SUPPORT TO GAIN SUPPORTERS

The Cohesion Policy and Public Attitudes towards the European Union

Julia Möttönen

Abstract

In this thesis the aim was to explore the relationship between Cohesion Policy funding and individual EU support. The Cohesion Policy is the EU's main tool to address regional disparities. It is redistributive and has a connection to citizens. Scholars argue that these characteristics of the Cohesion Policy could make it generate public support for the EU (Aiello et al., 2019; Borz et al., 2018). Citizens in a region which receives more Cohesion Policy funding are believed to be more supportive of the EU than those who receive less (Crescenzi et al., 2020; Rodríguez-Pose & Dijkstra, 2021); however, empirical evidence supporting this claim is mixed (Crescenzi et al., 2020; Dąbrowski et al., 2021). I use the *Cohesify citizen survey* from Borz et al. (2017) to investigate the Cohesion Policy's impact on individual EU support. I am using a statistical, multilevel analysis and include Cohesion Policy funding as a factor at the regional/macro-level and awareness of the Cohesion Policy and control variables, such as socioeconomic factors and identity, at the individual/micro-level. I found that the relationship depends on both macro- and micro-level factors. Regional Cohesion Policy funding increases public support for the EU but only when individuals are aware of the Cohesion Policy. This holds for specific EU support, i.e., perceiving EU membership to be beneficial, but not for diffuse EU support, i.e., general attitudes towards European integration (Hobolt & de Vries, 2016). EU policy, regional contexts and individual factors are thus interlinked for understanding public opinion and what generates support for the EU.

Acknowledgements

I would like to thank my supervisor Linda Berg for support, feedback, and encouragement throughout the writing of this project. Thank you for showing enthusiasm in my work, reminding me to enjoy the writing, and being a perfect example of how to guide someone in a working process.

Also, my deepest gratitude to the researchers at the University of Strathclyde – Heinz Brandenburg, Gabriela Borz, and Carlos Mendez – for, upon request, making their COHSIFY citizen survey available for me to base my research on. It has been a pleasure to build on your work and further investigate the important topics you cover.

Lastly, I would like to send all my love and thanks to my family and friends for always being there for me with support or distractions when I need it. Tack för allt!

Contents

List of Figures

List of Tables

List of Abbreviations

CEE – Central Eastern Europe

CF – Cohesion Fund

CI – Confidence Interval

CP – Cohesion Policy

CY – Cyprus

DE – Germany

EAFRD – European Agriculture Fund for Rural Development

EMFF – European Maritime and Fisheries Fund

ES – Spain

ESF – European Social Fund

ERDF – European Regional Development Fund

EU – European Union

GB – Great Britain / United Kingdom

GDP – Gross Domestic Product

GR – Greece

HU – Hungary

ICC – Intraclass correlation coefficient

IE – Ireland

ISCED – International Standard Classification of Education

IT – Italy

NL – the Netherlands

NUTS - Nomenclature of territorial units for statistics

PL – Poland

RO – Romania

SI – Slovenia

TFEU – Treaty on the Functioning of the European Union

UK – United Kingdom / Great Britain

1. Introduction

Public support for the EU is a hot topic in Europe and its importance for the legitimacy of European integration is highlighted both in academia and in the EU institutions (Hobolt & de Vries, 2016; Hooghe & Marks, 2009; Verhaegen et al., 2014). The EU institutions involve citizens in their events (European Commission, n.d.-c), scholars study the nature of the public opinion towards the EU (Hobolt & de Vries, 2016), and the postfunctionalist theory puts public opinion at the centre of the European integration (Hooghe & Marks, 2009). Public support of the EU is multifaceted: it captures different attitudes (Lubbers & Scheepers, 2005), is driven by several factors (Gabel & Palmer, 1995), and can be affected by EU policies (Aiello et al., 2019). One policy is claimed to be especially relevant for the connection between EU policies and public support for the EU, namely the Cohesion Policy (Dąbrowski et al., 2021; López-Bazo, 2021b).

The Cohesion Policy is the EU's main redistributive tool and constitutes about a third of the EU's expenditure budget. It promotes a 'harmonious development' with the 'aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions' (Article 174, TFEU 2012). The policy is allocated on a subnational, i.e., regional level, and involves actors at all levels in the multilevel governance structure of the EU (Piattoni & Polverari, 2016). Scholars regard the Cohesion Policy to be a factor which could shape public opinion, based on its connection to citizens as well as its influence on regional contexts (López-Bazo, 2021b). However, the Cohesion Policy's impact on public attitudes is contested. Some scholars note a direct positive relation between larger amount of Cohesion Policy funding in a region and more positive EU attitudes (Dąbrowski et al., 2021; Osterloh, 2011), others see a positive relationship but dependent on intervening factors (Crescenzi et al., 2020), and some even find that increased Cohesion Policy funding generates less support for the EU (Rehák et al., 2021).

This thesis analyses whether a larger amount of Cohesion Policy funding in a region generates more support for the EU, and what influences this relationship. The Cohesion Policy's capacity to bring the EU closer to the citizens and generate public support is believed to depend on both how large the funding is to a region and how aware individuals are of this funding (Borz et al., 2018). To investigate this relationship and include the awareness related factors, which not many scholars control for, the *Cohesify citizen survey* (Borz et al., 2017) is used as data source in this thesis. I also include different notions of EU support in this study. The notions reflect a utilitarian cost-benefit analysis of EU membership as well as general positions towards the European integration (Easton, 1975; Hobolt & de Vries, 2016). This gives a nuanced approached to the multifaceted nature of EU attitudes and to the

Cohesion Policy, as well as a better understanding of what generates public support for the EU and European integration.

1.1. Aim

The aim of this thesis is to investigate the relationship between the Cohesion Policy and public support for the EU. It will thus contribute to the research field on public opinion towards the EU. In comparison to most previous studies, Cohesion Policy is in this thesis, treated as a more complex factor. At the regional/macro-level, the Cohesion Policy is seen through its financial allocations to regions of EU member states. At the individual/micro-level, the influence of the Cohesion Policy funding is captured through individuals' awareness of the policy and personal benefits from its funding. In this way, the Cohesion Policy's capacity to bring the EU closer to the citizens and influence their levels of support is believed to depend on how large the funding to a region is and how aware individuals are of this funding. The analysis uses both the macro-level funding and micro-level awareness to assess the impact of Cohesion Policy on public EU support. Furthermore, the thesis investigates whether this potential influence varies depending on what notion of EU support that is considered, *specific* EU support, being the utilitarian cost-benefit analysis of EU membership, or *diffuse* EU support, i.e., a general position towards the European integration (Easton, 1975; Hobolt & de Vries, 2016; Lubbers & Scheepers, 2005).

1.2. Outline

The thesis is structured accordingly. The next chapter contains previous research and theory related to the Cohesion Policy and EU support. The chapter distinguishes between EU support and explanations of it, where the latter part further is separated into Cohesion Policy funding as macro-level factor and other explanations based on micro-level factors, e.g., awareness and socioeconomic factors. The chapter concludes with a presentation of the hypotheses guiding the study. Thereafter comes a chapter on material and method, which presents the data that is used for the analysis, how the variables are chosen and operationalised, how the statistical analysis is made, and some limitations of the study. The results from the analysis are presented in the following chapter. Lastly the concluding discussion further examines the results in relation to previous research, presents some general reflections, and gives suggestions for further research. In addition to this, an appendix is attached with detailed information on the variables and regions included in the study.

2. Theory and previous research

2.1. EU support

Public support of the EU is investigated in this thesis. It is treated as an individual opinion towards the EU and the European integration, captured in citizen surveys (Ekman, 2009; European Union, n.d.; Lipps & Schraff, 2021). The academic field studying public opinion towards the EU and the European integration investigates the determinants of both positive and negative attitudes – EU support and Euroscepticism (Hobolt & de Vries, 2016). The core of the research remains however the same – how can we understand public attitudes towards the EU and the European integration project. Previous research exploring both Euroscepticism and EU support is hence discussed in this thesis.

Instead of only separating positive attitudes and negative ones, a more fruitful distinction is claimed to be the notion of what can be captured while measuring public attitudes towards the EU. This implies that support of the EU is multifaceted. An individual who supports a certain EU policy might not necessarily be supportive of the EU institutions or want an expanded European integration (De Vries, 2018; Hobolt & de Vries, 2016; Lubbers & Scheepers, 2005, 2007).

One early distinction of versions of public opinion towards political institutions was set by Easton (1965, 1975), who separated *specific* and *diffuse* support. Specific support 'is directed to the perceived decisions, policies, actions, utterances or the general style of the authorities' (Easton, 1975, p. 437). It can stem from perceiving a political institution or arrangement to fulfil one's demands, or from an evaluation of the performance of the institution (Easton, 1975). This could in the EU context be attitudes towards the EU which are shaped depending on specific EU policies or how it manages crisis situations, similar to *policy support* (de Wilde & Trenz, 2012; Hobolt & de Vries, 2016). Diffuse support on the other hand 'refers to evaluations of what an object is or represents - to the general meaning it has for a person - not of what it does' (Easton, 1975, p. 444). In the EU setting, diffuse support would thus be support aimed at the EU as a political regime and European integration per se, related to *regime/polity support* (de Wilde & Trenz, 2012; Hobolt & de Vries, 2016).

Lubbers and Scheepers (2005) make a similar separation of versions of public attitudes towards the EU. They focus on Euroscepticism and set out the two distinctions *political* Euroscepticism and *instrumental* Euroscepticism (Lubbers & Scheepers, 2005). The political version cannot directly be compared to any of Easton's (1975) notions of EU attitudes, one can however expect it to be present within the diffuse support as it relates to individuals' belief of on which level political decisions should be made (Lubbers & Scheepers, 2005). Political legitimacy can hence be seen at the core of both notions. The instrumental notion is similar to Easton's (1975) specific support (scepticism) as it is 'meaning that people are sceptical about the benefits of the EU for their particular country' (Lubbers & Scheepers,

2005, p. 227). Like Easton's (1975) specific support it reflects an evaluation of outcomes of the European integration, but the instrumental version puts more emphasis on actual cost-benefit calculations than the specific version does (Easton, 1975; Lubbers & Scheepers, 2005). Lubbers and Scheepers (2005) find that their notions of attitudes towards the EU empirically are separate but with a modest correlation. The attitudes are also noted to have different explanatory factors (Lubbers & Scheepers, 2007). Similar patterns can thus be expected for Easton's (1975) notions of public support.

2.2. Macro-level explanations of EU support

2.2.1. Cohesion Policy as regional funding

The Cohesion Policy has a regional focus and is the EU's main redistributive financial mechanism. These are the characteristics which makes it particularly relevant for studying the determinants of public support of the EU (Aiello et al., 2019). The allocation of funding within the Cohesion Policy is dependent on the wealth of regions and the poorest regions in the EU are eligible to the most funding. To do these allocations the regions, measured at NUTS 2 level[1], are categorised depending on their per capita GDP in relation to the EU average[2]. Scholars argue that the Cohesion Policy's potential to influence public support for the EU comes from mitigating the negative EU image which is found in so called 'left behind regions' where citizens more commonly support Eurosceptic parties and hold anti-EU sentiments (Crescenzi et al., 2020; López-Bazo, 2021a). The idea connects to citizens' cost-benefit evaluations of the EU membership while determining their opinions towards the European integration (Hobolt & de Vries, 2016). More financial support received in one region is suggested to increase positive evaluations of the EU (Aiello et al., 2019). Financial redistribution through the Cohesion Policy could change regional contexts and thereby affect individuals' opinions within these regions. Dąbrowski et al. (2019) follow this utilitarian reasoning and find a direct relation between larger funding from the Cohesion Policy and less negative EU attitudes while controlling for socioeconomic factors at individual and regional levels across Europe. The impact is seen in all regions (Dąbrowski et al., 2019).

However, far from all studies find that Cohesion Policy funding changes the regional context in a way that increases EU support. Some scholars argue that the funds and programs the Cohesion Policy is delivered through are important to distinguish for an accurate understanding of the impact on public

---

[1] NUTS stands for 'nomenclature of territorial units for statistics' and are geographical divisions used for statistics and allocation of Cohesion Policy/Structural Funds in the EU. NUTS 2 represents regions with 800 000 to 3 million inhabitants and is the middle size of the classifications, equal to for example autonomous regions in Spain and French regions (European Commission, n.d.-a, n.d.-b)

[2] The categorisations were by the time of the conduction of the Cohesify citizen survey: *More developed regions* – GDP per capita above 90% of the EU average; *Transition regions* – GDP per capita between 75 % and 90 % of the EU average; and *Less developed regions* – GDP per capita less than 75% of EU average. (Regulation (EU) No 1303/2013)

support for the EU (Borz et al., 2018, 2022; Dellmuth & Chalmers, 2018; Rehák et al., 2021; Rodríguez-Pose & Dijkstra, 2021). The Cohesion Policy is delivered through the European Structural Investment Funds (ESIF), in short, the structural funds (1303/2013/EU, 2013; Brunazzo, 2016). ESIF consists of five different funds[3] with different focus areas. As the funds have different focus areas and funding from them aim at different projects, they impact the regional contexts differently. This makes some scholars argue that a suitable needs-based funding from the Cohesion Policy in one region is more adapt for determining EU support than the total amount of funding and that only some funding areas are directly associated with higher support for the EU (Brasili et al., 2019; Dellmuth & Chalmers, 2018). The same can be noted concerning the different funds (Borz et al., 2018; Rodríguez-Pose & Dijkstra, 2021).

The relationship between Cohesion Policy funding, contextual change, and public support for the EU is contested. Some studies note a reverse relationship where funding in one area does not just lack an impact on generating more EU support but is connected to more Eurosceptic opinions in the region (Rehák et al., 2021; Tomankova, 2021). A reason for this might be that the Cohesion Policy in these regions is ineffective in mitigating the socioeconomic circumstances which are said to cause discontent and scepticism towards the EU. As the 'left-behind' regions receive the most support the Cohesion Policy funding would correlate with negative EU attitudes unless the funding changed the regional context or in another way affected the public opinion. The results can thereby show a connection between the Cohesion Policy and less support for the EU, even if the opposite relationship was expected (Rehák et al., 2021). Hence, a positive relationship between Cohesion Policy funding and EU support is not to be taken for granted and its role as a macro-level factor with the potential to affect EU support must be nuanced and complemented with micro-level, individual determinants.

2.3. Micro-level explanations of EU support

2.3.1. Awareness of the Cohesion Policy

Except from being a macro-level factor changing the regional contex, the Cohesion Policy also has a connection to the micro-level determinants of EU support as it is argued to have the potential to bring the EU closer to the citizens (Dąbrowski et al., 2021; Osterloh, 2011). This makes awareness of the Cohesion Policy funding and personal benefits thereof central for the exploration of Cohesion Policy's impact on public support for the EU (Aiello et al., 2019). The relationship between the Cohesion Policy and EU support can in this way both signal solidarity within the European integration and relate to a more utilitarian, cost-benefit calculation of the EU membership. The main difference between Cohesion Policy at this micro-level and at the macro-level is that the influence of EU support at the micro-level is

---

[3] These are: European regional development fund (ERDF); European social fund (ESF); Cohesion fund (CF), European agricultural fund for rural development (EAFRD); and European maritime and fisheries fund (EMFF)

driven by changing subjective perceptions and not necessarily objective impacts of the policy (Borz et al., 2018; Dąbrowski et al., 2021).

The idea behind the awareness argument is that an individual's subjective perceptions of the Cohesion Policy will influence their attitudes towards the EU and positive perceptions are claimed to generate EU support (Aiello et al., 2019). When relating it to cost-benefit analysis of the European integration, two notions of subjective perceptions can be noted, the egocentric view and the sociotropic view (Aiello et al., 2019; Gabel & Palmer, 1995; Hooghe & Marks, 2005). The former concerns an individual's perception of benefiting from the Cohesion Policy themselves and the latter concerns perceptions of benefits for the individual's context, i.e., their town or region benefiting from the policy. Of these, the egocentric evaluation trumps the sociotropic one (Aiello et al., 2019). Some scholars show that awareness and subjective perceptions of the Cohesion Policy in general provide a better explanation for the impact of Cohesion Policy funding on EU support than what Cohesion Policy funding at the regional level does (Aiello et al., 2019; Osterloh, 2011). The same is noted in studies investigating the determinants of identification with the EU (Borz et al., 2018). Awareness of the Cohesion Policy can in this way be claimed to fully mediate the impact of Cohesion Policy funding on individuals' EU support as the cost-benefit calculation of the funding which could generate EU support cannot be made unless individuals are aware of the policy in the first place (Osterloh, 2011).

Still, subjective perceptions of benefits and awareness of the Cohesion Policy are more common in regions with larger Cohesion Policy funding (López-Bazo & Royuela, 2019). The regional funding is thus making awareness of the Cohesion Policy more likely (Aiello et al., 2019). There are however issues with this finding.

López and Royuela (2019) note that 'people who most support the EU tend to have a greater perception of the subjective benefits of the CP [Cohesion Policy]' (López-Bazo & Royuela, 2019, p. 746). The factors might correlate and blur the line between dependent and independent variables in the analysis. For example, operationalisations of EU support as a dependent variable, asking the respondent to evaluate their country's membership of the EU as a good or a bad thing can be regarded to be a subjective perception of sociotropic character.

Pure awareness questions do not come with the same correlation, but a lack of data on awareness of the Cohesion Policy has limited research in this field (Borz et al., 2018). Individuals' level of education and political interest have been used as substituting factors with the argument that they belong to the same 'cognitive mobilisation' mechanism which makes awareness more or less likely (Borz et al., 2018; Chalmers & Dellmuth, 2015; Dąbrowski et al., 2019; Inglehart, 1970). This is supported by Borz et al., (2018, 2022) as they investigate the determinants of awareness of EU funding. In addition to higher education and political interest, they find that the 'strongest driver of awareness […] is direct EU communication of Cohesion Fund projects' (Borz et al., 2018, p. 16), through for example billboards at

construction sites. The results highlight the interplay between context and individual while determining perceptions and support of the EU.

2.3.2. Other explanations

Socioeconomic factors were early on explored as explanatory variables for EU support (Gabel & Palmer, 1995; Hobolt & de Vries, 2016). The factors are a part of the utilitarian approach towards the drivers of EU attitudes and are closely related to the idea of 'losers of globalisation,' or in the European case, 'losers of Europeanisation' (Hobolt & de Vries, 2016; Tucker et al., 2002). The liberalisation of trade and increased transnational flows of goods and people are parts of the European integration and favours citizens differently depending on their socioeconomic status (Gabel, 1998; Gabel & Palmer, 1995). People with low education, low levels of human capital and low income are more sensitive to the increased competitiveness and thus tend to be less supportive of the EU and European integration. Whereas individuals with higher level of education, human capital and income instead benefit from Europeanisation and are more supportive (Hobolt & de Vries, 2016; López-Bazo, 2021b). Education is thus connected to both the logic of how socioeconomic factors impact EU support and to the idea of cognitive mobilisation. The explanatory value of the variable can thus be a combination of the two reasonings (Borz et al., 2018; Dąbrowski et al., 2019; Hobolt & de Vries, 2016).

The assumed relationships between socioeconomic factors and EU attitudes are generally supported by empirical data, both while investigating them at individual levels and on regional or country averages (López-Bazo, 2021b). Dąbrowski et al. (2019) do however, find that lower levels of education only correspond with lower EU support in some clusters of European regions. The results are not further explained in the article and as Dąbrowski et al. (2019) only include socioeconomic factors in their analysis, the noted patterns might be related to other explanatory variables. Chalmers and Dellmuth (2015) include more factors in their study and find that education has a positive impact on EU support. Yet, they do not distinguish between regional clusters as Dąbrowski et al. (2019) so their results cannot be said to certainly contradict each other. However, Chalmers and Dellmuth (2015) find 'that identity-related predispositions have a stronger effect on support for European integration than economic considerations' (Chalmers & Dellmuth, 2015, p. 403). Not including identity or other sets of factors in a study would thus limit the understanding of the drivers of EU support.

Individual values, such as political interest, associations with political parties, trust, and attitudes towards immigrants, are sometimes included in analyses of EU support (Hobolt & de Vries, 2016). These tend to have a mixed relation to the overarching approaches of explanatory theories of EU support (Hooghe & Marks, 2005). Political interest has as noted earlier been associated with cognitive mobilisation, but it can also signal socioeconomic status. Higher political interest is said to increase support for the EU. An individual with high political interest is both more likely to be able to evaluate

the consequences of European integration and belong to the people with high human capital which generally benefit more of the integration (Borz et al., 2018; Inglehart, 1970). Partisanship is dependent on the context when it comes to determining EU support, but people on the extremes of the left-right political scale are commonly less supportive of the EU than people in the middle of the political spectra (Hooghe & Marks, 2005). When following the benchmarking approach, the interplay between party association, politicians, and citizens gets more complex, suggesting that the groups influence each other in their approaches towards the EU (Hobolt & de Vries, 2016).

Trust is an explanatory factor which belongs to individual values and relates to institutions in its vertical notion and to people in its horizontal notion. Interpersonal trust is claimed to correspond with positive attitudes towards transnational integration and signals together with attitudes towards immigrants whether a person may perceive the European integration as a threat (Hooghe & Marks, 2005). High interpersonal trust and a positive view of immigrants are connected to higher levels of EU support (de Vreese & Boomgaarden, 2005; Hobolt & de Vries, 2016). The factors are hence a combination of both utilitarian and identity considerations.

Institutional trust is sometimes used for operationalising EU support as a single factor or as a part of an index (Hobolt & de Vries, 2016). Trust in the EU institutions can be too closely related with other operationalisations of EU support for being useful as an explanatory factor. Institutional trust in general has a mixed relation to EU support. The idea of benchmarking on national institutions as a guide for EU attitudes is contested. Whether individuals perceive EU institutions in the same way as their national ones seem to be dependent on contexts of perceived corruption, welfare, etc. (Bauhr & Charron, 2020; Hobolt & de Vries, 2016; Sánchez-Cuenca, 2000). Some studies show a transfer of attitudes towards national/domestic institutions directly to the EU (Anderson, 1998), whereas other note that EU support can stem from dissatisfaction of the functioning of the domestic institutions (Sánchez-Cuenca, 2000).

The identity approach emphasises the conflict which can arise between identities and territorial attachments as national borders are eroded through the European integration and political authority is transferred to the supranational level (Hobolt & de Vries, 2016). Thus, the assumed relationship is that individuals with strong national identity and attachment will be less supportive of the EU than individuals who identify themselves more as Europeans (Chalmers & Dellmuth, 2015). The role of identity is however sensitive to contexts (Hooghe & Marks, 2005).

Kuhn (2019) shows that not all national identities are perceived as conflicting with EU membership. Individuals often combine European identifications with national ones. These results did however come from the United Kingdom, which could be regarded a special case of mixtures of national identities within the same European country. Still, national identities are found to be either inclusive – accommodating for a European attachment – or exclusive – not accommodating for it – in data covering the entire EU (Balestrini, 2012). Analysis of this data also found that the identification with and

attachment to the EU was not conditioned by utilitarian, economic consideration (Balestrini, 2012). In other studies, identity factors are less important than economic cost-benefit calculations (Hobolt & Wratil, 2015). This is especially seen in economically deprived regions and member states in the aftermath of the Euro crisis (Hobolt & Wratil, 2015; Kuhn & Stoeckel, 2014). The context dependency of identity related factors can thus be seen both concerning whether national identity clashes with EU support and whether the identity factors are more powerful in explaining EU support than socioeconomic factors.

Lastly, transnationalism has been put forth as an explanatory factor for attitudes towards the EU (Hooghe & Marks, 2018; Kuhn, 2019). Transnationalism as a category of factors is very practical in its nature and concerns whether people are engaging in the cross-border interactions which are facilitated by the European integration (Kuhn, 2019). The factors can e.g., be having lived in another EU country or socialised with people from abroad. More transnationalism is associated with more EU support and a stronger European identity. A clear connection is drawn to the socioeconomic characteristics set out for identifying those who benefit from Europeanisation as 'Europeans with higher levels of education and high-status occupations tend to be significantly more transnational than the rest of the population' (Kuhn, 2019, p. 1223). Still, the transnationalist factors' clear connection to activities could make them easier to capture in surveys and less likely to be misunderstood by respondents than questions concerning individual values or self-assessments of socioeconomic life situations.

2.4. Hypotheses

As mentioned earlier, the aim of this thesis is to investigate the relationship between the Cohesion Policy and individuals' EU support with control for other explanatory factors at the individual level. EU support is operationalised in both specific and diffuse terms. Cohesion Policy is included as funding at the regional level and as related to awareness at the individual level.

The first hypothesis is based on the idea that cost-benefit calculations are generators of EU attitudes (Gabel & Palmer, 1995) and that Cohesion Policy funding alter the regional context and draws the EU membership benefits closer to individuals (Aiello et al., 2019). Followingly, as specific EU support is closer related to cost-benefit calculations than what diffuse EU support is (Hobolt & de Vries, 2016), the relationship between the variables is believed to vary depending on which of the dependent variables is used, this is captured in the included sub-hypothesis. The first hypothesis reads in full:

H1a: A larger allocation of Cohesion Policy funding will increase public EU support.

H1b: Cohesion Policy funding will have a larger impact on specific EU support than on diffuse EU support.

To investigate Cohesion Policy as an explanatory factor of EU support in a more nuanced way than what a pure cost-benefit calculation of the regional funding can do, I include awareness of the Cohesion Policy into the analysis, related to subjective perceptions of the funding. The cost-benefit analysis is believed to be dependent on individual awareness of Cohesion Policy funding. Furthermore, the awareness should have a larger impact on specific EU support as it is related to a single policy and not the EU per se. Still, higher levels of awareness are associated with other explanatory variables promoting EU support in general. Higher level of awareness could thus have a larger impact on diffuse EU support. The second hypothesis with sub-hypotheses are thus:

H2a: The effect of Cohesion Policy funding on EU support is mediated by public awareness of the policy.

H2b: The mediation effect is more prominent for specific EU support than for diffuse EU support as the awareness is related to cost-benefit perceptions of a certain policy.

H2c: The mediation effect is more prominent for diffuse EU support than for specific EU support as awareness is higher among people who already are more supportive of the EU.

3. Method and material

3.1. Material

3.1.1. Dataset

The material for this study is based on the *Cohesify citizen survey*, which was conducted in 2017 as a part of the EU Horizon 2020 financed COHESIFY project with the aim 'to investigate the impact of EU Cohesion policy on attitudes to the EU and European identity' (Borz et al., 2017, p. 4). Researchers often use quantitative methods and survey data while studying public opinion, as it 'is a technique that is well designed for assessing the prevalence and distribution of attitudes, as well as factual material about respondents' (Traugott & Donsbach, 2008, p. 223). Questionnaire-based datasets are commonly used by scholars who study public attitudes towards the EU, either with their own constructed surveys (Bauhr & Charron, 2020; Borz et al., 2018) or by using already existing ones (Chalmers & Dellmuth, 2015; Crescenzi et al., 2020). The research in this thesis is taking the latter approach and is using secondary survey data for the analysis. This gives a dependency on the already existing variables while operationalising the factors which are of interest for the study, something which can be problematic (John, 2018). Nevertheless, the data used is regarded to be appropriate for the research aim, as will be specified in the following section.

There are multiple surveys measuring public opinion towards the EU and related aspects. The research question and hypotheses in this thesis require a dataset which contains classification of the interviewees at the regional, preferably NUTS 2, level, to account for Cohesion Policy funding. Moreover, the survey must include questions on EU attitudes as this is the main dependent variable and optimally also include questions which capture different nuances of EU support (Gabel & Palmer, 1995; Lubbers & Scheepers, 2007). Considering the explanatory factors, awareness of Cohesion Policy funding is hypothesised to be of importance for the research, hence, such a variable must also be found in an appropriate dataset for the study.

With these considerations, the Cohesify citizen survey was chosen over the more commonly used Eurobarometer data. The Eurobarometer has a rich sample of questions capturing public support for the EU, but no variable related to awareness of Cohesion Policy funding in the standard questionnaire (European Commission, Brussels, 2019). Questions on awareness are found in the Perceive Citizen Survey (Bauhr & Charron, 2020), but as the Perceive data only contains one variable directly capturing support for the EU or European integration the Cohesify dataset is considered more appropriate for this study.

Contrasting to the other mentioned surveys, the Cohesify citizen survey does not cover all EU member states and instead of having representational population samples at national level, it has it at the

regional level (Borz et al., 2017). Lipps and Schraff (2021) found that surveys based on national representation can be problematic for estimating regional preferences, so the regional representativity in the Cohesify data is advantageous. Each region included in the dataset has at least 500 respondents. Still, there are only 17 regions included in the study[4]. These cover all classifications of regions that were set in the 2014-2020 programme period for the Cohesion Policy and the results should be transferrable to regions with similar characteristics. The insights might not extent to the entire EU but are considered to contribute to the general understanding of the Cohesion Policy's impact on public attitudes towards the EU. The regions with their 2014-2020 Cohesion Policy categorisations are seen in Figure 3.1. As illustrated, some regions are categorised as both More developed and Transition regions. This is due to the NUTS division of the regions. In the Cohesify dataset some regions are only included at NUTS1 level and as Cohesion Policy funding is set at NUTS2 level some of the larger regions include both categories. This is the case for Scotland (GB) and North East England (GB). Baden Württemberg (DE) is also only included as a NUTS1 region but all the NUTS2 regions within it are More developed regions. For more information on the regions see the attached appendix.

---

[4] The regions are: Cyprus (CY); Kentriki Makedonia (GR); Baden-Württemberg (DE); Thüringen (DE); Nyugat-Dunántúl (HU); Southern and Eastern (IE); Lombardia (IT); Podkarpackie (PL); Pomorskie (PL); Vest (RO); Zahodna Slovenija (SI); Castilla y León (ES); Andalucía (ES); Flevoland (NL); Limburg (NL); Scotland (GB); North East England (GB). For more information, see Appendix.

Figure 3.1. Map of the regions included in the Cohesify citizen survey
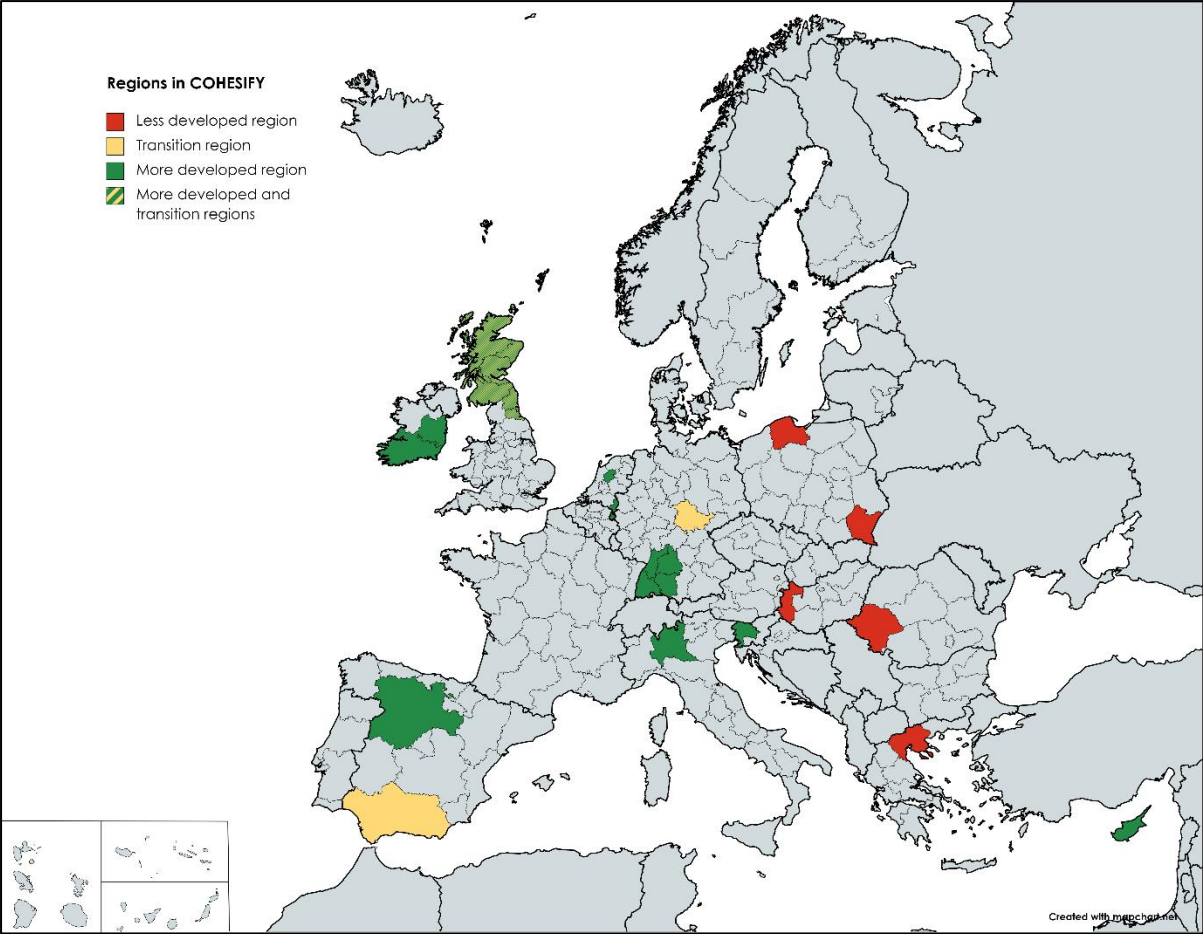
Notes: The figure shows a map of the 17 regions included in the Cohesify citizen survey and their classifications in the 2014-2020 Cohesion Policy period. *Source:* The author's own depiction based on information from the European Commission (2014/99/EU, 2014)

3.1.2. Operationalisation

This section presents the variables included in this thesis, dividing them in dependent and independent variables. The section is concluded with descriptive statistics of all the variables, presented in Table 3.2. To simplify an overview of the variables their names are marked as **bold** in the text.

Dependent variables

Two dependent variables are used in the thesis to account for the separate notions of public support for the EU. The division contributes to a more nuanced understanding of public opinion (Hobolt & de Vries, 2016). Some scholars advice for a combination of variables for the inclusion of various aspects of EU support instead of a separation of them (Curtis & Nielsen, 2018; Díaz-Lanchas et al., 2021; Gabel, 1998). Nevertheless, a separation of the two notions of EU support is central for answering the hypotheses of this thesis. Using two different notions is argued to give a better understanding of the relationship between the Cohesion Policy and EU support than what a single notion would have done (Lubbers &

Scheepers, 2005). This is believed to be the case even if the two notions included in the analysis only are based on one variable each. Therefore, as scholars rarely operationalise more than one notion of public support of the EU, the approach in this thesis can be seen as a compromise between creating an EU support index and only using one variable for it. The variables chosen as the dependent variables are Q3 and Q12 from the Cohesify citizen survey (Borz et al., 2017). The survey questions they are based on are:

> *Q3 [S] To what extent do you agree with the following statement: 'My country has benefited from being a member of the European Union'*
>
> *Q12 [S] How would you describe your general position on European integration?*

<div align="right">(Cohesify citizen survey 2017)</div>

Cronbach's alpha between the two variables lies on 0.705, just about making them reliable enough to compute an index of EU support (Mehmetoglu & Jakobsen, 2017). In this study they are however separate and treated as two different notions of EU support[5].

The first of the variables, Q3, is a display of a cost-benefit calculation of EU membership. The variable is regarded to measure specific support of the EU taken from Easton's (1975) general definition and similarly instrumental support as developed by Lubbers and Scheepers (2005) with the EU setting in mind. Moreover, the variable is similar to the classic Eurobarometer question 'Generally speaking, do you think that (OUR COUNTRY)'s membership of the EU is...? A good thing, a bad thing, neither a good thing not a bad thing' (European Commission, 2019) which is the most used operationalisation of EU support (see e.g., Chalmers & Dellmuth, 2015; Genna, 2009; López-Bazo, 2021b). Moreover, the variable is more connected to support towards the EU than towards the European integration, even if it is not covering opinions towards the EU institutions per se. It is instead the utilitarian undertone that makes the variable appropriate for the inclusion in this study.

The variable, Q3, from the Cohesify citizen survey contains answers on a five-point scale, ranging from strongly agreeing with the statement to strongly disagreeing with it. I have recoded the variable so that a higher score indicates a more positive evaluation of the EU membership and so that it has a starting value on zero. The variable is hence the following: *0 = Strongly disagree, 1 = Disagree, 2 = Neither agree nor disagree, 3 = Agree, 4 = Strongly agree.* The variable is thus a qualitative variable with an ordinal scale of non-dichotomous nature. These types of variables are commonly used for capturing attitudes and values (Djurfeldt, 2018). In the analysis the variable is referred to as ***specific EU support***

---

[5] Nevertheless, the models are tested by using an index of the two variables as a dependent variable in a robustness check of the results. See section 4.3. Robustness check.

or *EUbencntry*. Its frequency distribution is presented with a normal distribution curve in the histogram below (Graph 3.1.). It has a standard deviation of 1.166, a mean of 2.70 on the 0–4-point scale and includes 8 414 valid observations. Missing values in the variable are 1.7% of the total survey sample.

Graph 3.1. Histogram of the dependent variable specific EU support
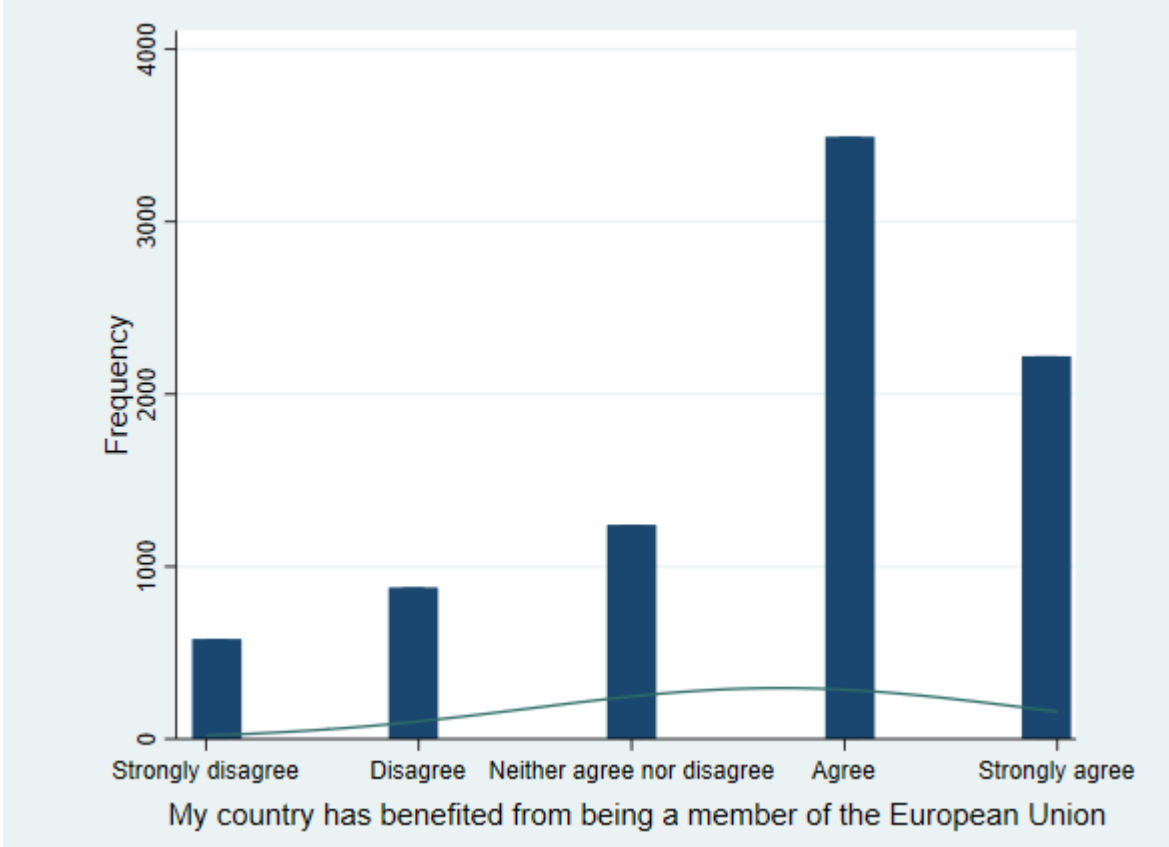
Notes: The graph depicts the frequency distribution of dependent variable EUbencntry capturing specific EU support, together with a normal distribution curve. *Source:* Cohesify citizen survey 2017, variable Q3

The second dependent variable, Q12, contrasts with the previously discussed variable as it is directed towards support of European integration and not the EU per se. It is capturing a more general stance towards European integration and is comparable with Easton's (1975) notion of diffuse support. At the same time, the variable cannot be directly translated to political support as defined by Lubbers and Scheepers' (2005), as it does not necessarily capture the respondent's preferences of which level political decisions should be made at. Specific and diffuse support will thus be used as terms to describe the two dependent variables in this thesis, even if they also can be classified according to other distinctions of EU support.

Q12 is coded so that a larger number equals more support of European integration. I have recoded the variable, so it has a starting value on zero and is referred to as ***diffuse EU support*** or *EUgenpos* in this study. The full range is hence: *0 = 'Strongly opposed', 1 = 'Opposed', 2 = 'Somewhat opposed', 3*

= Neutral', 4 = 'Somewhat in favour', 5 = 'In favour', 6 = 'Strongly in favour'. Just as with the previously discussed variable, this is a qualitative variable with an ordinal, non-dichotomous scale (Djurfeldt, 2018). The frequency distribution is presented in the histogram below (Graph 3.2.) with a normal distribution curve. The variable has a standard deviation of 1.706, a mean of 3.95 on the 0–6-point scale and includes 8 419 valid observations. Missing values in the variable are 1.6% of the total survey sample.

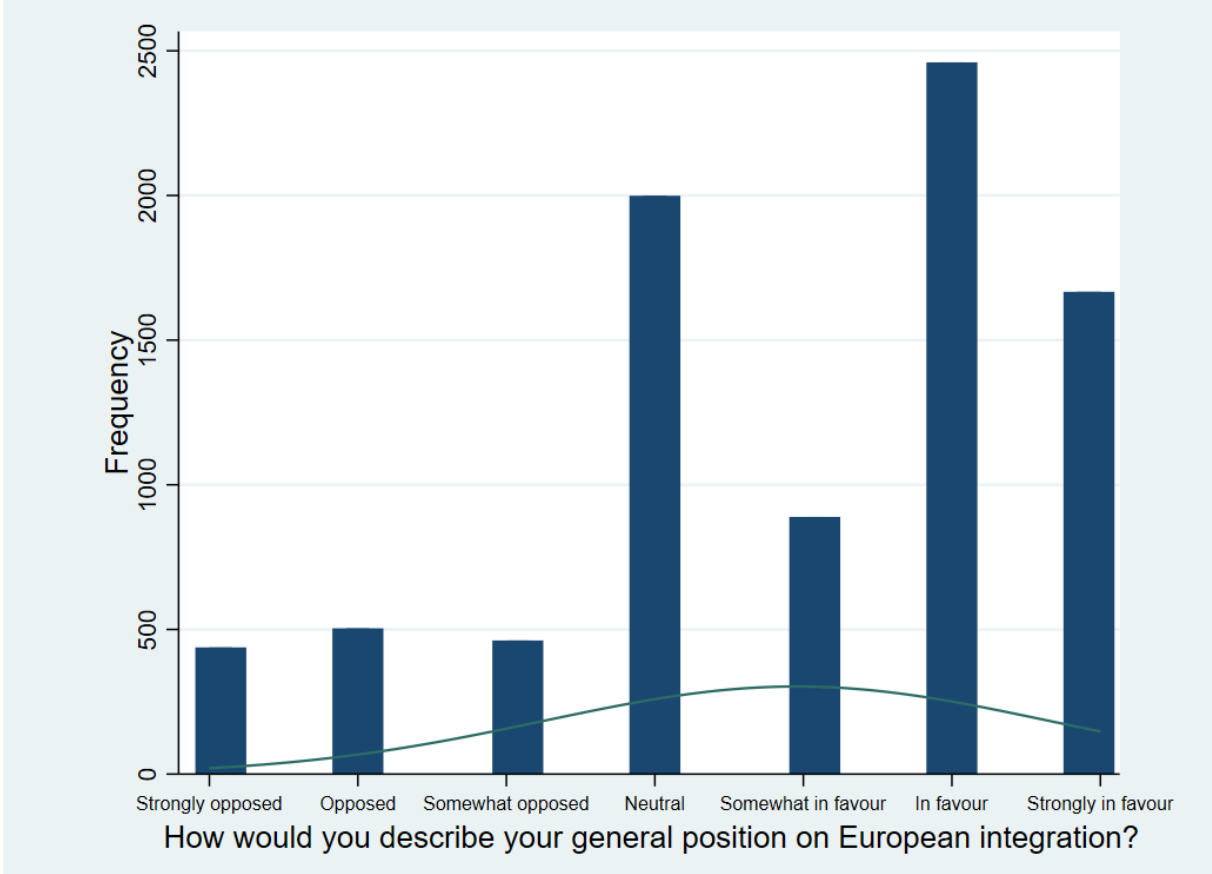## Graph 3.2. Histogram of the dependent variable diffuse EU support

Notes: The graph depicts the frequency distribution of dependent variable EUgenpos, capturing diffuse EU support, together with a normal distribution curve. *Source:* Cohesify citizen survey 2017, variable Q12

Table 3.1. displays the dependent variables in relation to the regions in the study. Kentriki Makedonia (GR) scores the lowest mean on both variables, 2.16 on benefit of EU membership, specific EU support, and 3.11 on general position towards European integration, diffuse EU support[6]. Pomorskie (PL) and Baden-Württemberg (DE) are the two regions with the highest scoring mean on both variables.

---

[6] As measurements of means regarding ordinal scales can be problematic (Djurfeldt, 2018), a summary of the frequency distribution of responses to the variables for each region is found in the appendix.

Pomorskie (PL) has the highest mean on benefit of EU membership with 3.22 and Baden-Württemberg (DE) the highest on general support with a mean of 4.49.

Only two regions have the same position in comparison to the other regions while comparing their means between the two variables. These are Kentriki Makedonia (GR) and Limburg (NL) which are found at the bottom of the tables. The largest change in placement between the two notions of EU support is seen in Lombardia (IT) which is the second least supportive region regarding benefit of EU membership but has a mean signalling support above the regional median on general position towards the European integration. The Spanish regions Castilla y León and Andalucía also place themselves much higher on the general position (diffuse EU support) than on benefit of EU membership (specific EU support). By contrast Nyugat-Dunántúl (HU) and Podkarpackie (PL) drop five placements on the general position towards the European integration compared to the ranking of means considering the membership benefit variable.

Table 3.1. Regional means of the dependent variables

Region	Mean of EUbencntry		Region	Mean of EUgenpos
Pomorskie (PL)	3.22		Baden-Württemberg (DE)	4.49
Baden-Württemberg (DE)	3.18		Pomorskie (PL)	4.44
Southern and Eastern (IE)	3.14		Zahodna Slovenija (SI)	4.43
Vest (RO)	2.97		Castilla y León (ES)	4.40
Podkarpackie (PL)	2.96		Andalucía (ES)	4.31
Nyugat-Dunántúl (HU)	2.90		Southern and Eastern (IE)	4.30
Thüringen (DE)	2.89		Vest (RO)	4.20
Zahodna Slovenija (SI)	2.78		Lombardia (IT)	4.12
Scotland (GB)	2.74		Thüringen (DE)	3.96
Castilla y León (ES)	2.70		Podkarpackie (PL)	3.96
Andalucía (ES)	2.58		Nyugat-Dunántúl (HU)	3.93
North East England (GB)	2.39		Scotland (GB)	3.82
Cyprus (CY)	2.39		Flevoland (NL)	3.46
Flevoland (NL)	2.33		Cyprus (CY)	3.46
Limburg (NL)	2.32		Limburg (NL)	3.42
Lombardia (IT)	2.28		North East England (GB)	3.40
Kentriki Makedonia (GR)	2.16		Kentriki Makedonia (GR)	3.11

Notes: The table shows the regional means on the dependent variables EUbencntry representing specific EU support and EUgenpos representing diffuse EU support. *Source:* Cohesify citizen survey 2017

Independent macro-level variable

Cohesion Policy funding per capita is the only variable at the regional/macro-level included in the analysis. The variable is based on regionalised data of Cohesion Policy funding from Eurostat (REGIO.B2/ Walsh, 2020). Payments registered before 2017 are included in the variable. This timeframe is chosen as the Cohesify citizen survey was conducted in 2017. ESIF allocations from the 2007-2013 programme period as well as those from 2014-2020 which had been paid before 2017 are included[7]. The total sum of allocations during this period is divided by respective region's population in 2016 to generate Cohesion Policy funding per capita. The variable is hence showing euros per capita, ranging from 101.59 euros per capita in Lombardia (IT) to 3273.36 euros per capita in Nyugat-Dunántúl (HU). The mean of the variable lies on 1141.90 euros per capita and the median on 1020.36 euros per capita. As the variable is based on per capita funding and not total allocation, the comparisons between regions of varied sizes are made easier. This is also the measurement of Cohesion Policy which normally is used in similar studies (Dellmuth & Chalmers, 2018). Table 3.2. presents descriptive statistic of this variable and all the other variables, found last in this section.

Independent micro-level variables

The main independent variables at the individual/micro-level are related to **awareness of the Cohesion Policy**. These factors include an index combining dummy variables capturing the respondent's awareness of EU funded projects in their region, awareness of the ERDF, ESF, CF, and if the respondent has noted any acknowledgement of EU funding in connection to for example building sites. The index has a range of 0 to 1 where 1 indicates a higher level of awareness. As the variable is an index it is no longer a dummy variable but has a scale from 0-1. If not stated in this section of the thesis, all indexes discussed have a Cronbach's alpha above the acceptable 0.7 score for appropriate combination[8] (Djurfeldt, 2018). For the regions included in the data, the highest mean on the awareness index is seen in Podkarpackie (PL) and Pomorskie (PL) both being on 0.75 on the 0-1 scale. The lowest mean of awareness is in Limburg (NL) scoring 0.21.

Another variable which belongs to the awareness factors is based on the question of whether the respondent **has benefited in their daily life** of a project funded by any of the structural funds (Borz et al., 2017). It connects to the idea of egocentric cost-benefit reasonings of the Cohesion Policy and clearly signals awareness of the policy (Aiello et al., 2019; Hooghe & Marks, 2005). The variable is coded as a dummy variable, with 0 representing 'no' and 1 representing 'yes'. The answer 'I don't know' is coded

---

[7] To control for the bias that might come with some regions having a more efficient administration and allocation of the funds than other regions, a robustness check is made using per capita funding only from the 2007–2013 programme period, thus excluding funding from 2014–2020. The results in the did not change significantly.

[8] Full information on all included variables, with Cronbach's alpha, original variables from the Cohesify citizen survey etc. can be found in the appendix.

as missing, 4.4% of the respondents gave this answer, and the drop-out is not considered to be problematic. In combination, the two variables of awareness can capture both awareness of the Cohesion Policy in one's region and whether a respondent has direct connection to any of its funded projects. These variables are thus believed to signal whether an individual can assess the Cohesion Policy's impact in their region and form their EU attitudes thereafter. The largest share of respondents that claim to have benefited from a Cohesion Policy project is found in Zahodna Slovenija (SI) where 34.2% of the respondents in the region answered 'yes' to the question. The region with the lowest share of people answering 'yes' to the question is Lombardia (IT) where only 5.8% indicate that they have benefited from the projects. The average mean for all regions lies on 18%.

Classical individual/micro-level, control variables for determinants of EU support are included in the analysis (Hobolt & de Vries, 2016). Descriptive information on these is found in Table 3.2. Starting with socioeconomic factors the variables cover the respondent's **gender**, as a categorical variable where 0 equals 'male' and 1 equals 'female', **age**, and **highest level of education**, following the International Standard Classification of Education (ISCED) scale ranging from 0 being no completed education to 6 being completed tertiary education at advanced level[9]. The **standard of living** for the respondent and their family is captured in a variable where the respondent on a scale from 0-6 consider their family to be poor (0) or rich (6).

No variable covering whether a respondent is unemployed or working, is included in the analysis. Unemployment is an important factor determining EU support based on the idea of 'losers of Europeanisation' (Gabel & Palmer, 1995; Hobolt & de Vries, 2016; Tucker et al., 2002). But as the Cohesify data only includes a question on work-situation over the last seven days and the categories can have an ambiguous meaning to the respondents, the variable is not included. Instead, the variable on family situation is noted to control for the connection between economic deprivation and EU attitudes.

The next set of control variables include individual values. **Political interest** is measured through an index including a respondent's interest in local/regional, national, and European politics, measured on a Likert scale from not interested at all (0) to very interested (3)[10]. The same scale is used for the index measuring **institutional trust**. This index stems from the survey items asking how much the respondent trust that a political institution will work in their interest. The institutions included in the

---

[9] Education is often operationalised as a categorical variable and not as a scale. The decision to not use categories for levels of education is taken to limit the total number of control variables in the analysis. As the variable is following the ISCED-scale, the impact of higher education can still be controlled for, and a clearer measuring is not necessary for the research aim of this thesis.
[10] Just as with level of education, political interest is sometimes operationalised as a categorical variable or dummy variable. As political interest is measured through an index in this thesis, the combined means of the included variables make it better resemble an interval scale than what the individual components do on their own. The scale is therefore made more appropriate for the variable.

index are local/regional public authorities, the national government, and the European Union. The decision was made to include trust towards the EU in the index even if some studies show a different relationship between how national trust and supranational trust impacts EU attitudes (Hobolt & de Vries, 2016). The index is thus measuring institutional trust in general and does not distinguish between the separate levels. Cronbach's alpha increases with the inclusion of the three variables in the index compared to while only combining the subnational and national items. Moreover, the decision was supported statistically in robustness checks, as trust in subnational and national institutions did not hold statistically significant differences in relation to the dependent variables in comparison to trust in the EU. Nevertheless, these findings could also stem from trust in the EU being closely related to the dependent variables of EU support.

Attitudes towards immigrants and **interpersonal trust** are two more variables included in the analysis which belong to individual values. The former variable comes from the survey question on how the respondent feels their country has changed as a result of immigration and the answers range over a 0–10-point scale from the country having become 0 'a worse place to live' to 10 'a better place to live'. It is not specified which country or part of the world the migrants might come from. The differences in attitudes which might be seen towards Europeans and non-Europeans (de Vreese & Boomgaarden, 2005) can to some extent be controlled for by including the variable directly related to interpersonal trust, as this variable specifically asks about the respondents' trust in people from other European countries. This variable also ranges from 0 to 10, representing 'no trust at all' (0) to 'complete trust' (10).

Individual identity is the third set of control variables. Two identity related variables are included. These cover the respondent's attachment to their nation and subnational places (region, town, etc.), and to supranational places. **National attachment** is constructed as an index from variables asking how attached the individual is to firstly their city/town/village, secondly to their region, and thirdly to their country. The answers range from 'not at all' (0) to 'very' (3) and the index thus has a Likert scale ranging from 0-3. The same scale is used for the supranational/**European attachment** index, which asks about the individual's attachment to Europe and the EU. These two survey items are combined in the European attachment index. A separation of these territorial levels of attachment allows for control whether national identification contrasts with EU support (Chalmers & Dellmuth, 2015). Moreover, it allows for an easier removal of EU identification as an independent variable if it is too similar to EU support in general (Borz et al., 2018). It has been noted that individuals often hold dual identities and can identify both with Europe and their country (Kuhn, 2019). As this thesis includes separate variables for national attachments and European attachments these patterns cannot be accounted. Nevertheless, as they are not the main point of interest for the research it is an acceptable limitation.

Last of the traditional control variables are activities which relate to transnationalism (Kuhn, 2019). The variable in this section is an index of various dummy variables covering **transnational activities** the respondent has participated in during the last year. These include having socialised with people from another EU country, read or watched a TV programme in a language other than their first language, and ordered goods or services online from another EU country (Borz et al., 2017). This index is based on the means of the included variables and has a range from 0-1. Cronbach's alpha lies on 0.6553 and does not reach to the generally accepted 0.7 limit for appropriate correlation. Still, all the activities are regarded to be related to transnationalism. The lower correlation could be due to national differences in availability of TV programmes and books in other languages than the national one. The national differences of size of and prices on the national markets could also make an individual more or less likely to order something from abroad.

Having lived in another European country is not included in the transnational activities as it is a stronger notion of transnationalism and might be more connected to the social stratification which has been seen together with transnational activities than what the other activities are (Kuhn, 2019). The variables in the index can instead cover aspects of transnationalism without requiring too high levels of social capital for the activities to be accessible.

A few variables related to perceptions of EU benefits are included as control variables in the analysis. These are not traditional control variables and might be too closely connected to the dependent variables for patterns of causation to be discovered. The variables should still be able to indicate whether individual perceptions of the EU and Cohesion Policy have a larger impact on EU support than what objective variables such as Cohesion Policy funding at the regional level has. The first of these assessment or perception variables is asking how the respondent believes their **region would have developed without EU funding**. The answers range from 0 meaning 'much better' to 4 meaning 'much worse', a higher value on the variable is thus expected to increase EU support. The answer option 'I don't know' is coded as a missing value in the data. However, a relatively large proportion of the respondents gave this answer, 12.83%. The variable should thus be seen as a perception of the EU funding only by those individuals who consider themselves to have the capacity to make the assessment.

The issue with the inclusion of the 'I don't know' answer in the questionnaire is also seen in the following variables which are based on the survey item asking how much the respondent believes their **region benefits from EU funding compared to the rest of the EU**. 16.68% of the respondents indicated that they did not know. For those who gave an assessment of the regional funding their answers were separated into those who stated that the region benefited *less* than the rest of the EU, the *same* as the rest of the EU, and *more* than the rest of the EU. In this analysis these answers are coded as separate dummy variables and those who answered 'less' are used as constant for comparison with the other options.

The final variable which belongs to individual assessments of the EU is based on the survey question on whether the respondent considers the **EU to be more advantageous** or disadvantageous for 'people like themselves' (Borz et al., 2018). The variable is thus an example of individual perceptions of the EU, based on egocentric cost-benefit calculations (Hooghe & Marks, 2005). Even if this variable just as those previously covered is an assessment of the EU, it does not suffer from the same large share of missing answers. Only 1.37% of the respondents stated that they did not know in response to the question. The issue of people's ability to make assessments of the impact of the European integration or the EU is thereby not seen when it comes to connecting it to the individual level. Instead, it is making assessments of contextual impacts or comparisons which can be problematic. In this thesis the variable is recoded so that a larger value indicates that the respondent perceives the EU to be advantageous for people like themselves, and a low number that it is disadvantageous. The answers are given on a scale of 0-4, ranging from strongly disagreeing (0) to strongly agreeing (4) with the statement that the EU is more advantageous than disadvantageous. See Table 3.2., on the next page, for descriptive statistic of all variables.

Table 3.2. Descriptive statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
Dependent variables					
EU membership has benefited country (Specific EU support) (4=Strongly agree)	8,414	2.700499	1.166271	0	4
General position towards European integration (Diffuse EU support) (6=Strongly in favour)	8,419	3.95332	1.706021	0	6
Independent variables					
Regional variable					
Cohesion Policy per capita (Euros)	8,559	1141.901	931.393	101.59	3273.36
Individual variables					
Awareness factors					
Personal benefit from Cohesion Policy (1=Yes)	8,182	.1827182	.3864589	0	1
Awareness of Cohesion Policy (1=Higher awareness)	8,221	.4805498	.3371232	0	1
Socioeconomic factors					
Gender (1=Female)	8,554	.3964227	.4891827	0	1
Highest level of education (6=Advanced tertiary)	8,463	3.822994	1.501313	0	6
Age of respondent (Years old)	8,546	49.94582	17.19218	18	102
Family standard of living (6=Rich family)	8,480	3.353774	1.205634	0	6
Individual values					
Political interest (3=Higher political interest)	8,526	1.690007	.9000431	0	3
Institutional trust (3=Higher institutional trust)	8,264	1.515933	.7434242	0	3
Immigrants make country better or worse (10=Much better)	8,268	5.545839	2.661538	0	10
Trust in other Europeans (10=Complete trust)	8,299	5.884564	2.502479	0	10
Individual identity					
National attachments (3=Stronger attachment)	8,499	2.392281	.6879136	0	3
European attachments (3=Stronger attachment)	8,434	1.873666	.9176738	0	3
Transnationalism					
Transnational activities (1=More transnationalist)	8,490	.5246643	.3135108	0	1
Perceived benefits of the EU					
Reginal development without EU funding (4=Much worse)	7,461	2.45262	1.149222	0	4
Region benefits less of EU funding (1=Yes)	7,131	.4766512	.4994896	0	1
Region benefits the same of EU funding (1=Yes)	7,131	.4107418	.492003	0	1
Region benefits more of EU funding (1=Yes)	7,131	.1126069	.3161339	0	1
EU is advantageous for people like me (4=Strongly agree)	8,434	2.132559	1.301369	0	4

Notes: The table displays descriptive statistics of the variables included in the analysis of this thesis. Variable labels, direction of coding, number of observations, mean, standard deviation, minimum and maximum values is included in the information.
Source: Cohesify citizen survey 2017

3.2. Method

The research in this thesis follows a statistical method where the public attitude – EU support – is analysed as a dependent variable affected by several independent variables at individual/micro- and regional/macro-level. A quantitative method like this allows for the inclusion of multiple respondents – a large *N* study – and analysis of the direction and strength of the relationships between the included variables (Djurfeldt, 2018; Esaiasson et al., 2017; Snijders & Bosker, 2012). As noted in the previous section, the data comes from a questionnaire with micro-level variables related to explanations of EU support, to which I have added regional Cohesion Policy funding as a macro-level variable.

A multilevel analysis is chosen instead of an ordinary, single-level, regression model such as the ordinary least squares (OLS) model, due to the nature of the research problem. This type of multilevel analysis is 'also known as hierarchical linear models, random effects models and random coefficient models' (Mehmetoglu & Jakobsen, 2017, p. 194) and allows for distinction between various levels of the variables in data (Gelman & Hill, 2007; Mehmetoglu & Jakobsen, 2017; Snijders & Bosker, 2012).

The dependent variable EU support is measured at the individual level, whereas the independent variables are distributed at both the individual and regional level. Cohesion Policy funding per capita is the only variable at the macro/regional level. All other variables are thus found at the micro/individual level. The regional context is assumed to have an impact on the individuals living in the region. Thus, the independent variables at the individual level cannot be claimed to be fully independent as the first level units, individuals, are nested within the second level units, regions (Mehmetoglu & Jakobsen, 2017). The hierarchical structure and investigation of the data further enable comparison between groups and respond to the criticism that survey-based analysis of public opinion separates the individual from its context (Traugott & Donsbach, 2008). The various levels are all included in the analysis (Gelman & Hill, 2007). In this study the main independent variable, Cohesion Policy funding, is situated at the macro-level and varies between regions and the dependent variable, EU support, is located at the micro-level. Because of this structure, the multilevel analysis gives more appropriate tools for the investigation of the assumed relationship between and the explanatory power of the variables than what a single-level regression analysis would do.

Thereby, the data used in this thesis is hierarchical and the analysis separates the variables at two levels. Level 1 is the individual/micro-level which contains the dependent variables, specific and diffuse EU support, together with the independent variables related to individuals, i.e., the awareness and perception-based factors as well as the traditional control variables. Level 2 is the regional/macro-level which includes the main independent variable, Cohesion Policy funding per capita.

The analysis is based on a random intercept model, which allows for variation in the intercept of the variables between the level 2 units, the regions, but not varying regression coefficients/slopes of the

variables (Gelman & Hill, 2007; Mehmetoglu & Jakobsen, 2017; Snijders & Bosker, 2012). It is therefore assumed that the regions can vary in terms of average value of EU support in the regression but that the independent variables should have the same effect on the dependent ones regardless of region. A maximum likelihood estimation is the basis for the investigation of the relationship and explanatory power of the variables. Consequently, the results show which coefficients are most likely for the data (Mehmetoglu & Jakobsen, 2017).

For the investigations of the hypotheses, separate multilevel regression analyses are made for each of the two dependent variables. The analyses follow the same procedure for both sets of variables. The dependent variable specific or diffuse EU support is first run in a regression with only Cohesion Policy per capita at the regional level as an independent variable. This gives an initial clue whether the first hypothesis holds (H1a). To check how robust the results are, the sets of control variables are added to the analysis one set at a time. Followingly, awareness related individual factors are added to the multilevel regression. By noticing how they relate to the dependent variable and how they impact the relationship between Cohesion Policy funding per capita and EU support, the other hypothesis can be tested (H2a). The hypotheses (H1b, H2b, and H2c) asking whether the Cohesion Policy funding and awareness factors have a larger influence on specific or diffuse EU support are answered by comparing the results from analyses which use either of the two dependent variables.

The results are generated by interpreting the coefficients of the dependent variables in the multilevel analysis, β, their explanatory power and direction of impact on the dependent variable, as well as their level of statistical significance. Due to the unstandardised nature of the two dependent variables, i.e., them being measured on different scales, diffuse EU support is expected to show larger beta coefficients of the independent variables as it has the larger scale. For drawing distinctions between the independent variables' impact on the dependent variables more attention is therefore given to statistical significance which should not vary between the variables per se.

As a relatively low number of level 2 units are included in the data, 17 regions, there is a risk that it will be more difficult to receive significant results at macro-level, as few units give larger standard errors (Mehmetoglu & Jakobsen, 2017). As recommended by Mehmetoglu and Jakobsen (2017), results with lower significance, 0.10 level, will be discussed together with those at 0.01 and 0.05 levels which normally are included in the discussion of results from statistical analysis. Another method to avoid this problem would have been to use clustered standard errors at the regional level. This would have replaced the multilevel modelling (Mehmetoglu & Jakobsen, 2017; Sundell, 2012). However, the multilevel analysis allows for comparison between groups, something which clustered standard errors do not (Gelman & Hill, 2007).

One example of the complexity of the multilevel analysis concerns the measurement of how much of the variation in the dependent variable is explained by the model. In an OLS model, this is normally

measured through R^2, but in the multilevel analysis, the variation must be calculated analogous by comparing an empty model – which shows the maximum variance in the dependent variable that can be explained by the individual and regional level – and the full model including all the variables in the study. The result gives the R^2 value for both the individual and regional level (Mehmetoglu & Jakobsen, 2017).[11] Still, the hierarchical nature of the data and the multiple variance components included can make an explanatory variable reduce the explained effect instead of increasing it. At its worst, this can lead to negative R^2 values (Mehmetoglu & Jakobsen, 2017; Snijders & Bosker, 2012). Therefore, likelihood ratio tests which determine the suitability of the model on the data are made for each time control variables are added to the analysis (Snijders & Bosker, 2012).

---

[11] For the full calculation of R² in multilevel regression analysis, see Mehmetoglu and Jakobsen (2017, p. 208).

4. Results

4.1. EU support and Cohesion Policy as regional funding

This section presents the empirical results from the multilevel analyses which were done to investigate the hypotheses of this thesis. The two notions of individual EU support – specific and diffuse – were both used as dependent variables and the results from each multilevel regression are presented in the following tables. The first set of hypotheses states that a larger regional allocation of Cohesion Policy funding per capita will increase public EU support (H1a) and assumes that the regional funding will have a larger impact on specific EU support than on diffuse EU support (H1b). The results related to these hypotheses are presented in Table 4.1.a. and 4.1.b.

Table 4.1.a. Relationship between Cohesion Policy funding and EU support, part 1

Variables / EU support	Model 0		Model 1		Model 2		Model 3	
	Specific	Diffuse	Specific	Diffuse	Specific	Diffuse	Specific	Diffuse
<u>Independent variables</u>								
Regional variable								
Cohesion Policy per capita			0.000164* (0.0000772)	0.000124 (0.000107)	0.000186** (0.0000719)	0.000153 (0.000110)	0.000194*** (0.0000497)	0.000192* (0.0000916)
Individual variables								
Socioeconomic factors								
Gender					0.0426 (0.0247)	0.0447 (0.0367)		
Highest level of education					0.137*** (0.00864)	0.195*** (0.0128)		
Age of respondent					0.00378*** (0.000745)	0.00721*** (0.00110)		
Family standard of living					0.110*** (0.0105)	0.153*** (0.0156)		
Individual values								
Political interest							0.100*** (0.0141)	0.154*** (0.0207)
Institutional trust							0.446*** (0.0170)	0.533*** (0.0250)
Attitude towards immigrants							0.0723*** (0.00515)	0.119*** (0.00757)
Trust in other Europeans							0.0606*** (0.00543)	0.120*** (0.00797)
Individual identity								
National attachments								
European attachments								
Transnationalism								
Transnational activities								
Constant	2.701*** (0.0808)	3.955*** (0.104)	2.513*** (0.114)	3.812*** (0.158)	1.391*** (0.123)	2.149*** (0.186)	0.876*** (0.0824)	1.297*** (0.146)
Regional level variance	0.109 (0.038)	0.177 (0.063)	0.085 (0.030)	0.164 (0.058)	0.074 (0.026)	0.172 (0.061)	0.034 (0.012)	0.119 (0.042)
Individual level variance	1.251 (0.019)	2.733 (0.042)	1.251 (0.019)	2.733 (0.042)	1.176 (0.018)	2.586 (0.040)	0.973 (0.016)	2.111 (0.034)
Observations	8414	8419	8414	8419	8242	8251	7726	7731

Notes: The table displays the results from multilevel regression analyses using specific and diffuse EU support as dependent variables with unstandardised coefficients. The table presents unstandardised regression coefficients (b), standard error (SEb) in parentheses, and statistical significance. Additional information is given on the constant, being the mean intercept for the regions, the regional level (level 2 unit) unexplained variance, individual level (level 1 unit) unexplained variance and number of observations (N). Statistical significance: * = p < 0,1, ** = p < 0,05, *** = p < 0,01 *Source:* Cohesify citizen survey 2017

Model 0 is the empty model test of the dependent variables. The results show how much of the dependent variables can be explained at the individual level and the regional level (Mehmetoglu & Jakobsen, 2017). While controlling for the intraclass correlation coefficient (ICC), it is noted that 8% of the variance is so called between group (regional) variation for specific EU support and 6% for diffuse EU support. Most of the variation will thus be explained at the individual level, 92% and 94% for the two dependent variables. This is not surprising as the data contains a rather low number of level 2 units. Nevertheless, the rule of thumb is that variation above 5% at the second level should not be ignored and the results encourage the use of multilevel analysis for the research (Mehmetoglu & Jakobsen, 2017). The change in unexplained variance at the two levels is seen by comparing the regional level variance and individual level variance between the other models and this first empty model.

For Model 1, Cohesion Policy funding per capita is added as an independent variable at the regional level. It only reaches statistical significance in relation to specific EU support where it suggests that a higher amount of Cohesion Policy funding per capita generates higher levels of EU support. The regional unexplained variance in the model is decreased from Model 0, indicating that the added variable contributes to explaining between group differences. The individual level variance remains unchanged as expected since no individual level independent variables are controlled for in this model. Hypothesis H1a is partly confirmed. A larger allocation of Cohesion Policy funding will increase public EU support, but only in the case of specific EU support. H1b is fully supported by the results. The findings must however be evaluated together with individual level control variables to be confirmed, even if this first model can signal the results.

The first set of control variables, socioeconomic factors, is added to the analysis in Model 2. Cohesion Policy funding is as in the previous model only statistically significant for specific EU. Its significance level and beta coefficient has increased, suggesting that some of its impact on the dependent variable was undermined by other factors which were not controlled for in Model 1. The effect on specific EU support is still low, especially while comparing it with the effect of some of the individual level explanatory variables on EU support. Age of the respondent is not significant as an explanatory variable, but the rest of the socioeconomic factors controlled for relate to the dependent variables as expected. Higher levels of education increases both specific and diffuse EU support as suggested by the literature (Hobolt & de Vries, 2016; López-Bazo, 2021b). The same goes for family standard of living, where a respondent who considers themselves to have a rich family is more supportive of the EU than someone with a poor family. The findings are generally supporting the theory of how socioeconomic conditions influence individuals' attitudes towards the EU (Gabel, 1998). The beta coefficients of the control variables are higher for diffuse than specific EU support. This is most likely due to the unstandardised scales of the dependent variables.

In Model 3, the control variables are changed to individual values. Here all the variables at the individual level are fully significant and show the assumed relationship to the dependent variables. Just as in Model 2, the coefficients are higher for diffuse EU support than for specific EU support. Interestingly, Cohesion Policy funding increases in significance and can provide explanation to both dependent variables. The results are still leaning in favour of the interpretation done in the previous models, i.e., that Cohesion Policy mainly influences specific EU support. Of the control variables, institutional trust has the largest impact on the dependent variables. However, as this variable is an index which includes trust in the EU, it could be that it lies too closely to the dependent variables for patterns of causation to be noted. Additional analysis of reverse causality is needed to assess this. A clear decrease of unexplained variance at both the regional and individual level could also be a sign of this close correlation between the variables. Institutional trust is included following Andersson's (1998) notion that national and supranational trust goes together to determine EU support. Based on this, the variables relate to EU support as suggested by the literature (de Vreese & Boomgaarden, 2005; Hooghe & Marks, 2005).

Table 4.1.b. Relationship between Cohesion Policy funding and EU support, part 2

Variables	Model 0		Model 4		Model 5		Model 6	
EU support	Specific	Diffuse	Specific	Diffuse	Specific	Diffuse	Specific	Diffuse
Independent variables								
Regional variable								
Cohesion Policy per capita			0.000107 (0.0000558)	0.0000474 (0.0000867)	0.000184* (0.0000759)	0.000155 (0.000108)	0.000148*** (0.0000429)	0.000135 (0.0000819)
Individual variables								
Socioeconomic factors								
Gender							-0.0323 (0.0220)	-0.0533 (0.0324)
Highest level of education							0.0659*** (0.00816)	0.0808*** (0.0120)
Age of respondent							0.00277*** (0.000709)	0.00729*** (0.00104)
Family standard of living							0.0179 (0.00962)	0.0137 (0.0142)
Individual values								
Political interest							-0.00229 (0.0140)	-0.00229 (0.0140)
Institutional trust							0.297*** (0.0168)	0.331*** (0.0246)
Attitude towards immigrants							0.0470*** (0.00488)	0.0853*** (0.00719)
Trust in other Europeans							0.0306*** (0.00527)	0.0306*** (0.00527)
Individual identity								
National attachments			-0.110*** (0.0161)	-0.265*** (0.0238)			-0.116*** (0.0167)	-0.271*** (0.0247)
European attachments			0.664*** (0.0122)	0.980*** (0.0181)			0.480*** (0.0140)	0.695*** (0.0207)
Transnationalism								
Transnational activities					0.486*** (0.0400)	0.777*** (0.0590)	-0.0277 (0.0408)	0.00464 (0.0601)
Constant	2.701*** (0.0808)	3.955*** (0.104)	1.600*** (0.0909)	2.709*** (0.140)	0.102*** (0.00775)	0.492*** (0.00774)	0.602*** (0.0932)	1.007*** (0.157)
Regional level variance	0.109 (0.038)	0.177 (0.063)	0.044 (0.016)	0.107 (0.038)	0.082 (0.029)	0.167 0.059	0.025 (0.009)	0.094 (0.034)
Individual level variance	1.251 (0.019)	2.733 (0.042)	0.917 (0.014)	2.004 (0.031)	1.226 (0.019)	2.675 (0.041)	0.819 (0.013)	1.777 (0.029)
Observations	8414	8419	8263	8275	8351	8353	7451	7457

Notes: The table displays the results from multilevel regression analyses using specific and diffuse EU support as dependent variables with unstandardised coefficients. The table presents unstandardised regression coefficients (b), standard error (SEb) in parentheses, and statistical significance. Additional information is given on the constant, being the mean intercept for the regions, the regional level (level 2 unit) unexplained variance, individual level (level 1 unit) unexplained variance and number of observations (N). Statistical significance: * = p < 0,1, ** = p < 0,05, *** = p < 0,01 *Source:* Cohesify citizen survey 2017

Model 4, presented in Table 4.1.b., includes individual identity factors as control variables for the relationship between regional level Cohesion Policy funding per capita and individual EU support. In this model Cohesion Policy per capita suffers from a lack of statistical significance for both dependent variables. This suggests that the relationship between Cohesion Policy funding and EU support is fully mediated by already set individual identities unless other control variables are included. Both variables related to individual identity are fully significant. As noted regarding trust in the EU included in the previous model, attachment to the EU might suffer from the same close connection to the dependent variables. The results show a strong positive relationship between attachment to the EU and EU support. More interestingly, national attachments have a negative relationship to the dependent variables, indicating the clash between identities which makes those with strong national attachments more likely to perceive the EU as a threat (Chalmers & Dellmuth, 2015).

Model 5 tests the relationship between the variables while controlling for transnationalism. Here Cohesion Policy per capita as the regional variable has a positive effect on the dependent variables but is only statistically significant for specific EU support. The transnational activities also show a positive relationship to the dependent variables and are fully significant for both notions of EU support. Still, the unexplained variance at the regional and individual level is almost unchanged in comparison to the empty model (Model 0). This indicates that the included variables only have a limited explanatory role for the dependent variables, and they are likely to be sensitive to control for other factors. It has already been suggested that the relationship is based on human capital and social stratifications than the activities themselves (Kuhn, 2019). Nevertheless, the model shows that people who engage in transnational activities are more likely to perceive the EU in a positive light.

Finally, Model 6 investigates the relationship between Cohesion Policy funding per capita at the regional level and individual EU support in its specific and diffuse notion while controlling for all the other individual factors which have been tested in the previous models. Starting with Cohesion Policy per capita, it is noted that there is no statistically significant effect on diffuse EU support. Cohesion Policy funding is therefore not sufficient to on its own influence individuals' general opinion towards the European integration. H1a can therefore not be confirmed in full.

However, for specific EU support a positive impact of the regional funding on the individual attitudes is seen and the relationship is fully significant. The beta coefficient is lower than what is has been in the previous models and low in comparison to the individual level control variables, but as the data contains few regions and many individual respondents and individual level variables this is not too surprising. Moreover, the uneven distribution of how much of the dependent variables' variance that could be explained at the regional and individual level is also making the regional level variable less influential. The results are thus showing that Cohesion Policy funding at the regional level has an impact

on how individuals evaluate their country's benefit of EU membership and H1a is partly confirmed. A larger allocation of Cohesion Policy funding increases the specific notion of public EU support.

As the assumed positive relationship between larger amounts of Cohesion Policy funding per capita and individual EU support only is noted in relation to specific EU support and not for diffuse EU support, H1b is fully confirmed by the findings of Model 6. The amendment that Cohesion Policy funding will *only* have an impact on specific EU support and not on diffuse EU support instead of *more* impact could be done, but the conclusion and confirmation of the hypothesis remain the same.

Of the control variables, family standard of living, political interest[12] and transnational activities have lost their statistical significance seen in previous models. Otherwise, the relationships between the dependent and independent variables remain. Institutional trust from individual values and European attachments from individual identity show the strongest impact on the dependent variables. These are however closely related to EU support and might suffer from too strong correlation, leaning towards multicollinearity (Hobolt & de Vries, 2016). Education, age, attitudes towards migrants, and interpersonal trust might thus be more useful as control variables even if they have lower coefficients.

While comparing the relationship between the control variables and the two notions of EU support it is noted that the beta coefficients for all statistically significant variables are larger for diffuse EU support than for specific EU support. This is, as previously noted, due to the unstandardised scale of the dependent variables. However, none of the control variables varies in statistical significance between the two notion of EU support. The difference seen for Cohesion Policy funding per capita between specific and diffuse EU support is therefore unique. The control variables have largely the same impact on individuals' evaluation of their country's membership benefits from the EU and on their general stance towards European integration. Whereas Cohesion Policy funding as a regional variable only impacts the former notion of EU support. As no other regional variables are included in the research the possibility that this finding is due to Cohesion Policy being a regional level variable in this analysis cannot be controlled for. Individual level awareness aspects of the Cohesion Policy will be included in the next section which should provide some clarity for determining whether the difference in significance is related to Cohesion Policy at both the regional and individual level or just is an outcome from being situated at the regional level in this model.

The changed unexplained variance at the level 2 and level 1 units in Model 6 compared to the empty model shows that for specific EU support, the variables included in the final model explain 77% of the variance in the dependent variable at the regional level and 35% of the variance at the individual level. For diffuse EU support the final model explains 46% of the variance in the dependent variable at

---

[12] The variable is neither significant in a robustness check excluding interest in European politics in the index.

regional level and 35% of the variance at the individual level. These numbers represent the R^2 value of the models. The high number at the regional level for specific EU support suggests that Cohesion Policy funding has an important explanatory power and determines regional variations in evaluations of EU membership benefits. Moreover, the positive R^2 values indicates that the model is not suffering from the negative contribution to the explained variance which can occur in multilevel regression analysis (Mehmetoglu & Jakobsen, 2017; Snijders & Bosker, 2012).

4.2. EU support and Cohesion Policy awareness

The results related to the second set of hypotheses of this thesis are presented in Table 4.2. This set of hypotheses states that the effect of Cohesion Policy funding on EU support is mediated by public awareness of the policy (H2a) and that this mediation effect is more prominent for specific EU support (H2b) or for diffuse EU support (H2c).

The empty model, Model 0, is the same as in the previous section. Cohesion Policy funding per capita at the regional level is included in these analyses, but it is complemented with its individual level notions of awareness and individual benefits of the policy in Model 7, adding the control variables in Model 8. As the variables related to individual perceived benefits of the EU suffer from a large share of missing cases and potential reverse causality, Model 9, which includes them in the analysis is only presented in the appendix. Some of the findings from that model are however included in the following section.

Table 4.2. Relationship between Cohesion Policy awareness and EU support

Variables	Model 0		Model 7		Model 8	
EU support	Specific	Diffuse	Specific	Diffuse	Specific	Diffuse
<u>Independent variables</u>						
Regional variable						
Cohesion Policy per capita			0.0000315 (0.0000762)	-0.0000346 (0.000102)	0.0000882* (0.0000411)	0.0000979 (0.0000781)
Individual variables						
Awareness factors						
Personal benefit from Cohesion Policy			0.368*** (0.0343)	0.493*** (0.0511)	0.184*** (0.0303)	0.234*** (0.0449)
Awareness of Cohesion Policy			0.794*** (0.0442)	0.977*** (0.0660)	0.307*** (0.0429)	0.187** (0.0637)
Soc.ec. factors						
Gender					-0.00695 (0.0230)	-0.0488 (0.0339)
Highest level of education					0.0533*** (0.00853)	0.0719*** (0.0126)
Age of respondent					0.00212** (0.000743)	0.00723*** (0.00110)
Family standard of living					0.0205* (0.00993)	0.0171 (0.0147)
Individual values						
Political interest					-0.0308* (0.0149)	-0.00423 (0.0220)
Institutional trust					0.283*** (0.0173)	0.317*** (0.0255)
Attitude towards immigrants					0.0450*** (0.00503)	0.0824*** (0.00743)
Trust in other Europeans					0.0264*** (0.00545)	0.0723*** (0.00804)
Individual identity						
National attachments					-0.115*** (0.0173)	-0.271*** (0.0256)
European attachments					0.470*** (0.0145)	0.681*** (0.0215)
Transnationalism						
Transnational activities					-0.0762 (0.0425)	-0.0481 (0.0629)
Constant	2.701*** (0.0808)	3.955*** (0.104)	2.194*** (0.113)	3.406*** (0.151)	0.690*** (0.0929)	1.074*** (0.155)
Regional level variance	0.109 (0.038)	0.177 (0.063)	0.082 (0.029)	0.146 (0.052)	0.022 (0.008)	0.084 (0.030)
Individual level variance	1.251 (0.019)	2.733 (0.042)	1.169 (0.019)	2.596 (0.042)	0.818 (0.014)	1.791 (0.030)
Observations	8414	8419	7763	7766	6939	6947

Notes: The table displays the results from multilevel regression analyses using specific and diffuse EU support as dependent variables with unstandardised coefficients. The table presents unstandardised regression coefficients (b), standard error (SEb) in parentheses, and statistical significance. The constant, regional level (level 2 unit) and individual level (level 1 unit)

With the awareness factors included in Model 7, Cohesion Policy per capita as a regional variable shows no statistical significance for either of the dependent variables. This indicates the importance of individual awareness for the existence of the earlier noted relationship between funding and support. The awareness related variables seem to fully mediate the effect of it as both higher level of awareness of the Cohesion Policy and having personally benefited from its funding significantly increase a respondent's specific and diffuse EU support. This suggests a confirmation of H2a that the effect of Cohesion Policy funding on EU support is mediated by the public awareness of the policy. At this stage, no conclusions can be made regarding H2b and H2c as the difference in coefficient effects of the independent variables on the two dependent variables could be due to the unstandardised scales of them and not related to the hypothesised relationships between the variables.

In Model 8, all control variables at individual level from Model 6 are includes in the analysis, while keeping both Cohesion Policy funding at the regional level and individual level awareness factors in the model. Cohesion Policy funding at the regional level has a weak statistically significant, positive effect on specific EU support. The mediation effect of awareness related factors on the regional variable can thus not be said to be absolute. H2a can be confirmed as a mediation effect is seen by comparing Model 6 and Model 8 but some explanatory power is still held by regional Cohesion Policy funding per capita for specific EU support. H1a is thus still relevant in this model. However, as Cohesion Policy funding only barely is significant one should be careful with conclusions based on these results. More clarity would come from research using data with more regions as the statistical significance is sensitive to the small number of level 2 units (Mehmetoglu & Jakobsen, 2017). Anyhow, the awareness related factors are statistically significant in their effects on the dependent variables. Their coefficients are among the largest of the independent variables and they are thus possessing strong explanatory values for EU support.

The impact of increased awareness of the Cohesion Policy on the two notions of EU support is illustrated in Graph 4.1., (see the next page), where the difference between impact and significance of the variable on specific and diffuse EU support is seen. The awareness variable is more significant for specific EU support than for diffuse EU support, suggesting that H2b is confirmed on the expense of H2c; the mediation effect is larger for specific EU support than for diffuse EU support. As seen from the confidence intervals in Graph 4.1. the awareness factor's impact in Model 8 is only fully significant for specific EU support, and the effect on the dependent variables is weak, even if its coefficients are relatively strong compared to the control variables. With the findings from Model 6 in mind, these results related to difference in statistical significance between the two notions of EU support are not surprising. As Cohesion Policy funding at the regional level only influence specific EU support and awareness is

related to the perception of this funding, the degree of awareness will consequently only impact specific EU support. The additional finding that awareness and personal benefit of the funding seem to spill over on diffuse EU support is therefore a more unexpected result. The findings could still be suffering from reverse causality – those more positive towards the EU could be more likely to be aware and perceive the benefits of the Cohesion Policy funding in their region.

Graph 4.1. Linear prediction of Cohesion Policy awareness on EU support
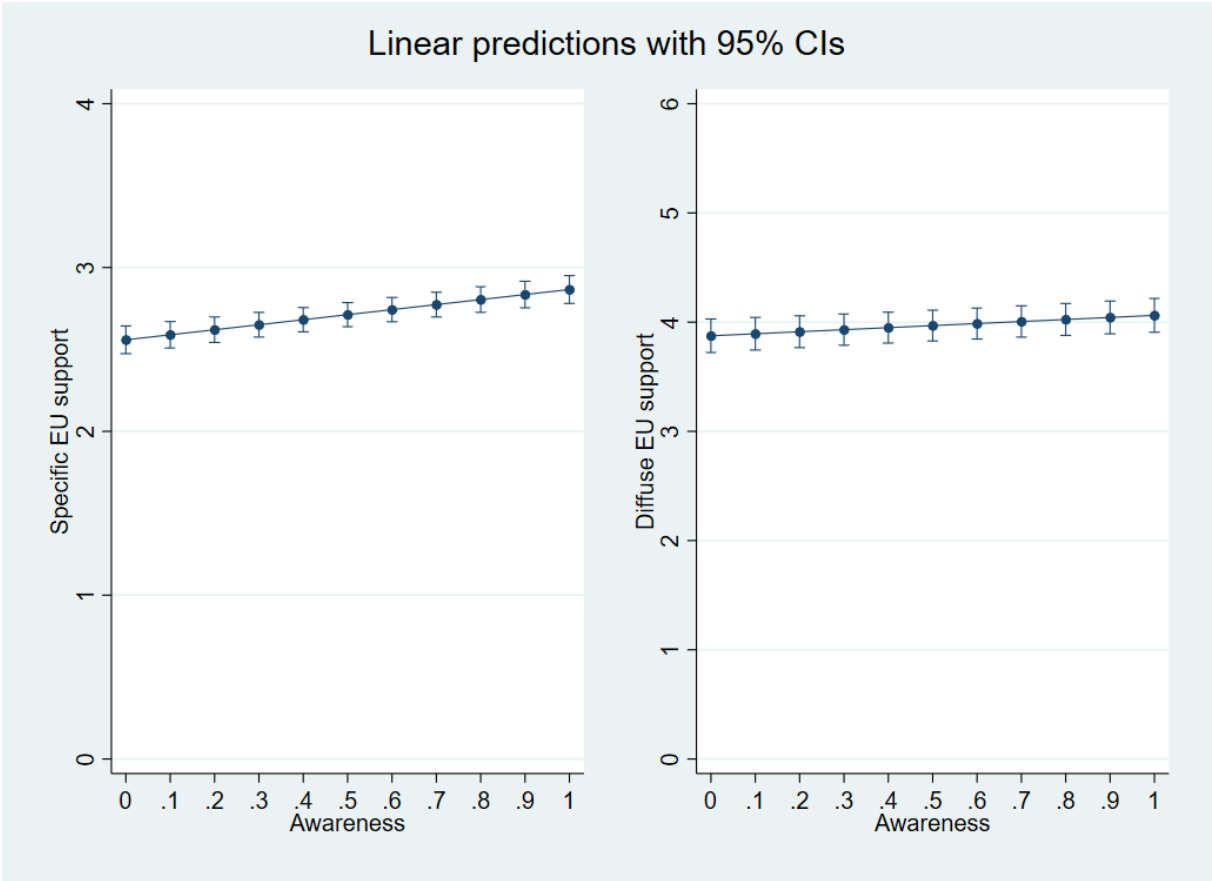
Notes: The graph illustrates the linear prediction of the awareness factor on specific and diffuse EU support from Model 8. The prediction has a fixed portion and 95% confidence intervals (CIs). *Source:* Cohesify citizen survey 2017

Going back to the results of Model 8 in Table 4.2., for the control variables the same relationships can be seen as in Model 6, with the exception that family standard of living and political interest both have gained some significance. Their significance levels are however still too low for the variables to be relevant. Political interest shows a negative impact on specific EU support something which goes against previous research on the topic[13] (Borz et al., 2018; Inglehart, 1970).

The R² values for the Model 8 show 80% explained variance at the regional level for specific EU support and 53% at the regional level for diffuse EU support. At the individual level, the explained

---

[13] The finding holds for a robustness check excluding interest in European politics from the index.

variance lies on 35% for both notions of EU support. No increase in explained variance at the individual level can be seen from comparing Model 6 and Model 8. The model might thus suffer from the issue of variables contributing negatively to the total explained variance (Gelman & Hill, 2007). Still, the likelihood ratio tests show an improved fit of the model on the data compared to Model 6 where the awareness factors were not included.

As noted earlier, individual level perceived benefits of the EU are problematic as explanatory variables of EU support. The perceived benefits factors are closely related to the dependent variables and claims of causal relationships between the variables are difficult to make (Hooghe & Marks, 2005). Furthermore, some of the variables suffer from many missing cases, which drastically reduces the total number of observations in this model in comparison with previous ones. Either way the variables can indicate how Cohesion Policy per capita as a purely objective variable stands against perceptive individual level factors. The factors are added to the analysis in Model 9, found in the appendix together with some comments on the findings. The most important aspects are discussed here.

The main findings from Model 8 concerning Cohesion Policy funding at the regional level and awareness of the Cohesion Policy at the individual level remain while including the perceived benefits factors. Also, the control variables remain largely unchanged. Cohesion Policy per capita does not have a statistically significant impact on EU support, whereas individual awareness and personal benefit of the Cohesion Policy are positively and fully significantly related to specific EU support. The relationship between the variables noted in Model 8 is seen more clearly with all individual level variables included.

As noted regarding Cohesion Policy per capita in Model 6, the difference in significance between the impact on the two notions of EU support can also be seen for its individual reflections of awareness and personal benefit. This difference is also seen for the perception if the 'EU is advantageous for people like me.' For this variable, the effect on the dependent variables is more significant for diffuse EU support than for specific EU support. The difference in significance is therefore not unique for the Cohesion Policy factors but is seen in perceived benefits as well. Still, none of the traditional control variables varies in statistical significance between specific and diffuse EU support.

Using the terminology of egocentric and sociotropic cost-benefit evaluations of the EU (Aiello et al., 2019), the results suggest that the egocentric evaluation seen in the 'EU is advantageous for people like me' variable more directly translates to general positive attitudes of European integration than to perceived benefits of EU membership for one's country. The latter is a more sociotropic notion of the evaluation. The difference of awareness' mediation effect on specific and diffuse EU support is similarly connected to the different notions of cost-benefit evaluations of the two dependent variables. The awareness of Cohesion Policy is more related to cost-benefit evaluations of the policy and has hence a stronger impact on specific EU support than on diffuse EU support which has less cost-benefit characteristics. For personal benefit of the policy, the relationship is more mixed and its egocentric, cost-

benefit character translates to both specific and diffuse EU support. This explanation indicates why the general effect is more prominent for specific EU support than for diffuse EU support together with the understanding of how regional Cohesion Policy funding relates to the dependent variables.

4.3. Robustness check

A separate multilevel analysis was made using an index of the two notions of EU support as dependent variable. Distinguishing between specific and diffuse EU support is important in this thesis and necessary for the answering of some of the hypotheses. Nevertheless, some scholars promote the index approach to operationalising individuals EU support instead of relying on single variables (Curtis & Nielsen, 2018; Díaz-Lanchas et al., 2021; Gabel, 1998). The robustness check is thus done as a protection of the results for criticism which is specifically aimed at the operationalisation of EU support.

A rerun of Model 6 using the EU support index shows that Cohesion Policy funding per capita has a positive effect on the dependent variable at 0.01 statistical significance level. All control variables show the same direction of relationship to the dependent variable and generally the same level of statistical significance as in the original Model 6. The robustness check of Model 8, with the EU support index show similar results. Cohesion Policy per capita at the regional level has no significant impact, but both individual awareness of the policy and personal benefit of its funding are fully significant and have a positive influence on the dependent variable. All other independent variables display roughly the same relationships to the dependent variable as in the results of Model 8. Other robustness checks have been mentioned in previous footnotes.

5. Concluding discussion

The empirical findings show that the relationship between the Cohesion Policy and public support for the EU is more than a question of influence or no influence. How the Cohesion Policy affects individuals' attitudes towards the EU depends both on which notion of EU support that is taken into consideration, the amount of regional Cohesion Policy funding, and individual awareness of the Cohesion Policy.

At the regional level, the amount of Cohesion Policy funding per capita a region receives has an impact on individuals' EU support, but only on the individuals' specific support which is captured through cost-benefit evaluations of their country's EU membership. General attitudes towards the European integration, so-called diffuse EU support, is not affected by the Cohesion Policy funding. These results hold for the control of individual level factors which are commonly used to explain EU attitudes (Hobolt & de Vries, 2016). The first set of hypotheses are therefore supported by the empirical findings. H1a, that a larger amount of Cohesion Policy funding will increase EU support is confirmed in the case of specific EU support. As tested in the robustness check, this is also confirmed while using an EU support index as the dependent factor. As for H1b, the hypothesis is fully confirmed; the funding has a larger impact on specific than on diffuse EU support.

Individual level awareness of the Cohesion Policy is key for mediating the relationship between the regional funding and public support of the EU. An individual must be aware of the Cohesion Policy to do the cost-benefit evaluations of the Cohesion Policy funding which could then influence their levels of EU support. The empirical findings in this thesis support this mediation effect. When the awareness related factors were controlled for, the impact of the regional level Cohesion Policy funding per capita on EU support was drastically reduced, or even completely lost its significance. H2a was thus confirmed; public awareness mediates the effect of Cohesion Policy funding on EU support, but only for specific EU support (H2b).

Cohesion Policy funding at the regional level only influences specific EU support and this was also the only notion for which the mediation effect could be seen. H2b was therefore confirmed and H2c was rejected, even if the explanation of why the mediation effect was larger for specific EU support than for diffuse EU support might be more nuanced than what was set out in the hypotheses. The mediation effect depends on both the regional level funding's relationship to EU support and on the awareness factors' closeness to cost-benefit evaluations. Awareness levels might be higher among those who already are more supportive of the EU, as suggested in H2c, but this is not controlled for in this thesis. Either way the correlation is not large enough to make the awareness factors more effective on diffuse EU support than on specific EU support. Personal benefit of the Cohesion Policy projects does however show an impact on diffuse EU support even while controlling for other perceived benefits of the EU.

Still, the variable has a relatively low mean and might come with a bias that those who answered that they have benefited from the policy might be more involved and supportive of the EU for other reasons. Nevertheless, the results indicate that even if the Cohesion Policy funding at the regional level only influences specific EU support, it has the potential to impact diffuse EU support as it reaches individuals.

The findings of this thesis highlight that Cohesion Policy funding only function as an explanatory factor for certain notions of EU attitudes. For Cohesion Policy funding to have a direct effect on higher levels of EU support a specific, cost-benefit evaluation-based notion of EU support is needed. Scholars who study EU support through other notions or through election results are less likely to find evidence for the relationship between Cohesion Policy funding and EU attitudes. The reverse relationship – where a larger amount of Cohesion Policy funding was noted to decrease EU support – in Rehák et al.'s (2021) study could be explained by this. The same goes for the case of the Brexit referendum where Crescenzi et al. (2020) did not find a direct impact of Cohesion Policy funding on the EU supportive remain vote. For the EU overall, Rodríguez-Pose and Dijkstra (2021) find that Cohesion Policy funding reduces votes on Eurosceptic parties when looking at all EU member states. This finding goes in line with the results of this thesis. The sensitivity to how EU support is treated in studies for Cohesion Policy to influence its levels might thus be context dependent as well as influenced by individual level factors such as awareness.

Awareness is found to have a mitigating effect on the relationship between Cohesion Policy funding and EU support. The results of this thesis are thus strengthening the findings of studies which come to the same conclusion (Aiello et al., 2019; Dąbrowski et al., 2021; Osterloh, 2011). The utilitarian theory determining EU support is to a large extent dependent on individual level awareness for the regional factor Cohesion Policy funding to have an impact on EU attitudes as suggested by the theory. Awareness and personal benefits of the Cohesion Policy are moreover robust to the inclusion of other individual level factors. This contrasts with the findings by López-Bazo and Royuela (2019) who noted that no impact of the factors was seen when other individual characteristics were included.

Concerning the inclusion of control variables in this thesis it is shown that awareness as a variable on its own is more appropriate for investigating the mediation effect than by using level of education or political interest as a substitute for it. Education still has a relationship to EU support as stated in previous research (Chalmers & Dellmuth, 2015; Dąbrowski et al., 2019), but political interest does not find support as an explanatory variable in this thesis. More efforts should therefore be made to include individual level notions of the Cohesion Policy, such as awareness or personal benefits of the policy in surveys capturing citizens' attitudes towards the EU (Borz et al., 2022).

The results do not find that it is necessary to distinguish between the structural funds, funding areas, or even control for needs or tangible impacts of Cohesion Policy funding in a region for the Cohesion Policy to influence EU support. But neither do the results undermine the findings in studies

which have included these aspects (Borz et al., 2018, 2022; Brasili et al., 2019; Dellmuth & Chalmers, 2018). These studies contribute to the research field by nuancing Cohesion Policy funding at the regional level, whereas this thesis has highlighted the Cohesion Policy's role at the individual level. The interplay of these levels is important to study for a better understanding of the relationship between the Cohesion Policy and EU support. The same can be said for general investigations of any EU policy and public attitudes. Individual level subjective perceptions and regional level objective factors together provide explanations of what determines public support of the EU and the European integration.

Looking at the limitations of this thesis, the first issues are related to the choice of data. The Cohesify citizen survey enabled this thesis to investigate parts of the relationship between the Cohesion Policy and EU support which the ordinary pan-European survey studies such as the Eurobarometer does not cover. However, the data only includes 17 regions. The inclusion of more developed and less developed regions in the data can almost entirely be drawn with a West-East divide. This is the case overall while looking at the EU, but more developed, transition, and less developed regions are found both in Western Europe and Central Eastern Europe (CEE) (European Commission, n.d.-b). Including regions which have a different classification than other regions in their country or area would enable an investigation which goes beyond classical divisions of the EU. Having multiple regions from the same country but with different classifications would especially have made the exploration of the role of the Cohesion Policy in the region more interesting as this could have controlled for national contexts which might affect levels of EU support. A more diverse sample could also make the results more transferable to the entire EU.

Some of the limitations stemming from the small number of regions included in the data could have been controlled for by using a different method for the analysis. Country level contexts would be difficult to control for as few countries have more than one region present in the data. The dataset does however include enough regions for the distinction between Western Europe and CEE to be made. This would require an additional level to the multilevel analysis and could be done in future research (Gelman & Hill, 2007; Snijders & Bosker, 2012).

The same can be noted for the decision to use only random intercept models and not random slope models. Dąbrowski et al. (2019) find that education only has an impact on EU support in some clusters of regions. The same might be the case for the awareness factors in this study as these factors are sometimes connected to levels of education in their relation to EU attitudes (Borz et al., 2018). This could be investigated through a random slope model and is suggested for further research as it falls outside of the scope of this thesis.

Reverse causality is not tested for in the thesis but is of importance for continued investigation of the findings. By doing this it would be clear whether the Cohesion Policy increases EU support through individual awareness or whether the results are due to already positive attitudes towards the EU held by

the citizens, making them more likely to be aware of the regional funding to start with (López-Bazo & Royuela, 2019). Nevertheless, the same limitation cannot be claimed for Cohesion Policy funding at the regional level. The regional allocations are made outside of the scope of public preferences and their relationship to EU support should thus not be sensitive to reverse causality or pre-existing attitudes.

For future research more efforts should be made to account for awareness factors in the relationship between EU policies and public attitudes. This would enable insights in how reverse causality might be involved in the relationship between Cohesion Policy funding, awareness, and EU support, and improve the possibility for future research to address other limitations of this thesis. The findings in this thesis ought to be assessed in more EU regions where other contexts could impact the results (Crescenzi et al., 2020; Dąbrowski et al., 2019). Moreover, a distinction could be made between the funds or project areas of the Cohesion Policy to determine which are the most effective for communication and generating support (Borz et al., 2018; Brasili et al., 2020; Dellmuth & Chalmers, 2018).

For policy implications comes the advice that the EU and those working with EU financed projects should not underestimate the role of communication (Aiello et al., 2019; Dąbrowski et al., 2021). This thesis has demonstrated that the Cohesion Policy can bring the EU closer to the citizens and impact their levels of EU support. Something as simple as displaying the EU flag at the site of an ESIF-funded project contributes to this (Borz et al., 2022). Furthermore, for the Cohesion Policy projects to have larger effect on public attitudes towards the EU they should be designed in an inclusive way so that individuals feel that they have benefited from them in their daily life. The multilevel governance structure of the Cohesion Policy makes it especially suited for this. With appropriate communication, support to the EU regions can generate public support for the EU.

References

Literature

Aiello, Valentina, Reverberi, Pierre Maurice, & Brasili, Cristina. (2019). European identity and citizens' support for the EU: Testing the utilitarian approach. *Regional Science Policy & Practice*, *11*(4), 673–693. https://doi.org/10.1111/rsp3.12242

Anderson, Christopher 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

Balestrini, Pierre P. (2012). How Citizens' Education, Occupation, Personal Economic Expectations and National Identity Interact with One Another to Sway Public Opinion on the EU. *Swiss Political Science Review*, *18*(3), 371–384. https://doi.org/10.1111/j.1662-6370.2012.02068.x

Bauhr, Monika, & Charron, Nicholas. (2020). The EU as a savior and a saint? Corruption and public support for redistribution. *Journal of European Public Policy*, *27*(4), 509–527. https://doi.org/10.1080/13501763.2019.1578816

Borz, Gabriela, Brandenburg, Heinz, & Mendez, Carlos. (2018). *The Impact of EU Cohesion Policy on European Identity: Results from the COHESIFY Citizen Survey*. http://www.cohesify.eu/research-papers/

Borz, Gabriela, Brandenburg, Heinz, & Mendez, Carlos. (2022). The impact of EU Cohesion Policy on European identity: A comparative analysis of EU regions. *European Union Politics*, 14651165221076444. https://doi.org/10.1177/14651165221076444

Brasili, Cristina, Calia, Pinuccia, & Monasterolo, Irene. (2019). Mapping citizens' identification with the EU. *Regional Science Policy & Practice*, *11*(4), 655–672. https://doi.org/10.1111/rsp3.12227

Brasili, Cristina, Calia, Pinuccia, & Monasterolo, Irene. (2020). Profiling identification with Europe and the EU project in the European regions. *Investigaciones Regionales - Journal of Regional Reserach*, *46*, 71–91. https://doi.org/10.38191/iirr-jorr.20.004

Chalmers, Adam William, & Dellmuth, Lisa Maria. (2015). Fiscal redistribution and public support for European integration. *European Union Politics*, *16*(3), 386–407. https://doi.org/10.1177/1465116515581201

Crescenzi, Riccardo, Di Cataldo, Marco, & Giua, Mara. (2020). It's not about the money. EU funds, local opportunities, and Euroscepticism. *Regional Science and Urban Economics*, *84*, 103556. https://doi.org/10.1016/j.regsciurbeco.2020.103556

Curtis, K. Amber, & Nielsen, Julie Hassing. (2018). Predispositions Matter…But How? Ideology as a Mediator of Personality's Effects on EU Support in Five Countries. *Political Psychology*, *39*(6), 1251–1270. https://doi.org/10.1111/pops.12546

Dąbrowski, Marcin, Spaans, Marjolein, Fernandez-Maldonado, Ana Maria, & Rocco, Roberto. (2021). Cohesion Policy and the citizens' perceptions of the EU: The role of communication and implementation. *European Planning Studies*, *29*(5), 827–843. https://doi.org/10.1080/09654313.2020.1805413

Dąbrowski, Marcin, Stead, Dominic, & Mashhoodi, Bardia. (2019). EU Cohesion Policy can't buy me love? Exploring the regional determinants of EU image. *Regional Science Policy & Practice*, *11*(4), 695–711. https://doi.org/10.1111/rsp3.12237

de Vreese, Claes H., & Boomgaarden, Hajo 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

De Vries, Catherine E. (2018). *Euroscepticism and the Future of European Integration*. Oxford University Press. https://doi.org/10.1093/oso/9780198793380.001.0001

de Wilde, Pieter, & Trenz, Hans-Jörg. (2012). Denouncing European integration: Euroscepticism as polity contestation. *European Journal of Social Theory*, *15*(4), 537–554. https://doi.org/10.1177/1368431011432968

Dellmuth, Lisa M., & Chalmers, Adam W. (2018). All spending is not equal: European Union public spending, policy feedback and citizens' support for the EU. *European Journal of Political Research*, *57*(1), 3–23. https://doi.org/10.1111/1475-6765.12215

Díaz-Lanchas, Jorge, Sojka, Aleksandra, & Di Pietro, Filippo. (2021). Of losers and laggards: The interplay of material conditions and individual perceptions in the shaping of EU discontent. *Cambridge Journal of Regions, Economy and Society*, *14*(3), 395–415. https://doi.org/10.1093/cjres/rsab022

Djurfeldt, Göran. (2018). *Statistisk verktygslåda 1: Samhällsvetenskaplig orsaksanalys med kvantitativa metoder* (Tredje upplagan). Studentlitteratur.

Easton, David. (1965). *A systems analysis of political life.* Wiley.

Easton, David. (1975). A Re-assessment of the Concept of Political Support. *British Journal of Political Science*, *5*(4), 435–457. https://doi.org/10.1017/S0007123400008309

Ekman, Joakim. (2009). Euroskepticism bland partier och medborgare: Tidigare forskning, förklaringar och förslag på analysmodeller. *Statsvetenskaplig tidskrift*, *111*(2), Article 2. https://journals.lub.lu.se/st/article/view/8159

Esaiasson, Peter, Gilljam, Mikael, Oscarsson, Henrik, Towns, Ann E, & Wängnerud, Lena. (2017). *Metodpraktikan: Konsten att studera samhälle, individ och marknad*.

Gabel, Matthew. (1998). Public Support for European Integration: An Empirical Test of Five Theories. *The Journal of Politics*, *60*(2), 333–354. https://doi.org/10.2307/2647912

Gabel, Matthew, & Palmer, Harvey D. (1995). Understanding variation in public support for European integration. *European Journal of Political Research*, *27*(1), 3–19. https://doi.org/10.1111/j.1475-6765.1995.tb00627.x

Gelman, Andrew, & Hill, Jennifer. (2007). *Data analysis using regression and multilevel/hierarchical models*. University Press.

Genna, Gaspare M. (2009). Positive country images, trust and public support for European integration. *Comparative European Politics*, *7*(2), 213–232. http://dx.doi.org/10.1057/cep.2008.8

Hobolt, Sara B., & de Vries, Catherine 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, Sara B., & Wratil, Christopher. (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

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

Hooghe, Liesbet, & Marks, Gary. (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, Liesbet, & Marks, Gary. (2018). 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

Inglehart, Ronald. (1970). Cognitive Mobilization and European Identity. *Comparative Politics*, *3*(1), 45–70. https://doi.org/10.2307/421501

John, Peter. (2018). Quantitative Methods. In V. Lowndes, D. Marsh, & G. Stoker, *Theory and methods in political science* (Fourth edition). Palgrave.

Kuhn, Theresa. (2019). Grand theories of European integration revisited: Does identity politics shape the course of European integration? *Journal of European Public Policy*, *26*(8), 1213–1230. https://doi.org/10.1080/13501763.2019.1622588

Kuhn, Theresa, & Stoeckel, Florian. (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

Lipps, Jana, & Schraff, Dominik. (2021). Estimating subnational preferences across the European Union. *Political Science Research and Methods*, *9*(1), 197–205. https://doi.org/10.1017/psrm.2019.38

López-Bazo, Enrique. (2021a). Does regional growth affect public attitudes towards the European Union? *The Annals of Regional Science*, 66(3), 755–778. https://doi.org/10.1007/s00168-020-01037-8

López-Bazo, Enrique. (2021b). The Impact of Cohesion Policy on Regional Differences in Support for the European Union*. *JCMS: Journal of Common Market Studies*, jcms.13153. https://doi.org/10.1111/jcms.13153

López-Bazo, Enrique, & Royuela, Vicente. (2019). Citizens' perception of the Cohesion Policy and support for the European Union. *Regional Science Policy & Practice*, *11*(4), 733–749. https://doi.org/10.1111/rsp3.12223

Lubbers, Marcel, & Scheepers, Peer. (2005). Political versus Instrumental Euro-scepticism: Mapping Scepticism in European Countries and Regions. *European Union Politics*, *6*(2), 223–242. https://doi.org/10.1177/1465116505051984

Lubbers, Marcel, & Scheepers, Peer. (2007). EXPLANATIONS OF POLITICAL EURO-SCEPTICISM AT THE INDIVIDUAL, REGIONAL AND NATIONAL LEVELS. *European Societies*, *9*(4), 643–669. https://doi.org/10.1080/14616690701396603

Mehmetoglu, Mehmet, & Jakobsen, Tor Georg. (2017). *Applied Statistics Using Stata: A Guide for the Social Sciences*. SAGE Publications.

Osterloh, Steffen. (2011). Can Regional Transfers Buy Public Support? Evidence from EU Structural Policy. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1763267

Piattoni, Simona, & Polverari, Laura. (2016). Introduction. In S. Piattoni & L. Polverari (Eds.), *Handbook on Cohesion Policy in the EU* (pp. 1–14). Edward Elgar Publishing. https://www.elgaronline.com/view/edcoll/9781784715663/9781784715663.00012.xml

Rehák, Štefan, Rafaj, Oliver, & Černěnko, Tomáš. (2021). EU integration, regional development problems and the rise of the new radical right in Slovakia. *Regional Science Policy & Practice*, *13*(2), 303–321. https://doi.org/10.1111/rsp3.12385

Rodríguez-Pose, Andrés, & Dijkstra, Lewis. (2021). Does Cohesion Policy reduce EU discontent and Euroscepticism? *Regional Studies*, *55*(2), 354–369. https://doi.org/10.1080/00343404.2020.1826040

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

Snijders, Tom A. B., & Bosker, R. J. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling* (2nd edition). London; Thousand Oaks, Calif. SAGE.

Sundell, Anders. (2012, May 17). Guide: Flernivåregressionsanalys del 1. *SPSS-AKUTEN*. https://spssakuten.com/2012/05/17/guide-flernivaregressionsanalys-del-1/

Tomankova, Ivana. (2021). The EU Structural Funds and trust in politicians: Another unwanted outcome? *Empirica*. https://doi.org/10.1007/s10663-021-09524-7

Traugott, Michael, & Donsbach, Wolfgang. (2008). The Methodological Strengths and Weaknesses of Survey Research. In *The SAGE Handbook of Public Opinion Research*. SAGE Publications Ltd. https://doi.org/10.4135/9781848607910.n21

Tucker, Joshua A., Pacek, Alexander C., & Berinsky, Adam J. (2002). Transitional Winners and Losers: Attitudes toward EU Membership in Post-Communist Countries. *American Journal of Political Science*, *46*(3), 557–571. https://doi.org/10.2307/3088399

Verhaegen, Soetkin, Hooghe, Marc, & Quintelier, Ellen. (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

Electronic sources

European Commission. (n.d.-a). *Glossary*. Retrieved 18 February 2022, from https://ec.europa.eu/regional_policy/en/policy/what/glossary/n/nuts/

European Commission. (n.d.-b). *Is my region covered (2014-2020)?* Retrieved 18 February 2022, from https://ec.europa.eu/regional_policy/en/policy/how/is-my-region-covered/2014-2020/

European Commission. (n.d.-c). *What is the Conference on the Future of Europe? - Conference on the Future of Europe*. Retrieved 18 January 2022, from https://futureu.europa.eu/pages/about

European Commission. (2019). *Eurobarometer 90.3 (2018)* (1.0.0) [Data set]. GESIS Data Archive. https://doi.org/10.4232/1.13254

European Union. (n.d.). *About Eurobarometer – Eurobarometer – Public opinion in the European Union*. Retrieved 22 February 2022, from https://europa.eu/eurobarometer/about/eurobarometer

REGIO.B2/ Walsh, John. (2020). *Historic EU payments by region: 1988-2018*. https://cohesiondata.ec.europa.eu/stories/s/Historic-EU-payments-by-region-1988-2018/47md-x4nq/

Judicial sources

2014/99/EU: Commission Implementing Decision of 18 February 2014 setting out the list of regions eligible for funding from the European Regional Development Fund and the European Social Fund and of Member States eligible for funding from the Cohesion Fund for the period 2014-2020 (notified under document C (2014) 974), 050 OJ L (2014). http://data.europa.eu/eli/dec_impl/2014/99/oj/eng

Consolidated version of the Treaty on the Functioning of the European Union, 326 OJ C (2012). http://data.europa.eu/eli/treaty/tfeu_2012/oj/eng

Regulation (EU) No 1303/2013of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006, 347 OJ L (2013). http://data.europa.eu/eli/reg/2013/1303/oj/eng

Data

Borz, Gabriela, Brandenburg, Heinz, & Mendez, Carlos. (2017). *The COHESIFY citizen survey dataset, Version 2017*. University of Strathclyde, Glasgow.

Appendix

Table A.1. Regional information

Region	NUTS code	Cohesion Policy categorisation	Population 2016	Cohesion Policy total allocation	CP per capita
Cyprus (CY)	CY00	More developed	848 319	738 933 107	871,06
Kentriki Makedonia (GR)	EL52	Less developed	1 883 339	1 921 684 464	1020,36
Baden-Württemberg (DE)	DE1	More developed	10 879 618	1 453 660 679	133,61
	Comment: NUTS1 region consisting of Stuttgart (DE11), Karlsruhe (DE12), Freiburg (DE13) and Tübingen (DE14).				
Thüringen (DE)	DEG	Transition	2 170 714	3 314 643 441	1526,98
Nyugat-Dunántúl (HU)	HU22	Less developed	983 933	3 220 770 561	3273,36
Southern and Eastern (IE)	IE02	More developed	3 594 781	2 360 615 547	656,68
	Comment: The NUTS divisions in Ireland has been redrawn. The former IE02 region is now split into Southern Region (IE05) and Eastern and Midland Region (IE06). Population data for IE02 in 2016 was taken by combining the new regions and withdrawing the population found in the NUTS3 region Midland (IE063) as this did not belong to the original IE02 region.				
Lombardia (IT)	ITC4	More developed	10 008 349	1 016 794 105	101,59
Podkarpackie (PL)	PL32	Less developed	2 083 496	5 890 848 710	2827,39
Pomorskie (PL)	PL63	Less developed	2 277 059	4 766 224 611	2093,15
Vest (RO)	RO42	Less developed	1 802 212	3 013 043 942	1671,86
Zahodna Slovenija (SI)	Slo4	More developed	971 995	1 743 403 274	1793,63
Castilla y León (ES)	ES41	More developed	2 454 454	2 598 818 948	1058,82
Andalucía (ES)	ES61	Transition	8 403 774	12 022 585 051	1430,62
Flevoland (NL)	NL23	More developed	404 068	111 139 285	275,05
Limburg (NL)	NL42	More developed	1 116 260	187 207 312	167,71
Scotland (GB)	UKM	More developed /Transition	5 388 865	1 944 022 572	360,75
	Comment: NUTS1 region consisting of Eastern Scotland (UKM2), South Western Scotland (UKM3), North Eastern Scotland (UKM5), and Highlands and Islands (UKM6).				
North East England (GB)	UKC	More developed /Transition	2 630 654	693 625 591	263,67
	Comment: NUTS1 region consisting of Tees Valley and Durham (UKC1) and Northumberland and Tyne and Wear (UKC2).				

Notes: The table presents information on the regions included in the study. Their NUTS code, status in the Cohesion Policy programme period 2014-2020 and population in 2016 are shown. The Cohesion Policy total is given in euros and covers the 2007-2013 period as well as 2014-2020 allocations before 2017. Cohesion Policy (CP) per capita is also given in euros. *Source:* Cohesify citizen survey 2017 (Borz et al., 2017), Eurostat (REGIO.B2/ Walsh, 2020), and European Commission (2014/99/EU, 2014).

Table A.2. Regional responses to specific EU support
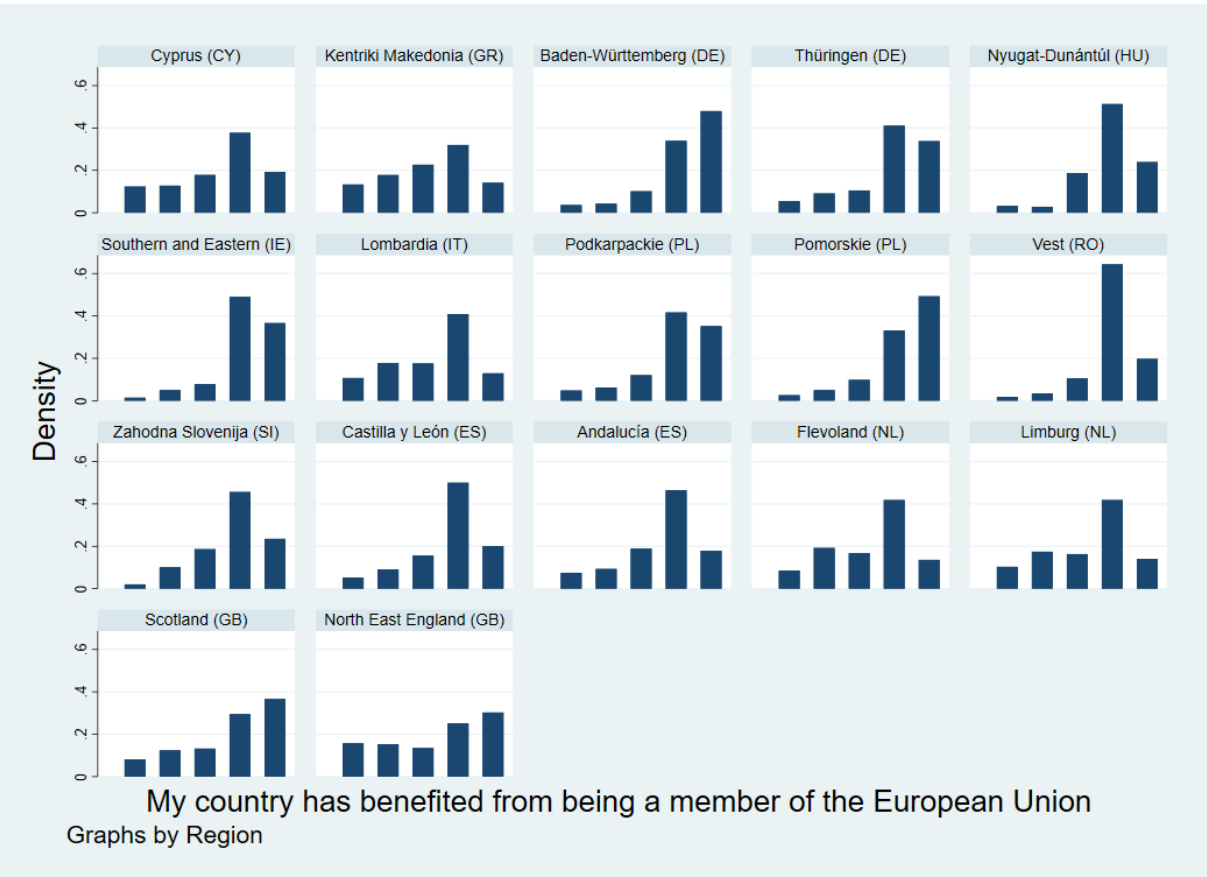
Graphs by Region

Notes: The table depicts graphs displaying the frequency distribution of dependent variable EUbencntry, capturing specific EU support in each region included in the data, ranging from strongly disagree to strongly agree. *Source:* Cohesify citizen survey 2017

Table A.3. Regional responses to diffuse EU support
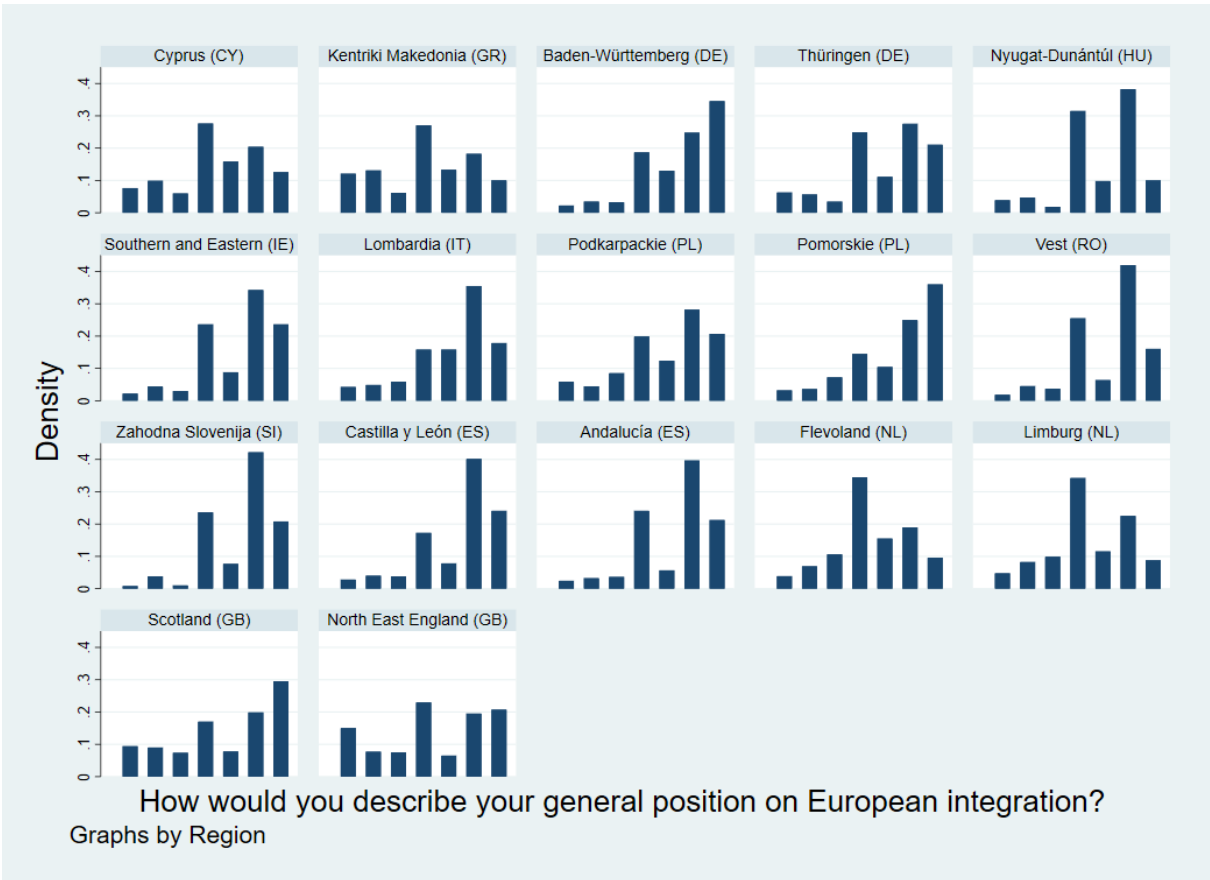
Notes: The table depicts graphs displaying the frequency distribution of dependent variable EUgenpos, capturing diffuse EU support in each region included in the data, ranging from strongly opposed to strongly in favour. *Source:* Cohesify citizen survey 2017

Table A.4. Variable information

Variable	COHESIFY citizen survey	Question/Statement	Coding
Dependent variables			
Specific EU support *(EU membership has benefited country, EUbencntry)*	Q3	To what extent do you agree with the following statement: 'My country has benefited from being a member of the European Union'	Strongly disagree (0) to Strongly agree (4)
Diffuse EU support *(General position towards European integration, EUgenpos)*	Q12	How would you describe your general position on European integration?	Strongly opposed (0) to Strongly in favour (6)
Independent variables			
Regional variable			
Cohesion Policy per capita	See Table A.1.		
Individual variables			
Awareness factors			
Personal benefit from Cohesion Policy	Q10	Have you benefited in your daily life from a project funded by any of these three funds [ERDF, ESF, CF]?	Yes (1), no (0)
Awareness of Cohesion Policy	Index of the following items: Q1, Q9_1_Q9_scale, Q9_2_Q9_scale, Q9_3_Q9_scale, Q21 Cronbach's alpha: 0.7175	The European Union provides funding for infrastructure, business development and training to regions and cities. Have you heard about any such EU funded projects to improve your own region or city? Have you heard about the following funds? ERDF, ESF, CF Have you noticed any public acknowledgement of EU funding in your region/town in the form of banners, placards etc.?	Combined mean of the variables ranging from 0-1
Perceived benefits of the EU			
Reginal development without EU funding	Q11	How do you think your region or city would have developed without EU funding?	Much better (0) to A lot worse (4)
Region benefits less of EU funding	Q23	Do you think your region benefits more, less or the same from EU funding than the rest of the EU?	Less (1), other (0)
Region benefits the same of EU funding	Q23	Do you think your region benefits more, less or the same from EU funding than the rest of the EU?	The same (1), other (0)
Region benefits more of EU funding	Q23	Do you think your region benefits more, less or the same from EU funding than the rest of the EU?	More (1), other (0)
EU is advantageous for people like me	Q15	To what extent do you agree with the following statement: 'The EU has more disadvantages than advantages for people like me.'	Strongly agree (0) to Strongly disagree (4)
Socioeconomic factors			
Gender	Q0	Are you male, female, other	Male (0), female (1)

Highest level of education	Q35	What is the highest level of education you have successfully completed?	ISCED 0, No education completed (0) to ISCED 6, Tertiary education – advanced level (6)
Age of respondent	Q36	What year were you born?	2017 – birthyear for age at the time of the interview
Family standard of living	Q40	Taking everything into account, what level is your family's standard of living? If you think of a scale from 1 to 7 where 1 means poor family, 7 rich family, and the other numbers are for the positions in between, about where would you place your family?	Poor family (0) to rich family (6)
Individual values			
Political interest	Index of the following items: Q24_1_Q24_scale, Q24_2_Q24_scale, Q24_3_Q24_scale Cronbach's alpha: 0.8443	To what extent would you say you are interested in… Local or regional politics, National politics, European politics	Combined mean of the variables ranging from Not at all (0) to Very (3)
Institutional trust	Index of the following items: Q30_1_Q30_scale, Q30_2_Q30_scale, Q30_3_Q30_scale Cronbach's alpha: 0.7204	For each of the following institutions, please tell me how much you tend to trust it to work in your interest? Local or regional public authorities, National government, European Union	Combined mean of the variables ranging from Not at all (0) to A lot (3)
Immigrants make country better or worse	Q31	Using a scale from 0 to 10 where 0 means 'makes it a worse place to live' and 10 means 'makes it a better place to live', how do you feel [country] has changed as a result of people from other countries coming to live here?	Worse place to live (0) to Better place to live (10)
Trust in other Europeans	Q32	Using a scale from 0 to 10 where 0 means 'no trust at all' and 10 means 'complete trust', to what extent do you personally trust people from other European countries?	No trust at all (0) to Complete trust (10)
Individual identity			
National attachments	Index of the following items: Q14_1_1_Q14_1_scale Q14_1_2_Q14_1_scale Q14_1_3_Q14_1_scale For Scotland: Q14_2_1_Q14_2_scale, Q14_2_2_Q14_2_scale, Q14_2_3_Q14_2_scale Cronbach's alpha: 0.7653	People may feel different degrees of attachment to places. Please tell me how attached you feel to: Your city/town/village, Your region, Your country	Combined mean of the variables ranging from Not at all (0) to Very (3)
European attachments	Index of the following items: Q14_1_4_Q14_1_scale Q14_1_5_Q14_1_scale	People may feel different degrees of attachment to places. Please	Combined mean of the variables ranging

				from Not at all (0) to Very (3)
	For Scotland: Q14_2_4_Q14_2_scale, Q14_2_5_Q14_2_scale Cronbach's alpha: 0.8745	tell me how attached you feel to: The European Union, Europe	

Transnationalism			
Transnational activities	Index of the following items: Q5_1_Q3_scale, Q5_2_Q3_scale, Q5_3_Q3_scale, Q5_4_Q3_scale, Q5_5_Q3_scale Cronbach's alpha: 0.6553	In the last twelve months, have you done any of the following things? Visited another European country; Read a book, newspaper or magazine in a language other than your mother tongue; Socialised with people from another EU country; Watched TV programs in a language other than your mother tongue; Ordered or purchased a good or service online from another country within the EU	Combined mean of the variables ranging from 0-1

Notes: The table presents information on the variables used in this thesis in relation to their original variables in the Cohesify cititzen survey. The variable label in this thesis, original variable indicator, original question/statement, and coding used in this thesis are stated. *Source:* Cohesify citizen survey 2017

Table A.5.Relationship between Cohesion Policy awareness and EU support, including perceived benefits factors

Variables	Model 0		Model 7		Model 8		Model 9	
EU support	Specific	Diffuse	Specific	Diffuse	Specific	Diffuse	Specific	Diffuse
<u>Independent variables</u>								
Regional variable								
Cohesion Policy per capita			0.0000315 (0.0000762)	-0.0000346 (0.000102)	0.0000882* (0.0000411)	0.0000979 (0.0000781)	0.0000634 (0.0000391)	0.0000602 (0.0000764)
Individual variables								
Awareness factors								
Personal benefit from CP			0.368*** (0.0343)	0.493*** (0.0511)	0.184*** (0.0303)	0.234*** (0.0449)	0.120*** (0.0321)	0.152** (0.0482)
Awareness of Cohesion Policy			0.794*** (0.0442)	0.977*** (0.0660)	0.307*** (0.0429)	0.187** (0.0637)	0.209*** (0.0475)	0.101 (0.0715)
Socioeconomic factors								
Gender					-0.00695 (0.0230)	-0.0488 (0.0339)	-0.00492 (0.0253)	-0.0587 (0.0379)
Highest level of education					0.0533*** (0.00853)	0.0719*** (0.0126)	0.0429*** (0.00931)	0.0609*** (0.0140)
Age of respondent					0.00212** (0.000743)	0.00723*** (0.00110)	0.00308*** (0.000813)	0.00871*** (0.00122)
Family standard of living					0.0205* (0.00993)	0.0171 (0.0147)	0.0142 (0.0108)	0.0250 (0.0163)
Individual values								

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Political interest					-0.0308* (0.0149)	-0.00423 (0.0220)	-0.0219 (0.0163)	-0.0101 (0.0245)
Institutional trust					0.283*** (0.0173)	0.317*** (0.0255)	0.237*** (0.0192)	0.284*** (0.0287)
Attitude towards immigrants					0.0450*** (0.00503)	0.0824*** (0.00743)	0.0390*** (0.00557)	0.0701*** (0.00836)
Trust in other Europeans					0.0264*** (0.00545)	0.0723*** (0.00804)	0.0221*** (0.00604)	0.0780*** (0.00904)
Individual identity								
National attachments					-0.115*** (0.0173)	-0.271*** (0.0256)	-0.106*** (0.0192)	-0.233*** (0.0287)
European attachments					0.470*** (0.0145)	0.681*** (0.0215)	0.425*** (0.0163)	0.597*** (0.0245)
Transnationalism								
Transnational activities					-0.0762 (0.0425)	-0.0481 (0.0629)	-0.0311 (0.0465)	-0.0742 (0.0698)
Perceived benefits								
Reg. dev. without EU funding							0.162*** (0.0115)	0.236*** (0.0172)
Region benefits the same of EU funding							0.216*** (0.0268)	0.153*** (0.0402)
Region benefits more of EU funding							0.244*** (0.0402)	0.304*** (0.0606)
EU advantageous for people like me							0.0265** (0.00969)	0.0593*** (0.0145)
Constant	2.701*** (0.0808)	3.955*** (0.104)	2.194*** (0.113)	3.406*** (0.151)	0.690*** (0.0929)	1.074*** (0.155)	0.395*** (0.0994)	0.489** (0.166)
Regional level variance	0.109 (0.038)	0.177 (0.063)	0.082 (0.029)	0.146 (0.052)	0.022 (0.008)	0.084 (0.030)	0.019 (0.007)	0.078 (0.029)
Individual level variance	1.251 (0.019)	2.733 (0.042)	1.169 (0.019)	2.596 (0.042)	0.818 (0.014)	1.791 (0.030)	0.765 (0.015)	1.717 (0.033)
Observations	8414	8419	7763	7766	6939	6947	5438	5431

Notes: The table displays the results from multilevel regression analyses using specific and diffuse EU support as dependent variables with unstandardised coefficients. Model 0 and Model 8 are also presented in the main part of this thesis, see Table 4.2. The table presents unstandardised regression coefficients (b), standard error (SEb) in parentheses, and statistical significance. Additional information is given on the constant, being the mean intercept for the regions, the regional level (level 2 unit) unexplained variance, individual level (level 1 unit) unexplained variance and number of observations (N). Statistical significance: * = p < 0,1, ** = p < 0,05, *** = p < 0,01 *Source:* Cohesify citizen survey 2017

Comments to Table A.5.: The perceived benefit factors have strong effects on the dependent variable, all of which have the expected direction. They do however relate to specific and diffuse EU support slightly differently than what the other control variables do. For example, the perception that the EU is advantageous to people like the respondent has a more significant effect on diffuse EU support than on specific EU support. Also, the effect of those that judge that their region is benefiting the same from EU funding as other European regions is larger on specific support than on diffuse support. For the R^2 values of Model 9, the total explained variance for specific EU support reaches 91% at the regional level and 39% at the individual level. For diffuse EU support the values are 56% at the regional level and 37% at the individual level. The explained variance has increased from previous models but is likely due to the perceived benefits factors' close connection to the dependent variables.