

Langer, W. (2010). Mehrebenenanalyse mit Querschnittsdaten. In C. Wolf & H. Best (Eds.), *Handbuch der sozialwissenschaftlichen Datenanalyse* (pp. 741–774). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-92038-2_28

Lehman, P., Matthieß, T., Merz, N., Regel, S., Werner, A., & Lewandowski, J. (2017). *Manifesto corpus* (Version: 2017-1). WZB Berlin Social Science Center. Retrieved September 20, 2022, from https://manifesto-project.wzb.eu/

Lengfeld, H., & Gerhards, J. (2008). Support for European Union Environmental Policy by Citizens of EU-Member and Accession States. *Comparative Sociology*, *7*(2), 215–241. https://doi.org/10.1163/156913308X289050

León, S., Jurado, I., & Garmendia Madariaga, A. (2018). Passing the buck? Responsibility attribution and cognitive bias in multilevel democracies. *West European Politics*, *41*(3), 660–682. https://doi.org/10.1080/01402382.2017.1405325

Majone, G. (2005). *Dilemmas of European Integration: The Ambiguities and Pitfalls of Integration by Stealth* (1st ed.). Oxford University PressOxford. https://doi.org/10.1093/0199274304.001.0001

McCright, A. M., Dunlap, R. E., & Marquart-Pyatt, S. T. (2016). Political ideology and views about climate change in the European Union. *Environmental Politics*, *25*(2), 338–358. https://doi.org/10.1080/09644016.2015.1090371

McGrath, L. F., & Bernauer, T. (2017). How strong is public support for unilateral climate policy and what drives it? *WIREs Climate Change*, *8*(6). https://doi.org/10.1002/wcc.484

McLaren, L. M. (2002). Public Support for the European Union: Cost/Benefit Analysis or Perceived Cultural Threat? *The Journal of Politics*, *64*(2), 551–566. https://doi.org/10.1111/1468-2508.00139

Mehmetoglu, M. (2016). *Applied statistics using stata*. SAGE Publications.

Milfont, T. L., & Schultz, P. W. (2018). The role of attitudes in environmental issues. In D. Albarracín & B. T. Johnson (Eds.), *The Handbook of Attitudes* (2nd ed., p. Chapter 11).

Routled.

Milman, O. (2021, September 15). Governments falling woefully short of Paris climate pledges, study finds. *The Guardian*. Retrieved September 21, 2022, from https://www.theguardian.com/science/2021/sep/15/governments-falling-short-paris-climate-pledges-study

Möhring, K. (2012). *The fixed effects approach as an alternative to multilevel analysis for cross-national analyses*. SocArXiv. https://doi.org/10.31235/osf.io/3xw7v

Moore, B., Benson, D., Jordan, A., Wurzel, R. K. W., & Zito, A. (2021). Governing with multiple policy instruments? In A. Jordan & V. Gravey (Eds.), *Environmental policy in the EU: actors, institutions and processes* (Fourth Edition, p. Chapter 17). Routledge.

Moravcsik, A. (2002). Reassessing Legitimacy in the European Union. *JCMS: Journal of Common Market Studies*, *40*(4), 603–624. https://doi.org/10.1111/1468-5965.00390

Muñoz, J., Torcal, M., & Bonet, E. (2011). Institutional trust and multilevel government in the European Union: Congruence or compensation? *European Union Politics*, *12*(4), 551–574. https://doi.org/10.1177/1465116511419250

Nicoli, F. (2019). Integration through crises? A quantitative assessment of the effect of the Eurocrisis on preferences for fiscal integration. *Comparative European Politics*, *17*(3), 397–425. https://doi.org/10.1057/s41295-018-0115-4

Nicoli, F., Kuhn, T., & Burgoon, B. (2020). Collective Identities, European Solidarity: Identification Patterns and Preferences for European Social Insurance. *JCMS: Journal of Common Market Studies*, *58*(1), 76–95. https://doi.org/10.1111/jcms.12977

Norris, P. (2017). The conceptual framework of political support. In S. Zmerli & T. van der Meer, *Handbook on Political Trust* (pp. 19–32). Edward Elgar Publishing. https://doi.org/10.4337/9781782545118.00012

Petri, F., & Biedenkopf, K. (2021). Weathering growing polarization? The European Parliament and EU foreign climate policy ambitions. *Journal of European Public Policy*, *28*(7), 1057–1075. https://doi.org/10.1080/13501763.2021.1918216

Pettigrew, T. F. (1979). The Ultimate Attribution Error: Extending Allport's Cognitive Analysis of Prejudice. *Personality and Social Psychology Bulletin*, *5*(4), 461–476. https://doi.org/10.1177/014616727900500407

Pohjolainen, P., Kukkonen, I., Jokinen, P., Poortinga, W., Adedayo Ogunbode, C., Böhm, G., Fisher, S., & Umit, R. (2021). The role of national affluence, carbon emissions, and democracy in Europeans' climate perceptions. *Innovation: The European Journal of Social Science Research*, 1–19. https://doi.org/10.1080/13511610.2021.1909465

Poortinga, W., Whitmarsh, L., Steg, L., Böhm, G., & Fisher, S. (2019). Climate change perceptions and their individual-level determinants: A cross-European analysis. *Global Environmental Change*, *55*, 25–35. https://doi.org/10.1016/j.gloenvcha.2019.01.007

Powell, G. B., & Whitten, G. D. (1993). A Cross-National Analysis of Economic Voting: Taking Account of the Political Context. *American Journal of Political Science*, *37*(2), 391–414. https://doi.org/10.2307/2111378

Rabe-Hesketh, S., & Skrondal, A. (2021). *Multilevel and longitudinal modeling using Stata* (Fourth edition). Stata Press.

Rohrschneider, R. (2002). The Democracy Deficit and Mass Support for an EU-Wide Government. *American Journal of Political Science*, *46*(2), 463–475. https://doi.org/10.2307/3088389

Rohrschneider, R., & Loveless, M. (2010). Macro Salience: How Economic and Political Contexts Mediate Popular Evaluations of the Democracy Deficit in the European Union. *The Journal of Politics*, *72*(4), 1029–1045. https://doi.org/10.1017/S0022381610000514

Rudolph, T. J. (2003a). Who's Responsible for the Economy? The Formation and Consequences of Responsibility Attributions. *American Journal of Political Science*, *47*(4), 698–713. https://doi.org/10.1111/1540-5907.00049

Rudolph, T. J. (2003b). Institutional Context and the Assignment of Political Responsibility. *The Journal of Politics*, *65*(1), 190–215. https://doi.org/10.1111/1468-2508.00009

Sánchez-Cuenca, I. (2000). The Political Basis of Support for European Integration. *European Union Politics*, *1*(2), 147–171. https://doi.org/10.1177/1465116500001002001

Scharpf, F. W. (2003). *Problem-solving effectiveness and democratic accountability in the EU* (Working Paper No. 03/1). MPIfG Working Paper. https://www.econstor.eu/handle/10419/41664

Sommet, N., & Morselli, D. (2017). Keep calm and learn multilevel logistic modeling: A simplified three-step procedure using stata, R, Mplus, and SPSS. *International Review of Social Psychology*, *30*, 203–218.

Stadelmann-Steffen, I., & Eder, C. (2021). Public opinion in policy contexts. A comparative analysis of domestic energy policies and individual policy preferences in Europe. *International Political Science Review*, *42*(1), 78–94. https://doi.org/10.1177/0192512120913047

Statement from the Paris Summit (19 to 21 October 1972). (1972). Retrieved August 02, 2022, from https://www.cvce.eu/content/publication/1999/1/1/b1dd3d57-5f31-4796-85c3-cfd2210d6901/publishable_en.pdf

Sternberg, C. (2017). Public opinion in the EU institutions' discourses on EU legitimacy from the beginnings of integration to today: *Politique Européenne*, *N° 54*(4), 24–56. https://doi.org/10.3917/poeu.054.0024

Steurer, R. (2021). Is the EU still committed to developing more sustainably? In A. Jordan & V. Gravey (Eds.), *Environmental policy in the EU: actors, institutions and processes* (Fourth Edition, p. Chapter 16). Routledge.

Tausendpfund, M. (2020). Mehrebenenanalyse. In M. Tausendpfund (Ed.), *Fortgeschrittene Analyseverfahren in den Sozialwissenschaften: Ein Überblick* (pp. 119–164). Springer Fachmedien. https://doi.org/10.1007/978-3-658-30237-5_5

Teney, C., Lacewell, O. P., & Wilde, P. D. (2014). Winners and losers of globalization in Europe: Attitudes and ideologies. *European Political Science Review*, *6*(4), 575–595. https://doi.org/10.1017/S1755773913000246

Thurm, R. (2022). Die Geister, die man rief: Wie die EU-Taxonomie sich ad absurdum führt. *Tagesspiegel Background Sustainable Finance*. Retrieved September 21, 2022, from https://background.tagesspiegel.de/sustainable-finance/die-geister-die-man-rief-wie-die-eu-taxonomie-sich-ad-absurdum-fuehrt

Treaty on European Union including the Protocols and Final Act with Declarations, Pub. L. No. Treaty Series No 12. (1994) (1993). Retrieved August 02, 2022, from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/273143/2485.pdf

Vasilopoulou, S., & Talving, L. (2019). Opportunity or threat? Public attitudes towards EU freedom of movement. *Journal of European Public Policy*, *26*(6), 805–823. https://doi.org/10.1080/13501763.2018.1497075

Vasilopoulou, S., & Talving, L. (2020). Poor versus rich countries: A gap in public attitudes towards fiscal solidarity in the EU. *West European Politics*, *43*(4), 919–943.

https://doi.org/10.1080/01402382.2019.1641781

Verhaegen, S. (2018). What to expect from European identity? Explaining support for solidarity in times of crisis. *Comparative European Politics*, *16*(5), 871–904. https://doi.org/10.1057/s41295-017-0106-x

Verhaegen, S., Hooghe, M., & Quintelier, E. (2014). European Identity and Support for European Integration: A Matter of Perceived Economic Benefits? *Kyklos*, *67*(2), 295–314. https://doi.org/10.1111/kykl.12055

Vihma, A., Reischl, G., & Nonbo Andersen, A. (2021). A Climate Backlash: Comparing Populist Parties' Climate Policies in Denmark, Finland, and Sweden. *The Journal of Environment & Development*, *30*(3), 219–239. https://doi.org/10.1177/10704965211027748

Vreese, C. H. de, & Boomgaarden, H. G. (2005). Projecting EU Referendums: Fear of immigration and support for European integration. *European Union Politics*, *6*(1), 59–82. https://doi.org/10.1177/1465116505049608

WECOOP. (n.d.). *EU Environment Policy*. European Union – Central Asia Water, Environment and Climate Change Cooperation (WECOOP). Retrieved August 5, 2022, from https://wecoop.eu/regional-knowledge-centre/eu-policies-regulations/

Weko, S. (2022). Communitarians, cosmopolitans, and climate change: Why identity matters for EU climate and energy policy. *Journal of European Public Policy*, *29*(7), 1072–1091. https://doi.org/10.1080/13501763.2021.1918751

Wendling, Z. A., Emerson, J. W., Esty, D. C., Levy, M. A., de Sherbinin, A., & et al. (2018). *2018 Environmental Performance Index*. Yale Center for Environmental Law & Policy. Retrieved August 12, 2022, from https://epi.yale.edu/

Wurzel, R. K. W., Liefferink, D., & Di Lullo, M. (2019). The European Council, the Council and the Member States: Changing environmental leadership dynamics in the European Union. *Environmental Politics*, *28*(2), 248–270. https://doi.org/10.1080/09644016.2019.1549783

Appendix

As supplementary material, the raw data, files to create and recode the dataset, and to reproduce analyses and graphs is provided. Please follow the instructions in the Logfile.

A Variable Descriptives

Table A1: Descriptive Statistics Individual Level Variables

Item	Variable Name	Observations	Mean	Std. Dev.	Min	Max
Support for Europeanization of environmental policies	joint	26460	.717	.45	0	1
Image of the EU	eu_image	27076	3.346	.87	1	5
Climate change concern	cc_prob	27155	7.695	2.071	1	10
Environmental importance	importance	27389	3.461	.627	1	4
Gender	gender	27498	.541	.498	0	1
Age	age	27498	51.831	18.201	15	98
Education	edu_3	27050	2.211	.675	1	3
Place of residence	residence	27492	1.958	.783	1	3
Social class	class 3	26431	1.646	.619	1	3
Frequency of discusssions on EU	discuss_eu	27366	1.829	.654	1	3
Left-right placement	lright	22533	5.261	2.147	1	10
Country is going in a wrong direction	drct_cntry_wrong	25297	.527	.499	0	1
EU is going in a wrong direction	drct_eu_wrong	23722	.486	.5	0	1
Pro-environmental actions	e_action	27366	4.210	2.722	0	14

Table A2: Descriptive Statistics Country Level Variables

Item	Variable Name	Observations	Mean	Std. Dev.	Min	Max
Environmental Performance Index	epi	28	73.565	6.335	64.11	83.95
Political Environmentalism	pol_env	28	-.772	3.11	-7.295	6.111
GDP per capita logged	gdp_ln	28	10.284	.618	9.198	11.637
Net Budget Contribution	net_budget	28	-224.562	556.611	-2730.142	318.133
Year of EU accession	accession_y	28	1988.286	19.421	1958	2013

B Country Descriptives

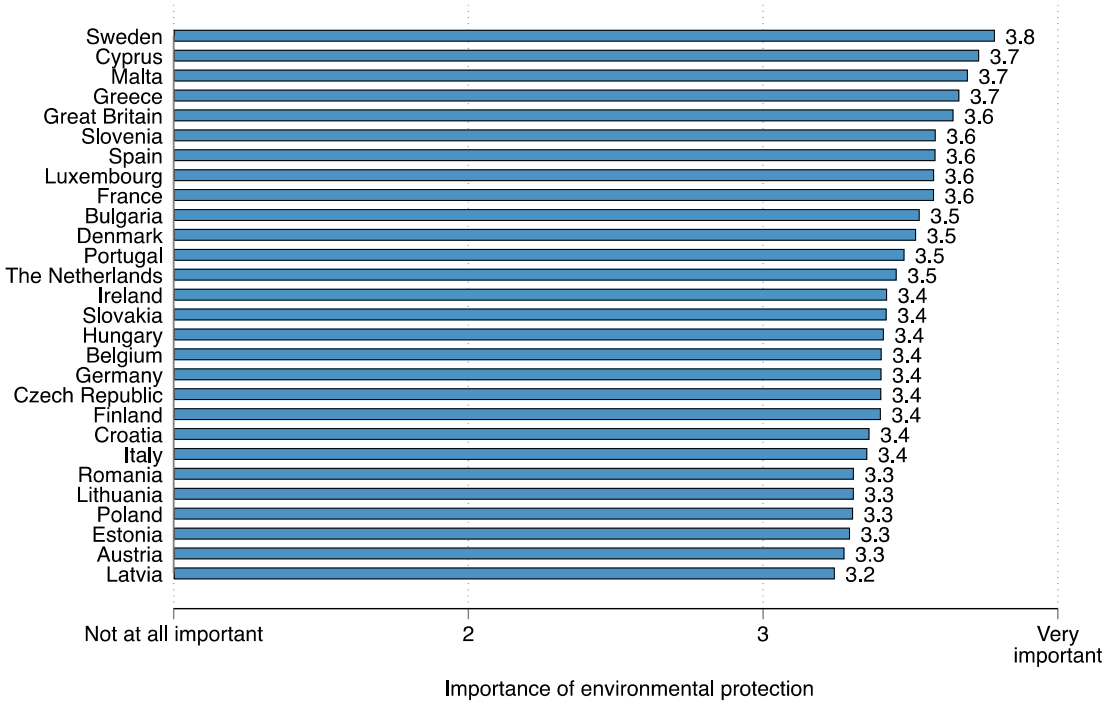


Figure B1: Importance of environmental protection by country, 1 – 4

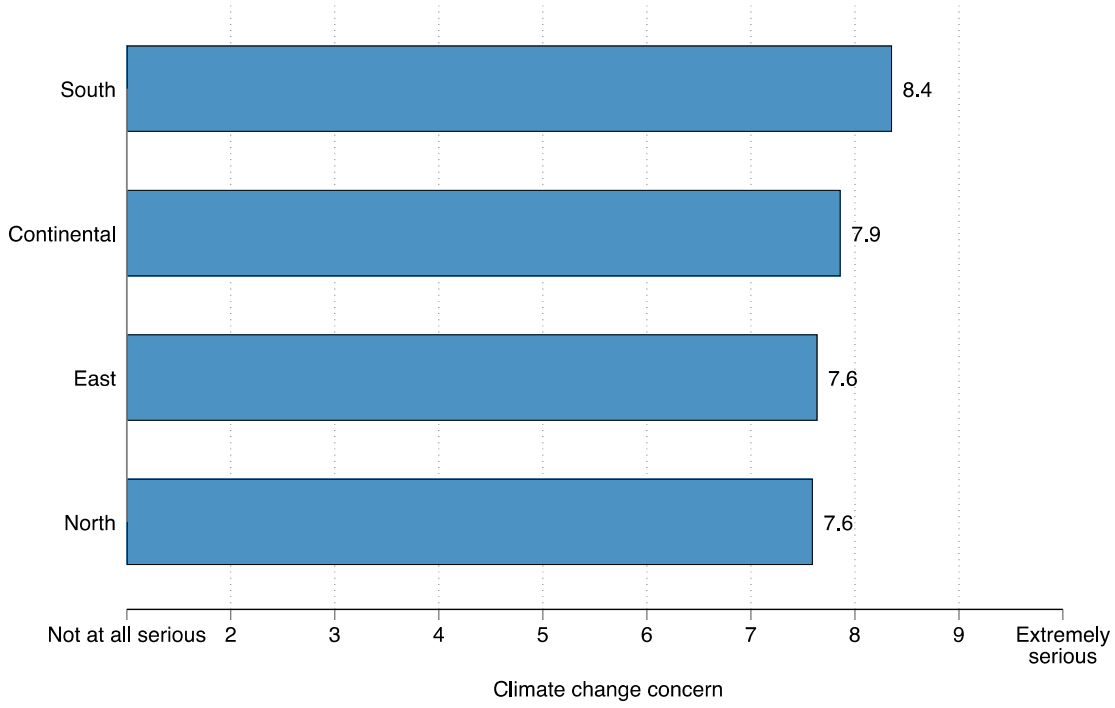


Figure B2: "Climate change is a … problem" by country group, 1 – 10

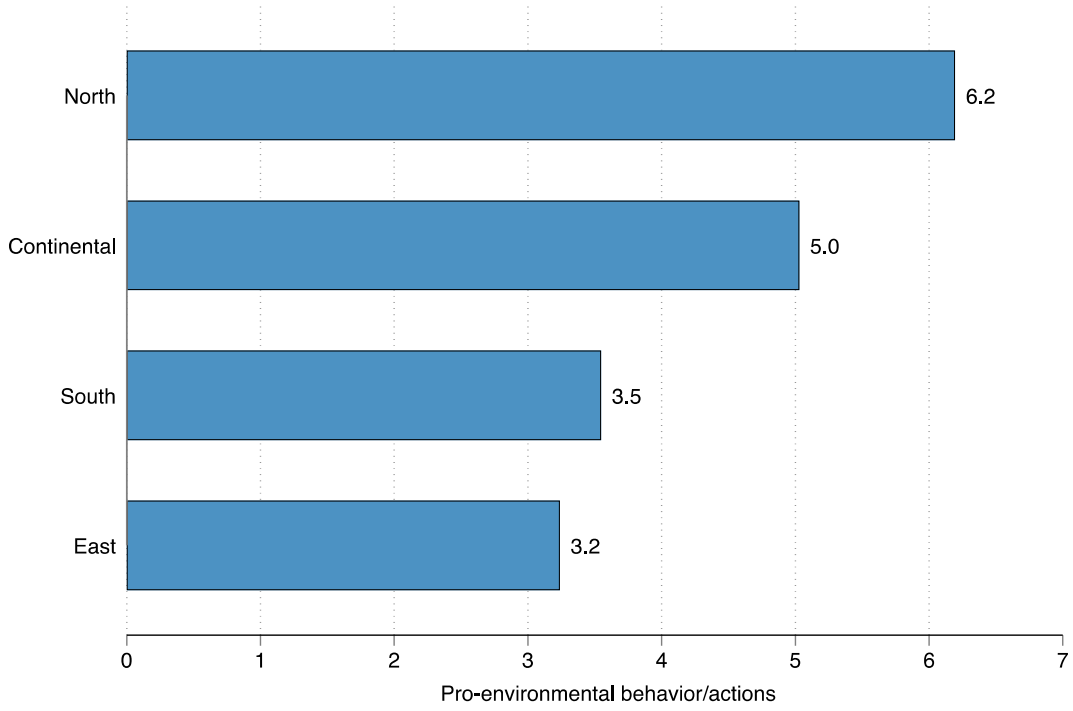


Figure B3: Pro-environmental behavior by country group, 0 – 14.

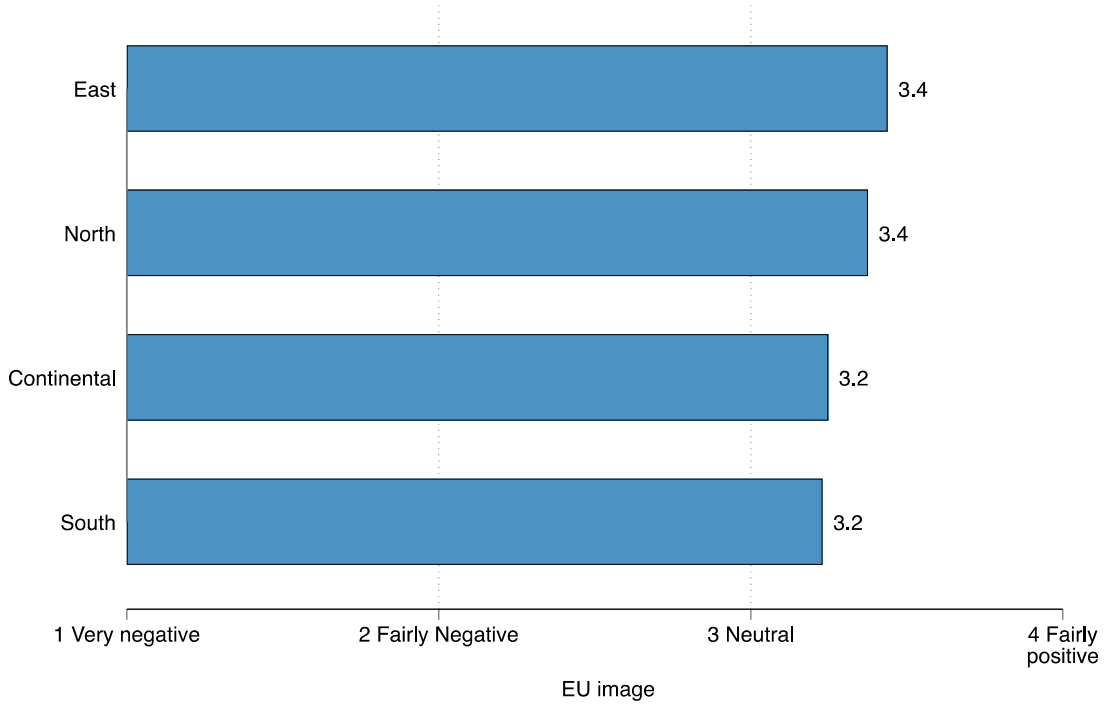


Figure B4: Image of the EU by country, 1 – 5.

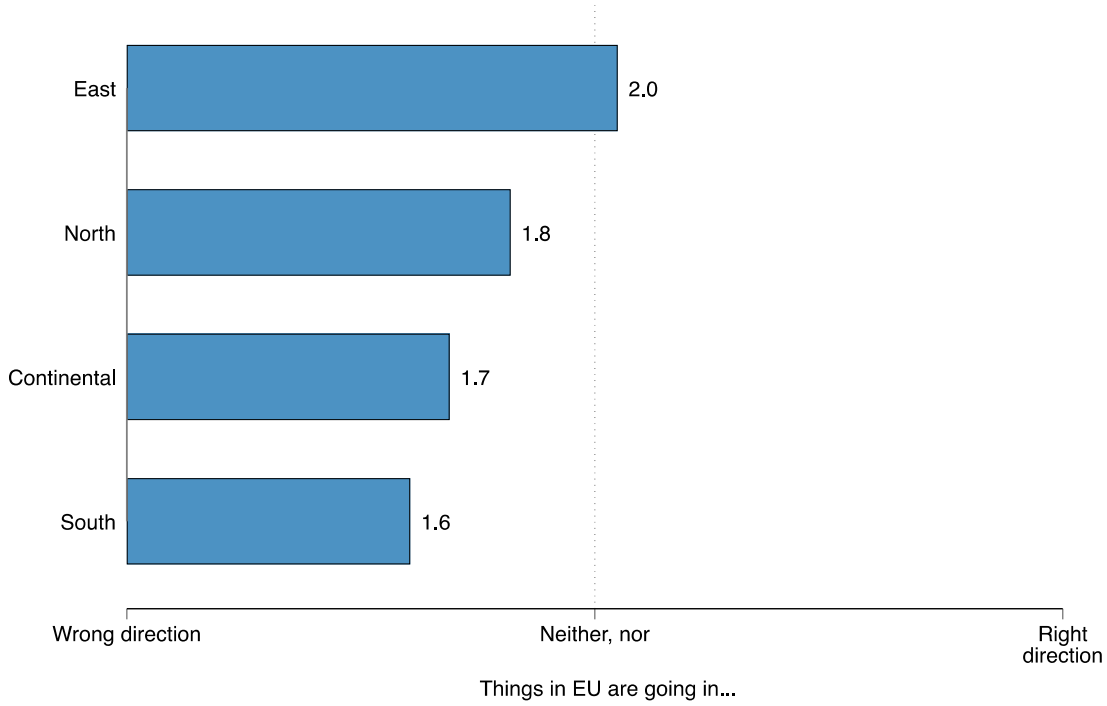


Figure B5: General Dis/Satisfaction with the EU, by country group.

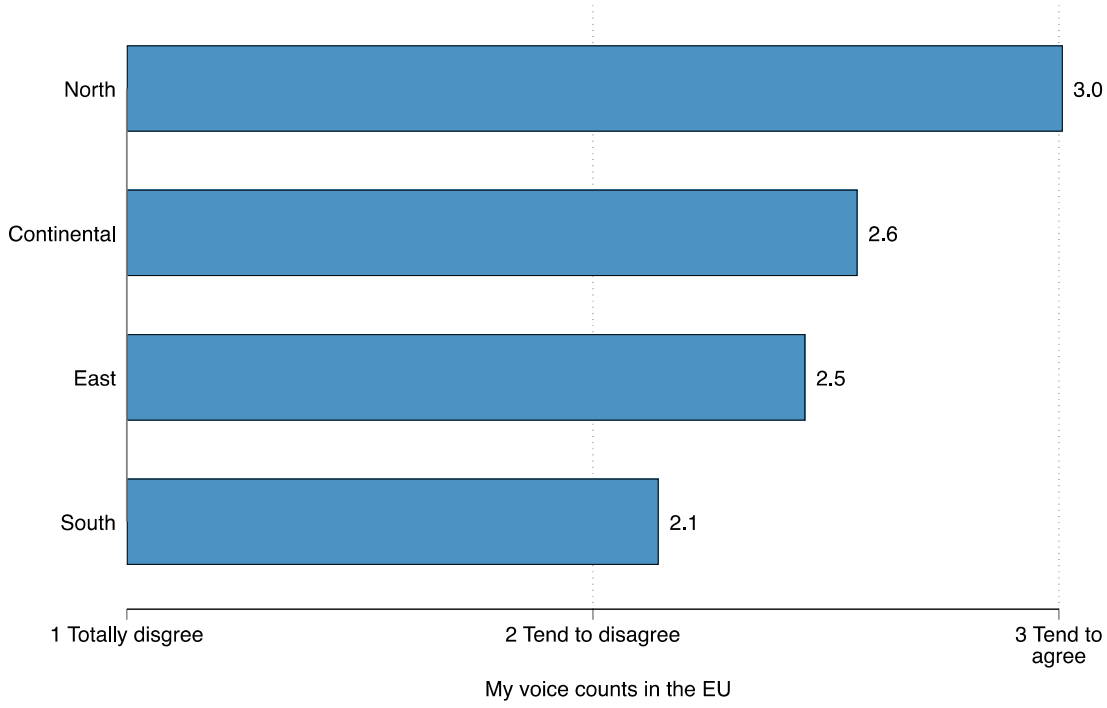


Figure B6: Satisfaction with democracy in the EU, by country group, category 4 "totally agree" not shown.

Table B1: Correlation matrix of environmental attitude variables

	environmental importance	climate change concern	environmental behavior	EU not doing enough	Government not doing enough
environmental importance	1.000				
climate change concern	0.411***	1.000			
environmental behavior	0.293***	0.220***	1.000		
EU not doing enough	0.161***	0.221***	0.133***	1.000***	
Government not doing enough	1.826***	0.258***	0.111***	0.569***	1.000***

Cronbach's alpha = 0.43

Table B2: Correlation matrix of EU attitude variables

	EU image	Direction the EU is going	My voice counts in EU
environmental importance	1.000		
climate change concern	0.441***	1.000	
environmental behavior	0.345***	0.281***	1.000

Cronbach's alpha = 0.63

C Regression Tables

Table C1: Multilevel fixed effects, for EU image and Climate change concern

	Image of the EU	Climate change concern
Gender (ref. male)	0.011	0.383***
	(0.014)	(0.049)
Age	-0.002*	0.003
	(0.001)	(0.002)
Education (ref. <15y / no)		
16-19 years/still studying	0.006	0.063
	(0.043)	(0.047)
>=20 years/still studying	0.114	0.119
	(0.062)	(0.071)
Class (ref. low)		
middle	0.130***	0.198*
	(0.036)	(0.086)
high	0.264***	0.332**
	(0.040)	(0.103)
Frequ. pol discuss (ref. never)		
Occasionally	0.109**	0.135
	(0.036)	(0.084)
Frequently	0.194**	0.438**
	(0.060)	(0.158)
Left-right placement	0.021	-0.274***
	(0.053)	(0.057)
Left-right placement squared	-0.006	0.016**
	(0.004)	(0.006)
Place of residence (ref. rural area/village)		
Small / middle sized town	0.001	0.207***
	(0.028)	(0.055)
Large town	0.034	0.224**
	(0.031)	(0.078)
Country wrong direction	-0.003	0.100
	(0.137)	(0.125)
EU wrong direction	-0.700***	-0.274***
	(0.090)	(0.062)
Constant	3.663***	7.921***
	(0.140)	(0.198)
Country level variance	-1.983***	-0.821***
	(0.132)	(0.130)
Indiv. level variance	-0.211***	0.665***
	(0.029)	(0.029)
Observations	19013	19010
N Cluster	28	28
AIC	46265.356	79810.811
BIC	46398.855	79944.307
Log Likelihood (LL)	-23115.678	-39888.405

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table C2: Multilevel fixed effects, country level variables added

	MC1 EPI + Pol. environm.	MC2 EPI + GDP	MC3 Pol. environm. + GDP	MC4 EPI + Accession year	MC5 Pol. Env. + Accession	MC6 GDP + Accession year
Image of the EU (1-5)	0.416***	0.416***	0.416***	0.416***	0.416***	0.415***
	(0.060)	(0.060)	(0.060)	(0.060)	(0.060)	(0.060)
CC Concern (1-10)	0.116***	0.117***	0.117***	0.116***	0.116***	0.117***
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Gender (ref. male)	0.016	0.016	0.016	0.016	0.016	0.016
	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)
Age	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Education (ref. <15y / no)						
16-19 years/still studying	-0.036	-0.037	-0.036	-0.031	-0.030	-0.029
	(0.089)	(0.089)	(0.089)	(0.090)	(0.090)	(0.090)
>=20 years/still studying	-0.048	-0.049	-0.048	-0.040	-0.039	-0.038
	(0.118)	(0.118)	(0.119)	(0.119)	(0.119)	(0.119)
Class (ref. low)						
Middle	0.090	0.090	0.090	0.091	0.091	0.090
	(0.055)	(0.055)	(0.055)	(0.055)	(0.054)	(0.054)
High	0.193*	0.192*	0.191*	0.195*	0.193*	0.193*
	(0.082)	(0.082)	(0.082)	(0.080)	(0.080)	(0.080)
Frequ. pol discuss (ref. never)						
Occasionally	0.184*	0.184*	0.184*	0.187**	0.186**	0.186*
	(0.072)	(0.073)	(0.073)	(0.072)	(0.072)	(0.072)
Frequently	0.068	0.067	0.067	0.072	0.071	0.071
	(0.074)	(0.074)	(0.074)	(0.073)	(0.073)	(0.073)
Left-right ideology	0.130	0.130	0.130	0.131	0.130	0.130
	(0.071)	(0.071)	(0.071)	(0.070)	(0.070)	(0.070)
Left-right-squared	-0.013*	-0.013*	-0.013*	-0.013*	-0.013*	-0.013*
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Place of residence (ref. rural area/village)						
Small / middle sized town	0.042	0.043	0.043	0.043	0.043	0.047
	(0.087)	(0.086)	(0.087)	(0.087)	(0.087)	(0.086)
Large town	0.069	0.070	0.070	0.071	0.071	0.075
	(0.092)	(0.092)	(0.092)	(0.093)	(0.093)	(0.093)
Country wrong direction	0.356*	0.358*	0.358*	0.356*	0.358*	0.358*
	(0.147)	(0.147)	(0.147)	(0.147)	(0.147)	(0.147)
EU wrong direction	-0.290**	-0.290**	-0.289**	-0.290**	-0.290**	-0.288**
	(0.101)	(0.101)	(0.102)	(0.101)	(0.102)	(0.101)
EPI	0.026*	0.018		0.030		
	(0.012)	(0.021)		(0.026)		
Political environmentalism	0.028		0.028		-0.000	
	(0.029)		(0.032)		(0.034)	
GDP logged		0.190	0.273			0.606**
		(0.205)	(0.141)			(0.194)
Accession year (ref. 1958)						
1973				-0.392*	-0.345*	-0.494***
				(0.176)	(0.176)	(0.140)
1981				-0.069	-0.218	0.298
				(0.190)	(0.117)	(0.199)

1986				0.484	0.388	0.714*
				(0.280)	(0.330)	(0.285)
1995				-0.286	-0.261	-0.333
				(0.212)	(0.208)	(0.191)
2004				-0.131	-0.463**	0.108
				(0.329)	(0.177)	(0.260)
2007				-0.499	-0.867***	-0.048
				(0.370)	(0.189)	(0.344)
2013				-0.206	-0.597***	0.054
				(0.372)	(0.120)	(0.246)
Constant	-1.580***	-1.575***	-1.574***	-1.469***	-1.317***	-1.590***
	(0.410)	(0.410)	(0.411)	(0.400)	(0.372)	(0.384)
Country level variance	0.124***	0.123**	0.127**	0.066***	0.072***	0.052***
	(0.036)	(0.040)	(0.043)	(0.014)	(0.018)	(0.013)
Observations	18543	18543	18543	18543	18543	18543
N Cluster	28	28	28	28	28	
AIC	19913.243	19913.432	19913.218	19909.355	19910.876	19905.765
BIC	20069.800	20069.989	20069.775	20097.224	20098.745	20093.634
Log Likelihood (LL)	-9936.621	-9936.716	-9936.609	-9930.678	-9931.438	-9928.883

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table C3: Separate country regressions, set 1

	(1) France	(2) Belgium	(3) The Netherlan	(4) Germany	(5) Italy	(6) Luxembourg	(7) Denmark	(8) Ireland	(9) Great Britain	(10) Greece
Image of the EU (1-5)	0.344**	-0.030	0.405**	0.469***	0.488***	0.279	0.395***	0.336*	0.572***	0.530***
	(0.123)	(0.109)	(0.148)	(0.142)	(0.116)	(0.228)	(0.111)	(0.134)	(0.122)	(0.106)
CC Concern (1-10)	0.006	0.200***	0.123	0.150***	0.128**	0.121	0.090	0.109*	0.209***	0.085
	(0.051)	(0.051)	(0.064)	(0.042)	(0.047)	(0.102)	(0.054)	(0.048)	(0.059)	(0.051)
Gender (ref. male)	-0.151	-0.130	0.133	0.060	0.115	-0.043	-0.168	0.213	-0.302	0.196
	(0.196)	(0.195)	(0.221)	(0.186)	(0.179)	(0.343)	(0.203)	(0.180)	(0.219)	(0.187)
Age	-0.007	-0.003	0.001	0.005	-0.014*	-0.007	0.003	-0.002	0.004	-0.005
	(0.005)	(0.005)	(0.007)	(0.005)	(0.006)	(0.011)	(0.006)	(0.005)	(0.006)	(0.006)
Education (ref. <15y / no)										
16-19 years/still studying	0.344	0.124	-0.423	-0.512	-0.206	1.079	-0.589	0.654*	0.138	0.168
	(0.320)	(0.329)	(0.386)	(0.296)	(0.279)	(0.633)	(0.434)	(0.300)	(0.330)	(0.258)
>=20 years/still studying	0.636	0.061	-0.870*	-0.573	-0.273	0.185	-0.349	1.034**	0.204	0.144
	(0.328)	(0.355)	(0.403)	(0.316)	(0.309)	(0.654)	(0.376)	(0.330)	(0.380)	(0.276)
Class (ref. low)										
Middle	0.136	0.559*	-0.117	-0.014	-0.234	0.611	0.348	-0.042	0.194	-0.154
	(0.226)	(0.221)	(0.372)	(0.196)	(0.236)	(0.444)	(0.257)	(0.198)	(0.232)	(0.195)
High	0.253	1.131**	-0.183	0.328	-0.130	0.671	0.518	0.064	0.878	0.733
	(0.385)	(0.435)	(0.398)	(0.391)	(0.395)	(0.608)	(0.315)	(0.538)	(1.040)	(1.131)
Frequ. pol discuss (ref. never)										
Occasionally	0.060	0.284	0.017	0.260	0.614**	-0.117	0.248	0.190	0.094	0.856***
	(0.219)	(0.215)	(0.315)	(0.253)	(0.213)	(0.445)	(0.270)	(0.203)	(0.255)	(0.224)
Frequently	-0.315	-0.437	0.176	-0.082	0.113	0.717	-0.008	0.119	0.065	0.560*
	(0.335)	(0.312)	(0.345)	(0.309)	(0.317)	(0.626)	(0.314)	(0.284)	(0.307)	(0.268)
Left-right ideology	0.362*	0.194	-0.024	0.272	0.093	0.104	0.227	-0.044	-0.035	-0.311
	(0.164)	(0.186)	(0.219)	(0.202)	(0.184)	(0.307)	(0.173)	(0.207)	(0.200)	(0.233)
Left-right-squared	-0.032*	-0.020	0.002	-0.029	-0.006	-0.008	-0.025	0.001	0.006	0.031
	(0.015)	(0.017)	(0.020)	(0.021)	(0.016)	(0.030)	(0.016)	(0.018)	(0.018)	(0.021)
Place of residence (ref. rural area/village)										
Small or middle sized town	0.443	-0.638**	0.304	0.351	-0.278	-0.706	0.095	-0.591*	-0.287	0.398
	(0.253)	(0.247)	(0.241)	(0.220)	(0.334)	(0.373)	(0.241)	(0.248)	(0.297)	(0.295)
Large town	0.631	-1.332***	0.143	0.120	-0.306	0.046	0.407	-0.208	-0.100	0.165

	(0.339)	(0.257)	(0.319)	(0.254)	(0.369)	(0.718)	(0.293)	(0.225)	(0.326)	(0.203)
Country wrong direction	0.370	0.509	0.003	0.205	0.318	-0.222	0.357	0.686*	1.083***	0.058
	(0.414)	(0.264)	(0.278)	(0.277)	(0.283)	(0.449)	(0.277)	(0.339)	(0.248)	(0.247)
EU wrong direction	-0.794	-0.408	0.075	-0.129	-0.306	-0.759	-0.213	-0.205	-0.710**	0.227
	(0.426)	(0.259)	(0.294)	(0.274)	(0.278)	(0.422)	(0.234)	(0.346)	(0.250)	(0.251)
Constant	-1.067	-0.138	-0.343	-2.019*	-1.187	-0.526	-1.458	-1.672	-3.126**	-1.417
	(0.929)	(0.800)	(1.057)	(0.866)	(0.921)	(1.748)	(0.762)	(0.864)	(1.028)	(0.957)
Observations	639	890	865	1210	665	280	818	764	577	736
Pseudo R^2	0.074	0.090	0.049	0.067	0.069	0.120	0.066	0.057	0.196	0.066

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table C4: Separate country regressions, set 2

	(11) Spain	(12) Portugal	(13) Finland	(14) Sweden	(15) Austria	(16) Cyprus	(17) Czech Republic	(18) Estonia	(19) Hungary
Image of the EU (1-5)	-0.188	0.125	0.437**	0.729***	0.119	0.172	0.217	0.472*	0.226*
	(0.159)	(0.258)	(0.140)	(0.133)	(0.111)	(0.307)	(0.114)	(0.185)	(0.107)
CC Concern (1-10)	0.082	0.628***	0.121*	0.095	0.106**	0.058	0.065	0.096	0.173***
	(0.076)	(0.089)	(0.055)	(0.060)	(0.038)	(0.094)	(0.038)	(0.057)	(0.046)
Gender (ref. male)	0.086	-0.189	0.268	0.270	0.040	-0.816	0.078	-0.107	0.092
	(0.246)	(0.274)	(0.216)	(0.241)	(0.163)	(0.484)	(0.174)	(0.244)	(0.166)
Age	-0.007	0.006	-0.004	-0.008	-0.013**	-0.020	-0.013*	-0.011	-0.019***
	(0.008)	(0.009)	(0.006)	(0.006)	(0.005)	(0.014)	(0.005)	(0.006)	(0.005)
Education (ref. <15y / no)									
16-19 years/still studying	-0.132	0.620	-0.126	0.715	0.634**	0.262	0.284	-0.377	-0.079
	(0.344)	(0.319)	(0.373)	(0.593)	(0.224)	(0.590)	(0.548)	(0.413)	(0.234)
>=20 years/still studying	0.282	0.278	-0.135	0.439	1.015***	-0.223	0.053	-0.120	-0.313
	(0.372)	(0.478)	(0.354)	(0.561)	(0.269)	(0.706)	(0.573)	(0.427)	(0.294)
Class (ref. low)									
Middle	0.019	0.345	0.220	-0.101	0.212	0.195	0.292	-0.443	-0.068
	(0.266)	(0.382)	(0.248)	(0.302)	(0.185)	(0.452)	(0.186)	(0.246)	(0.188)
High	-0.675	-1.101	0.167	-0.388	0.305	-0.597	0.777*	0.562	0.716
	(0.575)	(0.952)	(0.317)	(0.400)	(0.367)	(0.761)	(0.372)	(0.644)	(0.615)
Frequ. pol discuss (ref. never)									
Occasionally	-0.077	0.009	-0.039	0.597	0.448*	0.129	0.416*	0.450	0.122
	(0.286)	(0.288)	(0.237)	(0.336)	(0.226)	(0.423)	(0.179)	(0.289)	(0.214)
Frequently	-0.544	0.343	-0.183	0.408	0.291	-0.061	0.527	0.483	0.350
	(0.428)	(0.854)	(0.331)	(0.382)	(0.282)	(0.705)	(0.328)	(0.401)	(0.339)
Left-right ideology	-0.126	1.302***	0.005	-0.161	-0.040	0.536	-0.124	0.319	-0.305
	(0.242)	(0.225)	(0.238)	(0.204)	(0.168)	(0.295)	(0.154)	(0.265)	(0.191)
Left-right-squared	0.005	-0.113***	-0.016	0.017	0.001	-0.049	0.013	-0.026	0.020
	(0.022)	(0.020)	(0.020)	(0.020)	(0.015)	(0.025)	(0.014)	(0.022)	(0.015)
Place of residence (ref. rural area/village)									
Small or middle sized town	0.250	0.764*	-0.515*	-0.746*	0.387	1.465**	0.117	-0.264	-0.247
	(0.285)	(0.304)	(0.223)	(0.336)	(0.216)	(0.544)	(0.210)	(0.282)	(0.203)
Large town	0.285	1.107**	0.453	0.048	0.349	1.150**	0.418	0.473	0.261

	(0.362)	(0.410)	(0.321)	(0.357)	(0.208)	(0.437)	(0.223)	(0.297)	(0.231)
Country wrong direction	-0.768	0.494	0.151	0.122	0.090	0.048	0.247	0.395	0.437*
	(0.541)	(0.384)	(0.318)	(0.330)	(0.215)	(0.705)	(0.202)	(0.268)	(0.208)
EU wrong direction	0.193	-0.068	-0.226	-0.658	-0.075	-0.063	-0.266	-0.944**	0.181
	(0.446)	(0.424)	(0.337)	(0.340)	(0.213)	(0.760)	(0.223)	(0.295)	(0.198)
Constant	3.197**	-7.970***	-0.410	-1.215	-1.121	-0.071	-0.853	-1.531	0.621
	(1.036)	(1.327)	(1.021)	(0.944)	(0.756)	(1.630)	(0.891)	(1.286)	(0.888)
Observations	717	565	695	852	788	216	768	513	848
Pseudo R^2	0.032	0.330	0.106	0.129	0.070	0.122	0.055	0.112	0.067

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table C5: Separate country regressions, set 3

	(20) Latvia	(21) Lithuania	(22) Malta	(23) Poland	(24) Slovakia	(25) Slovenia	(26) Bulgaria	(27) Romania	(28) Croatia
Image of the EU (1-5)	0.267	0.566**	-0.272	0.644***	0.227	0.120	0.372**	-0.118	0.353**
	(0.239)	(0.188)	(0.237)	(0.150)	(0.161)	(0.126)	(0.144)	(0.109)	(0.123)
CC Concern (1-10)	0.159*	0.054	0.157	0.078	0.039	0.008	0.129*	0.078	0.161***
	(0.080)	(0.062)	(0.085)	(0.044)	(0.062)	(0.045)	(0.056)	(0.040)	(0.043)
Gender (ref. male)	0.571*	0.273	0.078	0.127	0.027	0.164	0.169	-0.120	0.274
	(0.284)	(0.239)	(0.329)	(0.183)	(0.204)	(0.188)	(0.234)	(0.170)	(0.169)
Age	-0.009	-0.013*	-0.006	-0.007	-0.018**	-0.009	-0.008	0.000	-0.007
	(0.009)	(0.007)	(0.012)	(0.006)	(0.006)	(0.006)	(0.009)	(0.005)	(0.006)
Education (ref. <15y / no)									
16-19 years/still studying	0.695	0.967	0.247	-0.009	-0.621	0.304	-0.649	-0.494	0.531
	(0.531)	(0.519)	(0.495)	(0.450)	(0.522)	(0.279)	(0.496)	(0.301)	(0.325)
>=20 years/still studying	0.419	0.555	0.004	-0.284	0.077	0.157	-0.562	-0.474	-0.027
	(0.547)	(0.523)	(0.571)	(0.469)	(0.590)	(0.317)	(0.542)	(0.345)	(0.362)
Class (ref. low)									
Middle	-0.137	-0.106	0.526	-0.059	0.254	0.094	0.956**	0.371*	0.229
	(0.319)	(0.248)	(0.390)	(0.219)	(0.215)	(0.201)	(0.296)	(0.179)	(0.191)
High	-0.800	-0.061	1.205	0.441	-0.419	0.883	0.445	0.430	0.979*
	(0.701)	(0.567)	(1.184)	(0.409)	(0.667)	(0.629)	(1.187)	(0.344)	(0.414)
Frequ. pol discuss (ref. never)									
Occasionally	-0.186	0.436	-0.242	-0.080	0.816**	0.100	0.143	0.060	0.302
	(0.371)	(0.283)	(0.402)	(0.221)	(0.263)	(0.204)	(0.302)	(0.193)	(0.200)
Frequently	0.112	0.443	0.448	0.492	0.787*	0.338	-0.639	0.010	0.324
	(0.522)	(0.401)	(0.631)	(0.310)	(0.389)	(0.358)	(0.410)	(0.283)	(0.288)
Left-right ideology	-0.055	0.267	0.676	0.049	0.238	0.027	0.264	0.293*	0.256
	(0.280)	(0.197)	(0.396)	(0.155)	(0.206)	(0.148)	(0.174)	(0.146)	(0.145)
Left-right-squared	-0.001	-0.026	-0.048	-0.005	-0.030	-0.006	-0.025	-0.024*	-0.018
	(0.023)	(0.017)	(0.033)	(0.013)	(0.018)	(0.013)	(0.015)	(0.012)	(0.013)
Place of residence (ref. rural area/village)									
Small or middle sized town	0.179	-0.100	0.592	-0.177	-0.336	-0.165	1.283***	0.026	-0.428*
	(0.361)	(0.297)	(0.388)	(0.221)	(0.224)	(0.220)	(0.308)	(0.208)	(0.203)
Large town	0.152	0.271	0.643	-0.416	-0.279	0.066	1.145***	-0.687***	-0.245
	(0.385)	(0.301)	(0.549)	(0.251)	(0.323)	(0.235)	(0.300)	(0.204)	(0.238)

Country wrong direction	-0.987**	-0.001	0.136	0.283	-0.174	-0.335	-0.621*	0.469*	0.812**
	(0.373)	(0.256)	(0.401)	(0.209)	(0.272)	(0.287)	(0.303)	(0.197)	(0.254)
EU wrong direction	-0.716	-0.028	-0.660	0.000	0.233	-0.038	-0.265	-0.451*	-0.766***
	(0.369)	(0.284)	(0.377)	(0.217)	(0.271)	(0.293)	(0.302)	(0.212)	(0.213)
Constant	0.631	-2.821*	-1.689	-2.086*	0.486	0.404	-1.765	-0.237	-2.974***
	(1.367)	(1.136)	(1.905)	(1.062)	(1.207)	(0.835)	(1.152)	(0.863)	(0.831)
Observations	534	466	224	615	693	587	526	672	820
Pseudo R^2	0.131	0.076	0.108	0.076	0.063	0.028	0.179	0.042	0.086

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$