OTTO VON GUERICKE UNIVERSITÄT MAGDEBURG FACULTY OF HUMANITIES

Course: Master's Project
Lecturer: Prof. Dr. Eva Gabriele Heidbreder
Winter Term 2023/2024

Master's Project Paper

EU Cohesion Policy and Identification with the EU

The case of German rural regions

Christin Gebauer
Matri. No.: [redacted]
M.A. European Studies

Fani Mitaki
Matri. No.: [redacted]
M.A. European Studies

Lys Ziebell
Matri. No.: [redacted]
M.A. European Studies

List of Illustrations

1 Introduction

They say money makes the world go round, but can it buy citizens allegiance for the EU? Citizens identifying themselves with the EU is an essential foundation for the EU polity to thrive. However, the EU houses member states under one roof whose various regions have different characteristics and needs in turn. To create cohesion in the EU, the eponymous policy was brought to life. Making up a third of its budget, the EU's main investment policy, Cohesion Policy, aims at reducing regional disparities (European Commission 2023). Regional characteristics, like socio-economic factors, distinguish one category of region from another and are amongst others significant in terms of how much Cohesion Policy spending a region and its citizens receive (European Commission 2021). Apart from the amount of allocated funds, other factors related to Cohesion Policy, like the adequacy of projects financed by Cohesion funds for a specific region, play a determinant role in its perception (Dellmuth/Challmers 2018). The Cohesion Policy instrument in general has a broad scope of functions, ranging from creating better employment structures to climate change prevention (EP Think Tank 2023). But do these factors make it more or less likely for citizens granting the EU more allegiance and developing a European identity?

Although the relationship between Cohesion Policy and European identity formation has already been investigated in previous research (e.g. Borz et al. 2022; Landes 2020; Dabrowski et al. 2019), a research gap regarding rural regions has been identified. Motivated by this empirical puzzle, this project addresses the research gap by examining significant predictors concerning EU Cohesion Policy for identification with the EU in rural regions. Contradicting existing research, our chief takeaways is that regional identification does in fact play a crucial role in creating a breeding ground for European identity formation.

In order to elaborate on the addressed empirical puzzle, relevant literature on the relationship between Cohesion Policy and European identity is briefly summarised below. The presentation of existing literature will aid in understanding how the research of this paper was inspired. By conducting research based on already existing literature, the latter will be not only proven capable of generating further research but its limitations will be utilised in order to further reduce the research gap and offer more sound explanations to related research questions.

Borz, Brandenburg and Mendez (2022) offer evidence that EU Cohesion Policy can have a positive impact on European identity formation. The authors analysed the exertion of

well-established identity drivers in the sphere of European structural and investment funds. Their findings show that mechanisms related to citizens' awareness of EU Cohesion Policy, their perceived benefits as well as exposure to Cohesion Policy advertising contribute to the citizens' formation of European identity (ibid.: 276). The authors emphasise that this refers to positive self-categorisation with the EU as opposed to emotional attachment (ibid.). Landes followed the argument that formation of European identity relies partly on rational economic considerations and analysed the effect of Cohesion Policy on regional development as well as the interconnection of European identity and regional policy investments (2020: 129f). Landes partly confirms Borz et al. results as he finds a positive correlation between the level of regional Cohesion Policy investments and the amount of citizens identifying with both their country and the EU (ibid.:129, 137f). Likewise, according to Landes' analysis there is a negative correlation between the level of investment and the amount of citizens with an exclusive national identification (ibid.). Dabrowski, Stead and Mashhoodi (2019) analysed regional drivers that influence citizens' images of the EU. They, too, find that regional Cohesion Policy spending per capita, the ESIF in particular, is a significant factor contributing to a less negative association of the EU amongst the local citizens (ibid.: 708). However, other regional drivers like the overall economic situation are equally important (ibid.). This becomes striking when combined with notions of euroscepticism in that region, leading to the positive effects of Cohesion Policy being overpowered by other drivers like migration and low educational levels (ibid.: 709). In this sense, the authors conclude that the benefits of Cohesion Policy in a region need to be communicated more clearly in order to strengthen its positive effect on EU perceptions (ibid.).

Comparing this existing literature on the relationship between Cohesion Policy and EU identity shows that studies have initially focused on economic impact assessments of EU funds in European regions (Landes 2020; Borz et al. 2022; Dabrowski et al. 2019) stressing the importance of instrumental mechanisms and the significance of rational-choice calculations. Even if there is literature about the various effects of Cohesion funds on European-related identity across EU member states, analyses of such interconnections in country-, position- or population-specific regions seem underrepresented. Among others, this results in a research gap of such analyses in rural regions in Germany. Rural areas can be defined as "areas outside urban clusters" (Eurostat 2023) and areas "where more than 50 % of its population lives in rural grid cells as used in the degree of urbanisation" (European

Commission 2014). By taking up the existing research on the nexus of Cohesion Policy and European identity, this Master's project adds to the literature while focusing on rural areas because it is here that due to the lack of a cosmopolitan effect other mechanisms of identity formation, such as information- and experience-based ones, are expected to come into play. In this study, we therefore address the research question of what the significant predictors of identification with the EU in rural regions that relate to EU Cohesion Policy are.

The remaining paper is structured as follows: To begin with, the next chapter explains the theoretical foundations of the cosmopolitan effect, followed by a detailed elaboration of our theoretical model, for which we drew inspiration from the above-mentioned research by Borz et al. Subsequently, our research design and the operationalization of the dependent and independent variables is described. Then, we present the results of our analysis and discuss them with respect to our hypotheses and relevant theoretical underpinnings. Finally, we conclude by highlighting our key findings and providing an outlook for possible future research.

2 Theoretical Background

The following section explains the theoretical basis of the cosmopolitan effect, which we draw on to justify our research focus, and relevant identity theories. Afterwards, theoretical background information for all variables included in this research is offered. This will help in defending the approach that there is a causal link between the dependent and independent variables and in achieving a comprehensive understanding of underlying reasons for these links.

This research focuses contextually on German rural regions and aims at reducing the research gap concerning EU Cohesion Policy and its impact in EU identity formation for citizens that live in the rural parts of Europe. During the last decades, a change concerning the political cleavages of European politics has been observed by scholars which led to a new political divide gaining salience, namely the cosmopolitanism-communitarianism divide (Koopmans/Zürn 2019). There is an increasing interest in research on this urban-rural divide in terms of contrasting (political) ideologies, categorised under the concepts of cosmopolitanism and communitarianism (e.g. Dilger 2023, Maxwell 2020). Cosmopolitanism among citizens is considered to entertain pro-globalisation as well as

positive and supportive attitudes towards multi-level systems of governance such as the EU (Dilger 2023: 3; Maxwell 2019: 456; Erisken 2014: 7). Communitarianism in contrast comprises anti-globalisation, eurosceptic attitudes and support of national sovereignty (Dilger 2023: 3; Maxwell 2019: 456; Pausch 2021: 5; Pichler 2008: 1121). While the cosmopolitan positions are predominant in large cities, the communitarian positions prevail in villages and the countryside (Maxwell 2019: 456; Maxwell 2020: 2062; Pichler 2008: 1121). In sum, the cosmopolitan effect increases the likelihood of citizens forming transnational identities (Dilger 2023: 3; Helbling/Teney 2015: 448f) such as European identity. Without this effect being strongly pronounced in rural areas, European identity formation is assumed to be diminished compared to urban areas. Nevertheless, Bayerlein and Diermeier come to the conclusion that euroscepticism, which is treated here as an indicator of communitarianism, decreases when citizens themselves or their regions benefit from EU funding (2022: 21) and thus the breeding ground for European identity formation is strengthened. Following on from this, we want to test for these assumptions in rural regions in Germany.

Before we lay out the theoretical foundation for the variables of our analysis, we present different models trying to explain the constitution of territorial identities. The nested model follows the assumption that people have a strong regional, a national as well as on top a European identity (Landes 2020: 130ff). The marble-cake model states that national and European identity cannot be treated separately and thus are an integral part of each other (Risse 2003). The usage of such an approach could serve as a starting point when it comes to the choice of variables. What needs to be stressed at this point is that an understanding of the entanglement between collective and individual identities is essential in order to follow the research design of this paper. In this sense, an overview of relevant models that explain the constitution of territorial identities is provided. Connected to the concept of nested identities are the theoretical underpinnings of Calhoun (1994) and Brewer and Gardner (1993, 1999) who underline the compatibility of several territorial identities existing as an individual's self-categorization. While Calhoun’s and Brewer’s theory can be viewed as the foundation for the concept of nested identities and the dual role of identities, Díez Medrano and Gutiérrez (2001) have been found to expand their theory by including theoretical underpinnings from Inglehart’s model of cognitive mobilisation (1970). This expansion offers new insights into the details of the circumstances that make a compatibility of multiple identities possible in terms of an individual’s self categorization (Díez Medrano/Gutiérrez 2001). According to their research, the social construction of

compatibility of identities is crucial for its success, as it has been found in the example of Spain, that a public discourse which is accompanied by a negative connotation of the compatibility of several territorial identities and a framing that is disadvantageous towards this idea, lead to a public that has been primed to view nested identities as incompatible (ibid.). In practice, this means that a citizen of an EU member state is more likely to perceive herself as a European, as well as an Asturian Spanish citizen, when European identity is promoted through public discourse like the media and an identification with several territorial identities is not portrayed as something threatening but as something compatible and positive. Apart from findings on the compatibility of various territorial identities which are accompanied by the concept of nested identities, the marble cake model adds to these findings about territorial identities by concluding that these identities have to be necessarily analysed as a unity (Risse 2003). This connects to the research of Díez Medrano and Guttiérez (2001) in so far, as it portrays a Spanish identity as intertwined with a European identity. Comparisons like this underline the central idea of the marble cake model, meaning that territorial identities are an integral part of each other. Furthermore, the marble cake concept of multiple identities finds the integrity of identities being based on the discursive construction of identities (Risse 2003). This means that a social construction of the French national identity can be portrayed as being connected to European culture and history. The theories on identities that have just been elaborated lay the foundation for the upcoming theoretical background for identity-related variables. In this sense, it is important to stress that the compatibility of multiple territorial identities is supported.

Our theoretical model and research design is predominantly based on the research of Borz et al. (2022) that was already mentioned briefly. However, for our analysis the theoretical model from Borz et al. has been altered in several points, which will be further elaborated on after a more profound explanation of their research. In order to offer a comprehensive explanation of the respective research, it will be presented exhaustively. The parts that are expanded or not taken on in this research will be highlighted in the succeeding methodology chapter.

Borz et al. argue that cognitive, instrumental as well as communicative mechanisms increase the likelihood of individuals forming a European identity, whereby they refer to the cognitive dimension, i.e. individual self-categorization as European (2022: 261, 267). This focus derives from the argument that Cohesion Policy is closely tied to

economic-utilitarian and rational considerations in terms of the policy's main objective and redistribution logic (ibid.: 265). Thus, the authors propose that Cohesion Policy operating through ESI funds is unlikely to foster feelings of European attachment (ibid.: 264). The first mechanism mentioned in Borz et al (2022), instrumental rationality, originates from rational choice theories (ibid.: 263). In this sense, European identity formation is considered as being affected by cost-benefit calculations regarding EU membership (Eichenberg/Dalton 1993) and the evaluation of the performance of the EU. Accordingly, the identification on an European level depends also on individually experienced economic advantages (Osterloh 2011; Verhaegen et al. 2014; Landes 2020). Consequently, Borz et al. find out that **citizens' perceptions of benefits**, both in individual and regional favour, serve as an European identity driver (2022: 263). The implications of these theoretical underpinnings for this research are that citizens' identification with the EU is influenced by citizens' perception regarding individual benefits being granted through EU funds. Another mechanism of identity formation that the authors observe is based on Inglehart's model of cognitive mobilisation (1970). This model refers to the cognitive abilities of individuals to receive and process information with regard to the political entity (Inglehart 1970: 47; Borz et al. 2022: 262). According to Inglehart, cognitive mobilisation is a crucial aspect in the development of supportive attitudes among citizens towards a (European) political community, as "one must become aware of it before one can develop a sense of commitment" (1970: 47). Moreover, the level of awareness might not only have an impact on the formation of support for but also of identification with a (supranational) political community (Inglehart 1997: 338). Thus, Borz et al. subsume Inglehart's considerations in their study under the notion of citizens' cognitive **awareness of EU funds** as a driver of European identity (2022: 262). Lastly, Borz et al. analyse the effect of communication in the form of EU advertising and branding as a driver (ibid). The citizens' exposure to these communicative contents is considered to have a positive effect on European identity as, for instance, the EU symbols are assumed to elicit positive associations "through psychological 'affect transfer' processes or so-called 'evaluative conditioning'" (ibid.: 264). Their findings suggest that the citizens' cognitive awareness of the funds (in particular the Cohesion Fund), the perceived individual and regional benefits of Cohesion Policy (rather than national benefits) as well as exposure to EU funding advertising contribute to the likelihood of cognitive European identity formation (ibid.: 276). Furthermore, their analysis has shown that the two dimensions of European identity are evoked by different mechanisms: While the cognitive, instrumental and communicative

drivers have a positive effect on self-categorization with Europe/the EU, they do not foster European attachment (ibid.: 273, 276). Though Borz et al. find evidence for a positive relationship between Cohesion Policy funding and European identity formation, they do not claim to provide evidence for causality between these variables (ibid.: 267, 277). Rather, they result in a correlation between Cohesion Policy spendings and levels of European identity formation being investigated and conclude in cognitive, communicative and instrumental mechanisms being determinant drivers of this correlation. In this research, we aim at defying these limitations posed by the research of Borz et al. More information on the role of causal inference is found in the methodology chapter. The communicative mechanism is not considered in this research, which will be further explained in the methodology chapter.

In the following, the theoretical background of the mechanisms for the independent variables of regional attachment and policy efficiency will be presented.

Chacha (2013) conducted research on public opinion matters centred around European integration and focused on the subnational level. The relevance of this research was explained as stemming from a fair amount of EU policies being implemented on the regional level, which means that these policies are implemented closer to their recipients (ibid.). This results in an essential relevance of citizens' public opinion on EU policies. In the research, it was found that citizens' inclusive **regional attachment**, meaning an individual's identification that includes one's region and can potentially include other identifications as well, enhances the support for European integration, as "the EU has facilitated regional autonomy and input in EU policies" (Chacha 2013: 209). Conversely, this means that an exclusive regional attachment does not mirror this relationship, neither does an exclusive national attachment (Chacha 2013). In this sense, an individual who identifies exclusively with its nation or region is not likely to support European integration. Additionally, it is argued that if citizens develop nested identities that include more than one form of attachment, they are more likely to support European integration and the EU in general (Díez Medrano/Gutiérrez 2001). Similarly, Landes (2020) concluded his findings in the observation that the group of citizens that identify with their country and the EU is positively correlated with regional investments from Cohesion policy funds in regard to identification with the EU. This supports the findings of Chacha (2013) that only individuals with inclusive identities show positive correlations with the level of identification with the EU. For this research design this means that a high value of the

independent variable "regional attachment" is linked to a better opinion on EU redistributive mechanisms that deepen European integration only if it is expressed as an inclusive regional identification. For instance, this inclusive identification can be expressed as a high identification with the region in connection with a positive perception of the EU membership of one's country.

Apart from that, the theoretical background related to the variable of **policy efficiency** is largely based on policy feedback mechanisms that explain how well a policy instrument like redistributive spending fits to the needs of the recipient region. Dellmuth and Chalmers (2018) argue that citizens' support of the EU is needed for the EU to be able to solve policy problems, which is why they explore the connection between support of the EU and policy spendings. It has been observed that policy spendings in specific sectors led to more public support, while spendings in other sectors did not show significantly higher amounts of support (Dellmuth/Chalmers 2018). In that sense, it was detected that support for the EU is dependent on if there is a regional need for spending in a specific sector. An example of this finding is support for the EU increasing, when there is no motorway in a European region and consequently spendings from the EU on infrastructure are received. For this research this means that if the EU's policies are deemed as efficient and policy issues are solved efficiently, citizens' identification with the EU is more likely to be positively influenced.

The next mechanism is supported with theoretical underpinnings from the respective academic literature that connects notions of citizens' perception of their country's **EU membership** with citizens' support of European integration in general. In this sense, scholars have investigated the reasons why citizens support European integration and therefore their country's EU membership as well (Hooghe/Marks 2005). These reasons are classified into three groups with the first one examining cost-benefit calculations as a reason for citizens supporting or opposing European Integration, the second one analysing individual and collective forms of identity as explanation and the third reason investigating political cues, meaning the communication and connotation of European integration by various political actors (ibid.). As the dependent variable of this research is concerned with the identification with the EU, the second reason from the explanations list that has just been presented applies to this context. In detail, this means that identification with the EU is connected to perceiving one's country being part of the EU as something positive.

The dependent variable, namely the **identification with the EU** is rooted in academic literature concerning citizens' attachment to the EU (Kania/Karolewski 2013). The concept of the identification with the EU is intertwined with other concepts in the EU academic literature context, for instance European integration (ibid.). The latter is referred to amongst others in academic debates about the end of the so-called permissive consensus and the shift towards a constraining dissensus (Hooghe/Marks 2006). What is stressed in academic debates about identification with the EU is that citizens' public opinion about the EU is essential for a deeper European integration (Kania/Karolewski 2013). Research goals connected to the identification with the EU as a dependent research variable can be grouped into three branches: The first branch is concerned with the essence of European identity and what it means to include a collective identity in an individual's sense of identity (ibid.). The second branch focuses on support systems and barriers for the development and the fortification of an identification with the EU, while the third branch is constituted with research about amongst others the social construction of a European "we-ness" (ibid.: 27). Our research can be categorised into the second branch that is concerned with obstacles and fortifiers of an identification with the EU.

3 Methodology

In the following paragraphs, an overview is given over the research design that was chosen to answer the research question. In the beginning, a justification for the approach chosen for this research is explained, laying the foundation for the overall methodology chapter. To identify and check predictors connected to Cohesion Policy for their explanatory power in regards to their influence on the level of European identity formation in German rural regions, there has already been information about these predictors and their theoretical underpinnings listed in the previous chapter. Now that the theories behind these predictors and connected mechanisms have been illustrated, this chapter introduces the operationalization of these predictors and their transformation into independent variables, applicable for the chosen method of analysis. As this research was inspired by Borz et al. (2022), differences and similarities will be pointed out in order to gain a comprehensive understanding of which parts of the research design of Borz et al. were imitated and which parts were neglected due to limitations like lack of data. Apart from including how the predictors related to Cohesion Policy are accommodated in the research design, the data selection process will be explained. In this way, comprehension should be created about

which data was chosen to operationalize the dependent and independent variables. Another specific focus will be given to the definition of (rural) regions, which is essential in understanding which notion of (rural) regions is used for this research in the EU context.

In order to explain the foundation of the research design and the methodological approach for answering the research question, more details on the ontological and epistemological position will be further elaborated and expanded by justifying the choice of the theoretical framework. This research is based on a foundationalist ontological position that acknowledges the existence of a "real" world and on a positivist epistemological position which concludes in the fact that European identity and the different predictors connected to EU Cohesion Policy can be conceptualised and operationalised through a quantitative approach. As the broad theoretical framework has already been elaborated on in the theoretical background chapter, it is not considered further in this chapter.

This research is based on the following research question: "What are significant predictors concerning EU Cohesion Policy for identification with the EU in rural regions?". It constitutes an advancement of current knowledge on identification with the EU in relation to EU Cohesion Policy, as it progresses the research designs of various scholars and moves beyond their limitations. The analysis of the application of well-established identity drivers was an aspect that was stressed by various scholars in their research (Borz et al. 2022; Landes 2020; Dabrowski et al. 2019). Although different drivers found their place in the various scholars' research frameworks, e.g. Borz et al. (2022) did not assume a causation between identity drivers and identification with the EU but rather found merely a correlation. This limitation is overcome in this research which can partially be explained by the ontological and epistemological positions that have been mentioned above. In contrast to the mentioned research, we assume a causality between the dependent and independent variables which we have backed up with the theoretical underpinnings in our theoretical model and aim at highlighting by finding significance in our regression analysis. Through regression analysis, the direction of the causal relationship between the dependent and the independent variable is already defined, meaning that a potential causality is assumed before conducting the analysis. Therefore, the goal of the analysis is to provide information about the significance of the relationship. This results in a quantitative methodological approach which analyses causal inferences. Apart from that, the research gap concerning identification with the EU and its connection to EU Cohesion Policy is in so far reduced, as this research enriches existing knowledge with an analysis in German rural regions. In sum, the research question that is about to be answered through

this research points out issues that have not yet been addressed empirically in a satisfactory way. Moreover, the research question is part of an explanatory research goal which aims at offering understanding about the relation between the dependent and the independent variables through a causal explanation. This causal explanation includes causal mechanisms and the assessment of causal effects. Also, the notion of causality that applies here is rather probabilistic than deterministic, which follows the common assumption that exists in the social sciences that there are no real laws like in the hard sciences (Glymour 1998).

Despite theoretical background information already given before, this paragraph points out the role of theory in this research. As mentioned above, the research question and goal stem from the need to address an empirical puzzle differently than other scholars. Our research question incorporates different variables that have been deconstructed in regard to their theoretical underpinnings in the respective chapter of this paper. After the conceptualisation and operationalisation paragraph, it will become clear how these variables are translated into theoretically derived propositions, meaning hypotheses.

Based on the theory examined in the literature review and the theoretical model, it is expected that perceived individual benefits, the perception of EU membership of one's country as well as the awareness of Cohesion funds are significant predictors for the identification with the EU in rural regions. The positive influence of perceived benefits related to Cohesion Policy on the level of identification with the EU has been supported by various theoretical underpinnings which are linked to rational economic considerations (Borz et al. 2022; Landes 2020). The same goes for the awareness of Cohesion funds in general (Borz et al. 2022). Apart from that, the perception of the EU membership of one's country is also expected to have a positive impact on the level of identification with the EU, as it was found that citizens with an exclusive national identification do not identify more with the EU due to EU Cohesion Policy spending (Landes 2020).

Now that the epistemological and ontological positions, as well as theory development have been elaborated on, and the research question and research goal have been commented on, the chosen research methodology will be clarified. This includes the conceptualisation and operationalisation of relevant variables which will be presented alongside a comparison of this research framework with the research design of Borz et al. (2022), as well as information on the selection of cases and the collection of data. Afterwards, the data analysis will be explained.

The dataset that was created by researchers in relation to the PERCEIVE survey published by Bauhr and Charron (2019) serves due to its extent practical conditions for making causal inferences and test hypotheses quantitatively. In comparison to Borz et al. (2022) it can be said that the lack of a causal claim in the respective research can potentially be overcome by the larger data set that is offered by the PERCEIVE survey. Another advantage of the data set in regard to the chosen quantitative approach is that the investigated relationship between regional policies and support or lack of support as a phenomenon can be observed over a larger population. The combination of data about a certain phenomenon that can be observed in a rather large population with a systematic approach of collecting this data, like the dataset of the PERCEIVE survey and the use of descriptive statistics, makes this research fitting for quantitative analytical approaches. The nature of the data, the collection process as well as testable hypotheses will be further elaborated on in this chapter. Afterwards the descriptive statistics method will be presented. In general, a quantitative approach is the more promising path to take when generalisations or law-like conclusions are intended to be made. In this sense, the quantitative method is expected to reduce the research gap on generalisations or at least significant causal inferences about predictors regarding Cohesion Policy and their impact on EU identification. Nevertheless, the limitations that come with investigating such causal inferences are apparent, meaning that it is known that the complexity of a social reality can not be fully captured by the given data set and empirical analysis. Despite these limitations, this research is aimed at reducing the respective research gap and offering a fertile ground for replication and further research on this topic.

In order to gain insights about causal inferences and variables' explanatory power through a quantitative approach, the different predictors related to EU Cohesion Policy as well as the identification with the EU need to be conceptualised and combined with empirical indicators that are fitting for a quantitative methodological approach.

Starting with an illustration of the conceptualisation and operationalisation of the dependent and independent variables in the research framework of Borz et al., the main inspiration for this research, is a necessary precondition for understanding connections and disagreements with this framework in comparison to the research design of this paper. While identifying differences and similarities with the respective paper by Borz et al. (2022), the data set that is the foundation for the conceptualisation and operationalisation of this research and the chosen research methodology in general will be presented. This presentation will be carried out parallelly, as the comparison with Borz et al. and the

introduction of the main data set are intertwined. The PERCEIVE survey dataset by Bauhr and Charron (2019) serves as a significant source for this research design and the operationalization of variables and parallelly proves the fertility of the PERCEIVE data set for research in general. With more than 35 questions, the survey aims at investigating drivers for EU regional policies on the micro- and macro-level. This offers the opportunity for every variable being operationalized by a survey question and its answer options in this research design. Apart from that, as every survey participant is geo-coded, predictors that lead to a support of the EU can be broken down to NUTS levels. Additionally, Germany is one of the 15 countries that were survey-relevant, which makes this data set suitable for this research. Its intent to examine regional policies and their connection with the support or the lack of support of the EU combined with categorizations into NUTS regions, a classification that allows to observe rural regions, makes the dataset of the PERCEIVE survey an ideal source for the operationalization of the dependent and independent variables.

Similarities between our research framework and the theoretical underpinnings from Borz et al. (2022) can be found regarding the dependent variable, as in both cases the dependent variable is represented by the same concept, namely the identification with the EU. However, whereas Borz et al. (2022) have chosen a categorical empirical indicator for the dependent variable, for this research an ordinal indicator has been chosen. The question Q9.3 “On a 0-10 scale, with ’0’ being ’I don’t identify at all, and ’10’ being ’I identify very strongly’, how strongly do you identify yourself with Europe?” (Bauhr/Charron 2019: 14) from the PERCEIVE Survey Dataset assists in indicating the level of **identification with the EU**. The different answer options of the survey questions are interpreted individually for this research design: 0-3 indicates a low identification with the EU, 4-6 a medium and 7-10 a strong identification with the EU.

Regarding the independent variables of interest, in this research design, the main mechanisms for the independent variables are the perception of individual benefits from EU Cohesion projects, the awareness of Cohesion funds and Cohesion projects, the identification with the region, the perception of policy efficiency and the perception of the EU membership of one’s own country. The first mechanism refers to the instrumental **perception of individual benefits** from EU funds and can be measured with question Q3 from the PERCEIVE data set. The survey question “To your knowledge, have you ever benefited in your daily life from any project funded by the EU?” (ibid.: 12) offers scale options to answer it. The second mechanism outlines the **individual awareness of EU**

Structural Funds in general and **EU funded regional projects** in specific. It corresponds to the following questions from the data set: “In general, have you ever heard about the EU Structural Funds?” and “In general, have you ever heard about any EU funded project in your region or area?”. Q1.3 and Q1.4 each serve as a nominal indicator with yes/no answer options. So far, the concepts of mechanisms for the independent variables match the research design from Borz et al. (2022), if the communication mechanism that is included in these scholars’ paper is disregarded, but are differing from their research by having altered indicators. In this research, the theoretical model is expanded by the addition of three further mechanisms. The third mechanism describes the **identification of citizens with their own region**. “On a scale with ‘0’ being ‘I don’t identify at all, and ‘10’ being ‘I identify very strongly’, how strongly do you identify yourself with your region?” is the respective survey question that operationalizes this variable. Here, the values on the ordinal scale show the citizens’ identification with their region, with 0-3 indicating a low identification, 4-6 a medium and 7-10 a strong identification with the region. The fourth mechanism operationalizes the concept of the **perception of policy efficiency**, which means that according to the chosen indicator, it becomes apparent how well the policy instrument, in this case Cohesion Policy spendings, fits the needs of the citizens. The answer options from question Q5.1 “How effective do you think the European Union will be at dealing with the biggest problem in your region?” (ibid.: 12) serves as nominal indicators, spanning from “very effective” over “somewhat effective” to “not so effective”. The fifth and last mechanism is the **perception of the EU membership** of one’s own country. Question Q8 “In general, do you think that (YOUR COUNTRY’S) EU membership is a good thing, a bad thing, neither good nor bad?” (ibid.: 13) serves as the operationalization for the last variable, while its answer options serve as the empirical indicator. As some answer options to the survey questions presented obstacles for the analysis, they were not considered in the data analysis. More information on this will be listed below.

The conceptualisation and operationalisation of the dependent and independent variables leads to the following hypotheses:

H1: Individuals who perceive that they have gained personal benefits from EU funds are more likely to identify with the EU.

H2: Individuals that are aware of EU Structural Funds are more likely to identify with the EU.

H3: Individuals who identify with their own region are more likely to identify with the EU.

H4: Individuals who perceive the EU's problem solving-capacity as efficient are more likely to identify with the EU.

H5: Individuals who perceive their country's EU membership as beneficial are more likely to identify with the EU.

Now that the similarities between this research design and the theoretical framework of Borz et al. (2022) have been elaborated on, more details about the case selection process will be presented, including the criteria for the selection of German rural regions in the PERCEIVE survey data set. Regarding case selection, this research retrieves data that is based on German rural regions. The definition of rural regions that is applied here stems from official EU definitions. The classification of territorial units for statistics (Nomenclature des Unités territoriales statistiques, NUTS) is a geographical classification system according to which the territory of the EU is divided into three hierarchical levels: NUTS-1, NUTS-2 and NUTS-3 (European Commission 2022: 4; European Commission 2018: 4). In Germany, NUTS-3 corresponds to districts and independent cities (European Commission 2022: 6; European Commission 2018: 6). This classification into economic areas facilitates the collection and harmonisation of regional statistical data about the EU. It can thus be used for socio-economic analyses of the regions. NUTS-1 comprises major socio-economic regions, NUTS-2 implies basic regions for regional policy measures and NUTS-3 denotes small regions for specific diagnosis (European Commission 2022: 7; European Commission 2018: 7). The applied data in order to identify rural regions corresponds to the regional territorial breakdown of the countries in accordance with the Commission Regulation (EU) 2016/2066 amending annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (Regulation (EC) 1059/2003). The NUTS classification according to this regulation is known as NUTS-2016 (European Commission 2018) classification, while our selection of the cases is based on the typology of NUTS-3 urban-rural regions (European Commission 2019: 77).

In order to select cases for our analysis, the following criteria helped define the cases which are eligible rural NUTS-3 regions in Germany. First of all, the data set of the PERCEIVE Survey was significantly trimmed to 1500 respondents from Germany. Then, the "Urban-rural typology of NUTS3 regions" was used in order to define predominantly rural regions (Eurostat 2023). This typology is based on a three-step approach in order to classify the NUTS-3 regions in the EU based on the share of the rural population, and categorised into predominantly rural regions, intermediate regions and predominantly

urban regions (European Commission 2019: 74). First, rural areas need to be defined, which are in turn all areas outside urban clusters. Urban clusters are clusters of contiguous grid cells of one km² with a density of at least 300 inhabitants per km² and a minimum population of 5,000, which means that rural grid cells can be defined as cells with a population density that is less than 300 inhabitants per km² and/or fewer than 5,000 inhabitants (ibid.). Then, NUTS-3 regions are classified on the basis of the share of their population in rural areas. Predominantly rural regions imply at least 50 % of the population living in rural grid cells (ibid.: 74ff). In contrast, in intermediate regions the share of the population living in rural areas is between 20 and 50 %, and in predominantly urban regions more than 80 % of the population live in urban clusters (ibid.). NUTS-3 regions that are smaller than 500 km² are merged with one or more of their neighbours for classification purposes (ibid.: 76). Lastly**,** the size of the urban centres in the region is determined. Originally predominantly rural regions which contain an urban centre of more than 200,000 inhabitants making up at least 25 % of the regional population become intermediate. This also applies to intermediate regions which contain an urban centre of more than 500,000 inhabitants making up at least 25 % of the regional population. They become predominantly urban regions (ibid.).

In order to test the expected causality and explanatory power of the independent variables in regard to their influence on the level of identification with the EU, the dataset from the PERCEIVE survey was filtered according to German predominantly rural regions which was facilitated by the survey's use of the NUTS classification system. Within this typology, 110 NUTS-3 regions in Germany are classified as predominantly rural regions, and 85 among them can be found in the data set. In total, the PERCEIVE Survey data set was trimmed to 216 respondents in 85 rural NUTS-3 regions in 12 different federal states (NUTS-1 regions) at first, which can be potentially used for the analysis. Other data of the PERCEIVE Survey which does not serve as explanatory base within the scope of this paper was not considered. Apart from that, eleven more survey participants were not regarded in the analysis, as amongst their chosen answer options, e.g. the choice "(99) Not sure" (Bauhr/Charron 2019: 14) or "(3) Neither good nor bad" (ibid.) were deemed as obstacles to the data analysis. This resulted in the survey data set being trimmed again to 205 respondents. Finally, the relevant cases were sorted in a spreadsheet program according to the survey participant ID that was given in the PERCEIVE dataset, the TYPETEL_, which pointed out whether it was an interview conducted over landline or mobile phone, the NUTS classification and the region_code, which gave information about

the geocode. Apart from that, the survey questions that are used for operationalizing the dependent and independent variables were listed in the spreadsheet. The quantitative method for testing the explanatory power and assumed causation of the variables is explained in the following section.

Method

The method chosen for this research design is a binary logistic regression analysis based on Windzio (2013) and Sarstedt/Mooi (2014). In this chapter, the method is further elaborated on and the data requirements for the regression analysis are explained.

The method of regression analysis was chosen because regression models enable an analysis of the relationship between independent and dependent variables in terms of significance and of the relative strength of variables, but they also indicate predictions (Sarstedt/Mooi 2014). In our research design, testing for significance means investigating whether the independent variables have a significant effect on the respective level of identification with the EU, which is either strong, moderate or low. Apart from that, the regression model can reveal which independent variables have a higher explanatory power. Like classical linear regression, binary logistic regression represents a statistical explanation of the occurrence of values of the dependent variable. Dependent variables are variables caused by the influence of one or more independent variables (Windzio 2013: 39). Thus, the results will show which independent variables can explain variances of the binary dependent variable, which is the respective level of European identity, better than the other independent variables (ibid.). The scale type of the dependent variable is a factor determining the type of regression (Sarstedt/Mooi 2014: 198). Considering the fact that the dependent variable is ordinal-scaled, question 9.3 “On a 0-10 scale, with ’0’ being ’I don’t identify at all, and ’10’ being ’I identify very strongly’, how strongly do you identify yourself with Europe?” (Bauhr/Charron 2019) demonstrates the answer options on a Likert scale. For this case, Sarstedt and Mooi (2014) recommend conducting an ordinal regression analysis. However, this method is not being applied, as it would go beyond the scope of this research. According to Sarstedt and Mooi (2014), ordinal and nominal dependent variables require the application of a logistic regression model instead of a linear one. Binary logistic regression can be applied if the dependent variable has only two values, which means that it has to be binary or dichotomous (ibid.: 198). It then estimates the probability of occurrence given a change in the independent variable. Multinomial logistic regression models are used if the dependent variable is variable and comprises more than

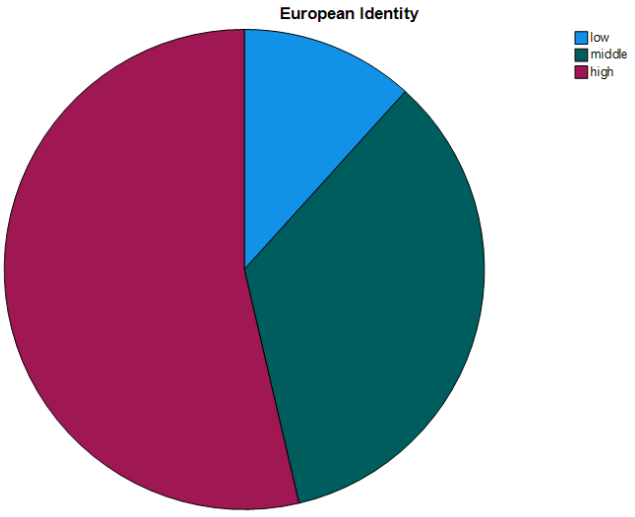
two levels (Sarstedt/Mooi 2014: 198). This type of analysis was suspended due to missing interpretability compared to the binary logistic regression.

A binary logistic model was thus chosen due to the empirical indicators and their available data used for this analysis. Since the scale type of the dependent variable is not metric, linear regression is no option. Instead the data implies ordinal-scaled values with regard to the dependent variable, and multiple independent variables which are either ordinal or nominal-scaled, which is why a logistic model fits best in order to answer the research question. The next part describes further how the dependent variable was binary scaled, and which other predictions for this type of regression are required.

Several data requirements need to be fulfilled in order to establish a binary logistic regression analysis. The first condition refers to binary-scaled dependent variables. For this reason, the values describing the level of identification with the EU from 0-10 have been categorised into three Likert-scale items, where 0-3 expresses a low identification with the EU, 4-6 a moderate identification and 7-10 indicates a high identification with the EU. The data requirements for such a binary logistic analysis thus comprise that the y-variable is binary coded as in "0" and "1" as expressions for coding. This kind of coding is in turn possible for each of the three levels of identification with the EU (Sarstedt/Mooi 2014: 198).

The shares of each of the three levels of identification with the EU in relation to the total quantity of respondents can be illustrated as follows in a pie chart.

Chart 1: Shares of three levels of identification with the EU in the regressions



Source: Own illustration via SPSS; see Appendix 1 according to Bauhr, M./Charron, N. (2019).

The analysis therefore consists of three binary logistic regression models, one created for each level of identification with the EU. Nominal-scaled independent variables are defined as categorical in this analysis.

Another pre-condition to apply successfully a binary logistic regression requires that there is no multicollinearity between the variables, which means that the independent variables are not meant to be highly correlated while weaker forms of collinearity are common. Otherwise, substantial collinearity might lead to errors when it comes to the identification of significant variables (ibid.: 199). This condition was proved by the correlation matrix in the regression analysis in SPSS, which did not identify highly correlated independent variables (Appendix 2-4).

According to Sarstedt and Mooi (2014: 165), data samples are required to be representative for the population and large enough for the model. According to Green's (1991) rule of thumb for sample sizes in regression analysis, the equation 104 + k, with *k* being the number of independent variables, results in the number of observations needed. As this research explores the explanatory power of nine independent variables illustrating five different mechanisms, hence k = 9, the needed number of observations according to Green's equation is 113. The data collection of our research covers a survey with 205 participants from rural regions and therefore complies with the rule of thumb. Among those respondents, 24 of them indicated a low identification, 71 a moderate and 110 a high-level identification with the EU (Appendix 1).

The next data requirement that is to be fulfilled is whether the sample represents the population adequately (Sarstedt/Mooi 2014). As the PERCEIVE survey has its participants categorised in individuals from predominantly urban regions, intermediate regions and predominantly rural regions and this research extracted the data for the predominantly rural regions, the sample is representative for analysing European identity in rural regions in Germany.

Apart from that, the variables shall not be constants and the dependent variable must be interval or ratio scaled (ibid.). The PERCEIVE data set proves that there is variation in the dependent and independent variables which is expressed in individual answers of each survey participant on the survey questions as well as in the multicollinearity test.

Even if this regression model reveals which independent variables have a higher explanatory power concerning the dependent variable, it is important to mention that within binary logistic regression, the regression coefficients cannot be compared between different models. In turn, comparisons between the three regression models are

problematic, but comparisons between the values of the independent variables and their reference categories as well as between different predictors remain possible (Windzio 2013: 69).

The Wald statistic was applied in order to calculate the significance of the values. Values can be defined as significant if they are below 0.05. An important cue in regression analyses of any type is the regression coefficient whose properties are briefly elaborated on. This statistical determinant functions as a measure of the average functional relationship between different variables as well as the degree of dependence between variables (Windzio 2013: 50, 69). The regression coefficient's (B) exponent, called Odds Ratio (OR), indicates the strength of the correlation of the occurrence concerning a specific independent variable, in short the chance or the probability of occurrence of variables. Odds are calculated by dividing the probability (p) of a state or event by its counter-probability. The chances described by Odds Ratios are always expressed in ratios of possibilities (Windzio 2013: 47). They are the factors by which the Odds, or the chances, change when the value of the independent variable increases by one unit (ibid: 56). A value of above 1 indicates that it is more likely that the event will occur than that it will not occur. A value of 1 describes that the occurrence and non-occurrence of an event are equally probable. A value of below 1 indicates that it is more likely that the event will not occur than that it will occur. It needs to be mentioned that each Odds Ratio consists of different probabilities (ibid.: 54).

In order to control the validity of the three regression models before analysing them, different statistical tests have been applied. The Omnibus test indicates a significance in case its value is below 0.05. Then, the null model should definitely be extended by the independent variables, because with their inclusion the model can be improved achieving a better analysis. The Hosmer-Lemeshow test shows if there is a good fit of the model to the data when the significance is above 0.05. In addition, the classification table implies an overview of correctly predicted variables in a model. A percentage of above 50 to 60 % of correctly predicted variables indicates that the model is "meaningful" in the sense that it predicts something.

4 Empirical Findings

The following section provides an overview of the key findings in the frame of the empirical analysis in three regression models. After summarising the results in relation to

our hypotheses briefly, the validity of the regression models as well as the values resulting from them are shown in Table 1 and Table 2 in order to give further insight into the analysis.

The results of the analysis provide support for our hypothesis 2 that individuals that are aware of EU Cohesion Funds are more likely to identify with the EU, which is in line with the awareness mechanism for the mobilisation of European identity. The regression models also support hypothesis 3 that individuals who identify with their own region are more likely to identify with the EU. In addition to the regional attachment serving as explanation for the formation of European identity, our hypothesis 5 can be confirmed as well: The analysis shows that individuals who perceive the membership of one's country to the EU as a good thing are more likely to identify with the EU.
In contrast, the perception of individual benefits and the perception of EU policy efficiency are no strong indicators for the identification with the EU (Table 2). The empirical results of model 3 show that individuals who stated a strong identification with the EU are more likely to have already benefited from EU-funded projects, but the probability is not significantly higher. Within model 3, the same applies to individuals who see the EU as an effective problem solver in their region. Our analysis thus does not fully support our hypotheses 1 and 4 which means that the instrumental mechanism as well as policy efficiency do not serve as reliable explanatory predictors for identification with the EU.

In order to explain the results of our three regression models further, the following table presents the validity of each model by using three different statistical tools.

Table 1: Validity of the regression models

	Omnibus test (Sig. < 0.05!)	Hosmer-Lemeshow test (> 0.05!)	Correctly predicted variables (>50-60%!)
Model 1	0.002	0.772	89.3%
Model 2	0.077	0.354	65.4%
Model 3	< 0.001	0.970	68,3%

Source: Own illustration; see output script of regression analyses in Appendix 2, 3, 4.

Model 1 and model 3 show validity through their significance proofed by the Omnibus test (Table 1). In addition, there is a good fit of the model to the data for both in the Hosmer-Lemeshow test and the models predict variables correctly in most instances. In contrast, in case of model 2, the null model does not need to be extended by the

independent variables, and with the inclusion of these variables it is not necessarily a better model. Nevertheless, the Hosmer-Lemeshow test shows a significance of 0.354 and thus indicates that there is a good fit of the model to the data. There is also a majority of the values that are correctly predicted (ibid.). Due to the mentioned reasons, the results of the second regression with "medium identification with the EU" as the dependent variable will not be discussed in more detail. Only significant values will be used for the explanation of the mobilisation of identification with the EU.

Significant predictors in our classifications of identification with the EU contain "identification with the region" and "general perception of EU membership", but also at some point the "awareness of EU Structural Funds" (Table 2). All of the findings apply to individuals in pre-selected rural regions in Germany.

Table 2: Predictors of identification with the EU in three regression models

Dependent variable:	**Low identification with the EU**			**Medium identification with the EU**			**Strong identification with the EU**		
	B	*p*	*OR*	*B*	*p*	*OR*	*B*	*p*	*OR*
Predictors:									
Mechanism 1									
Rational perception of individual benefits from EU funds [No]	-0.076	0.916	0.926	0.321	0.458	1.379	-0.188	0.662	0.829
Mechanism 2									
Individual awareness of EU Structural Funds [No]	0.810	0.136	2.247	0.359	0.277	1.432	-0.705	0.038*	0.494
Inverted OR									*2.024*
Individual awareness of EU funded projects in the region [No]	0.007	0.990	1.007	-0.073	0.828	0.929	0.045	0.895	1.047
Mechanism 3									
Identification with the region [Low]	1.294	0.036*	3.646	0.151	0.751	1.163	-0.943	0.053	0.389
Identification with the region [Medium]	0.015	0.980	1.015	0.741	0.030*	2.099	-0.710	0.043*	0.492
Inverted OR									*2.033*
Mechanism 4									
Perceived policy efficiency of EU instruments [Somewhat effective]	-0.766	0.367	0.465	-0.563	0.263	0.569	0.787	0.118	2.197

Perceived policy efficiency of EU instruments [Not so effective]	-0.016	0.982	0.984	0.023	0.961	1.023	-0.059	0.901	0.943
Mechanism 5									
General perception of EU membership [A bad thing]	2.186	0.001***	8.899	0.548	0.344	1.730	-2.859	0.008**	0.057
Inverted OR									*17.544*
General perception of EU membership [Neither good nor bad]	0.885	0.134	2.423	0.545	0.200	1.725	-0.967	0.031*	0.380
Inverted OR									*2.632*
N [∑ Sample]		205			205			205	

*Classification of probability value (p): * p < 0.05. ** p < 0.01. *** p < 0.001*

Source: Own illustration; see output script of regression analyses in Appendix 2, 3, 4.

The probability value is classified from a lower probability of below 0.05, marked as"*", which still means "significant", to a higher probability of below 0.001, marked as "***". Since some of the answer options work as reference categories within this analysis, they are not directly shown in the table. The respective answer options functioning as independent variables are mentioned in square brackets (ibid.). Each of the three regression models counts a total sample size of 205 cases.

Due to a better understanding and interpretation of the findings, some of the values indicated in the table are used in their converted form in order to get and formulate more meaningful results in the discussion. Moreover, in the following the focus is set on significant results with regard to the strength of the probability value and on determined mechanisms which support our hypotheses.

5 Discussion

In the following section, the findings are further discussed in relation to our hypotheses as well as with regard to previously mentioned theories and mechanisms working behind the formation of European identity. The results provide partial support for our five hypotheses which are repeated as follows in order to present the results clearly.

H1: Individuals who perceive that they have gained personal benefits from EU funds are more likely to identify with the EU.

The results do not support H1. In contrast to Borz et al., our analysis thus denies the instrumental mechanism working behind individuals' identification with the EU. Individuals who perceive that they have gained personal benefits from EU funds are not significantly more likely to identify with the EU. Nevertheless, another result within this analysis which does not indicate significant values shows that with a stated strong identification with the EU, individuals are more likely to have already benefited from EU-funded projects than not (Table 2; Appendix 4). This argument would indeed support our first hypothesis, but due to insufficient probability it is not used for the discussion of the results.

Our result suggests that the process of identification is of a more emotional character and cannot be reduced to personal cost-benefit calculations. Thus according to our research, (European) identity formation cannot be explained by rational choice theory.

H2: Individuals that are aware of EU Structural Funds are more likely to identify with the EU.

We argue that **H2 can be confirmed** in case individuals indicated a strong identification with the EU, which is also in line with Borz et al. Our hypothesis can thus be partly supported, because it does not apply to individuals indicating a low- and medium-level identification with the EU. Even if the regression in model 1 shows that it is more likely that individuals who have not heard of EU Structural Funds have a low European identity compared to the ones who have already heard of them (Table 2; Appendix 2), which is indeed in line with our second hypothesis, the probability value is not high enough in this case. It can be rather stated that it is more likely that people who have heard of EU Structural Funds have a strong European identity compared to the ones who have not heard of EU Structural Funds. The probability is 2.024 times as high (Table 2; Appendix 4). The results show differentiation between the two independent variables that were chosen for H2, i.e. individual awareness of EU Structural Funds and the individual awareness of EU funded projects in the region. However, the fact that the latter occurs less could be due to the fact that it is more specific information that citizens would need to be aware of. We can indeed note a tendency of influence of the second awareness predictor: it is more likely that people who have not heard of EU funded projects in their region have a low European identity compared to the ones who have already heard of them (Appendix 2). Nevertheless,

when the individual awareness of EU funded projects in the region is considered, we cannot argue that there is a significant contribution to identification with the EU (Table 2). Considering the theoretical foundations again, the only partial confirmation (regarding the identification levels) of the awareness hypothesis is possibly due to the argument that in rural regions, not least because of the stronger communitarian attitudes, but also as a result of a possible lack of infrastructure in the educational field, there is less dissemination of information about EU Cohesion Policy and/or citizens are less receptive to such information. This gap might thus result in a generally lower level of awareness.

H3: Individuals who identify with their own region are more likely to identify with the EU.

H3 can be confirmed which is visible in different scenarios in each of the three regression models (Table 2). Considering the first model, it can be proved that individuals who indicated a low identification with their region are more likely to identify lowly with the EU as well compared to individuals who indicated a strong identification with their region (ibid.; Appendix 2). The probability is 3.646 times as high. With regard to the second model, another result is that individuals who identify moderate with their region are more likely to identify at a medium-level with the EU compared to individuals with a strong regional identity (Table 2; Appendix 3). The probability is 2.099 times as high. The third model also shows significant results in this category (Table 2; Appendix 4). It can be thus stated that individuals who identify strongly with their region are more likely to identify strongly with the EU in contrast to individuals indicating a moderate regional identity. The probability is 2.033 times as high. In addition, further insignificant results would also state that people who identify strongly with their region rather indicate a strong EU identity compared to people who identify lowly with their region (ibid.).

The results surrounding regional identification are surprising as common European integration theories have a hard time explaining European identity formation at all or while other strong territorial identities, i. e. national or regional, are given. Intergovernmentalism, for example, stresses the rigidity of national identities, resulting in an obstacle for European integration (Kuhn 2019: 1219). Therefore, intergovernmentalist scholars consider the prospects of the development of European identity to be slim (ibid.: 1219f). Neofunctionalism does not explicitly tackle the topic of European identity formation (ibid.: 1218). However, postfunctionalism stands out with its considerations as it highlights the relevance of collective identities for integration processes (Leuffen et al. 2022: 145).

According to Hooghe and Marks "*identity* is decisive for multi-level governance in general, and for regional integration in particular" (2008: 2, emphasis in original). From a postfunctionalist perspective, existing territorial identities (national/regional) do not automatically oppose European support and identity formation; what is decisive is if they are exclusive or inclusive (ibid. 2008: 13; Schimmelfennig 2018: 18). This stems from the observation that citizens with exclusive national identities tend to be antagonistic towards EU integration and prone to eurosceptic attitudes (Leuffen et al. 2022: 158, 162; Hooghe/Marks 2008: 13). Even though there is room for the vision of European identity in postfunctionalism, Hooghe and Marks remark that collective identities are very stable and that a national identity will only slowly change into (or be supplemented with) a European one—but this rather inert development can hardly keep pace with political European integration (ibid.: 12f, 22). In this context, the divide between cosmopolitanism and communitarianism also enters the picture: in contrast to the communitarians, the cosmopolitans are positive about the possible Europeanisation of national identities (Leuffen et al. 2022: 157). Nevertheless, postfunctionalism sees more chances for the communitarian ideology to prevail (ibid.).

Our variable regarding H3 does not include the exclusivity or inclusivity of regional identification, but generally speaking our research approach leans towards the co-existence of multiple territorial identities. Assuming that the regional identification indicated by the respondents from our survey data is inclusive in nature, our finding of a positive relationship between regional and European identification does correspond with postfunctionalist assumptions. Moreover, earlier research has already shown that inclusive regional identification can be favourable towards EU support (Chacha 2013: 209). Likewise, in view of the combination of strong regional attachment and EU policies that foster regional integration, in this case Cohesion Policy, an increase in positive EU perception and ultimately European identity seems likely, as our results show.

H4: Individuals who perceive the EU's problem solving-capacity as efficient are more likely to identify with the EU.

Turning to our fourth hypothesis, we argue that the results do not support H4. The analysis thus denies the mechanism of the perceived policy efficiency of EU instruments working behind individuals' identification with the EU. Individuals who perceive the EU's problem solving-capacity as efficient are not significantly more likely to identify with the EU (Table 2). If results with insignificant probabilities are considered, it could be argued that

individuals who see the EU as an effective problem solver in their region rather identify strongly with the EU than individuals who see the EU as not so effective (ibid.; Appendix 4).

Our results show that there is not necessarily a correlation between citizens' perceived alignment between regional policies and the recipient region to identify as European. As with H1, it can be argued that the identification process is not primarily a matter of (rational) transactions. On the other hand, the perceived problem-solving capacity is certainly important for positive perceptions of the EU. Once again, however, awareness of what the EU actually does for one's own region is a prerequisite.

H5: Individuals who perceive their country's EU membership as beneficial are more likely to identify with the EU.

H5 can be confirmed in case individuals indicated a low or a strong identification with the EU. The hypothesis can thus be partly supported, because it does not apply to individuals indicating a medium-level identification with the EU (Table 2). It is more likely that individuals who indicate that EU membership is a bad thing instead of a good thing show a low identification with the EU. The probability is 8.899 times as high, and the classification of the probability value in terms of significance is very high (ibid.; Appendix 2). In turn, it is also more likely that individuals who indicate that EU membership is a good thing compared to a bad thing show a strong European identity. The probability is 17.544 times as high, and the classification of the probability value in terms of significance is high (ibid.; Appendix 4). Last but not least, it is more likely that individuals who indicate that EU membership is a good thing compared to a neither good nor bad thing show a strong European identity. The probability is 2.632 times as high (ibid.).

Generally, a positive perception of one's country's EU membership can be transferred to support for European integration. The latter is closely linked to European identity as existing research already suggests (Kuhn 2019: 1215). This interconnection is increasingly being approached from the perspective that collective identity can indeed be crucial in mobilising EU support (ibid.). The combination of our results on regional identification and EU membership supports this reasoning.

To sum it up, explanations for identity formation in the context of Cohesion Policy which are based on instrumental rationality or policy feedback mechanisms are not supported by our regression analysis. Instead, we can confirm that mechanisms surrounding the citizens'

awareness, their regional identification as well as their perception of EU membership do have a significant impact on European identity formation in rural regions (in Germany).

6 Conclusion

This paper adds to the growing body of research on the potential influence of Cohesion Policy on European identity formation by offering new insights on identity-related mechanisms that are at work in rural regions. Inspired by the research from Borz, Brandenburg and Mendez (2022), we expanded the theoretical model from there to a total of five mechanisms related to identity formation and EU Cohesion Policy: the perception of individual benefits, the citizens' awareness of EU Structural Funds and funded projects, the identification with their region, their perception of the EU's policy efficiency as well as of their country's EU membership. Using binary logistic regression models, we conducted an in-depth analysis of survey data corresponding to these mechanisms from 205 individual respondents located in rural areas in Germany. Our results reveal that the most significant predictors with regard to a strong identification with the EU are the citizens' regional identification, their opinion regarding (Germany's) EU membership, and lastly, their awareness of funds.

We argue that individual self-categorization with the EU in the context of Cohesion Policy is triggered by explanatory mechanisms such as cognitive mobilisation (awareness), EU support (perception of membership) and regional attachment (identification). While the former can be regarded as a precondition for the other mechanisms, the latter leads to the conclusion that the respondents' existing territorial identities are inclusive and thus favour identification as European. A positive attitude towards EU membership adds to this and further encourages the formation of European identity in rural regions.

The chief finding from our research project is therefore that a stronger regional identification, which can also be traced back to communitarianism outweighing cosmopolitanism in rural areas, does not hinder European identification per se. Again, the decisive factor is whether the regional identity is inclusive or exclusive. Thus, with this finding we also provide critical evidence regarding postfunctionalist assumptions.

Finally, our analysis offers room for extension in future research projects on the nexus of EU Cohesion policy and European identity, for example by including control variables such as the amount of allocated funds and the GDP of the NUTS-3 regions, or by adding social indicators in order to conclude different motives for the respective, individual-based

interrelation between EU Cohesion Policy and European identity. Furthermore, the analysis could be broadened to include different countries in order to compare the significant predictors of European identification in rural regions across Europe. Likewise a comparison of rural versus urban regions could give beneficial insights regarding fertile grounds for European identification and possible disparities that need to be addressed to strengthen an even European integration.

Bibliography

Bauhr, M./Charron, N. (2019). The EU as a Savior and a Saint? Corruption and Public Support for Redistribution. *Journal of European Public Policy*, 0(0), pp. 1-19. https://doi.org/10.1080/13501763.2019.1578816.

Bayerlein, M./Diermeier, M. (2022). Exchanging Money for Love? A Regional Analysis of EU Cohesion Policy on Euroscepticism. *Kiel Working Paper*, No. 2219. https://www.ifw-kiel.de/de/publikationen/exchanging-money-for-love-a-regional-analysis-of-eu-cohesion-policy-on-euroscepticism-26275/ (Last access: 22 November 2023).

Borz, G./Brandenburg, H./Mendez, C. (2022). The Impact of EU Cohesion Policy on European Identity: A Comparative Analysis of EU Regions. *European Union Politics*, 23(2), pp. 259-281. https://doi.org/10.1177/14651165221076444.

Brewer, M. B. (1993). Social Identity, Distinctiveness, and In-Group Homogenity. *Social Cognition*, 11(1), 150-164.

Brewer, M. B./Gardner, W. (1996). Who is this We: Levels of Collective Identity and Self Representations. *Journal of Personality and Social Psychology*, 71(1), pp. 83-93.

Büttner, S. M./Leopold, L. M. (2016). A 'new spirit' of public policy? The project world of EU funding. *European Journal of Cultural and Political Sociology*, 3(1), pp. 41–71. https://doi.org/10.1080/23254823.2016.1183503

Calhoun, C. (1994). Social Theory and the Politics of Identity. In: Charles Calhoun (ed.), *Social Theory and the Politics of identity.* Cambridge: Blackwell Publishers.

Chacha, M. (2013). Regional attachment and support for European integration. *European Union Politics*, 14(2), pp. 206-227. DOI: 10.1177/1465116512462910.

Commission Regulation (EU) 2016/2066 of 21 November 2016 amending the annexes to Regulation (EC) No 1059/2003 of the European Parliament and of the Council on the

establishment of a common classification of territorial units for statistics (NUTS). http://data.europa.eu/eli/reg/2016/2066/oj (Last access: 22 November 2023).

Dabrowski, M./Stead, D./Mashhoodi, B. (2019). EU Cohesion Policy can't buy me love? Exploring the regional determinants of EU image. *Regional Science and Policy Practice*, 11(4), pp. 695-711. https://doi.org/10.1111/rsp3.12237.

Dellmuth, L./ Chalmers, A. (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), pp. 3–23.

Díez Medrano, J./ Gutiérrez, P. (2001). Nested identities: National and European identity in Spain. *Ethnic and Racial Studies*, 24(5), pp. 753–778. https://doi.org/10.1080/01419870120063963.

Dilger, C. (2023). Divided over globalisation. Measuring the ideological divide between cosmopolitans and communitarians in Europe using a classification approach. *Social Science Research*, 109, pp. 1-14. https://doi.org/10.1016/j.ssresearch.2022.102776.

Eichenberg, R. C./Dalton, R. J. (1993). Europeans and the European Community: The Dynamics of Public Support for European Integration. *International Organization*, 47(4), 507–534. https://doi.org/10.1017/S0020818300028083

EP Think Tank (2023). What EU cohesion policy finances (in billion €). European Parliamentary Research Service. https://epthinktank.eu/2017/10/06/cities-front-line-of-climate-action/figure-2-what-eu-cohesion-policy-finances-in-billion-e/ (Last access: 24 November 2023).

Eriksen, E. O. (2014). Regional cosmopolitanism: the EU in search of its legitimation. *European Journal of Futures Research*, 2(51), pp. 1-9. https://doi.org/10.1007/s40309-014-0051-8.

European Commission (2014). Directorate-General for Regional and Urban Policy: A harmonised definition of cities and rural areas: the new degree of urbanisation (WP 01/2014).

European Commission (2018). Eurostat. Regions in the European Union – Nomenclature of territorial units for statistics, NUTS 2016/EU-28 – Edition 2018. Publications Office, 2018. https://data.europa.eu/doi/10.2785/475524.

European Commission (2019). Eurostat. Methodological manual on territorial typologies – 2018 edition. Publications Office, 2019. https://data.europa.eu/doi/10.2785/930137.

European Commission (2021). In profile: EU cohesion spending by NUTS regions. Cohesion Open Data Platform. https://cohesiondata.ec.europa.eu/stories/s/EU-spending-by-NUTS-regions/ym2g-jhtp/#2.-is-cohesion-funding-allocated-by-nuts-regions- (Last access: 23 May 2023).

European Commission (2022). Eurostat. Statistical regions in the European Union and partner countries – NUTS and statistical regions 2021 – 2022 edition. Publications Office of the European Union. https://data.europa.eu/doi/10.2785/321792.

European Commission (2023). The EU's main investment policy. https://ec.europa.eu/regional_policy/policy/what/investment-policy_en (Last access: 23 May 2023).

Eurostat (2023). Methodology – Rural development. https://ec.europa.eu/eurostat/web/rural-development/methodology (Last access: 19 July 2023).

Glymour, B. (1998). Contrastive, Non-Probabilistic Statistical Explanations. *Philosophy of Science*, 65(3), pp. 448–471.

Green, S. B. (1991). How Many Subjects Does It Take To Do A Regression Analysis. *Multivariate behavioral research*, 26(3), pp. 499–510. https://doi.org/10.1207/s15327906mbr2603_7.

Helbling, M./Teney, C. (2015). The cosmopolitan elite in Germany: transnationalism and postmaterialism. *Global Networks*, 15(4), pp. 446-468. https://doi.org/10.1111/glob.12073.

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

Hooghe, L./Marks, G. (2006). Europe's Blues: Theoretical Soul-Searching after the Rejection of the European Constitution. *PS: Political Science & Politics*, 39(2), pp. 247-250. https://doi.org/10.1017/S1049096506060422.

Hooghe, L./Marks, G. (2008). A Postfunctionalist Theory of European Integration: From Permissive Consensus to Constraining Dissensus. *British Journal of Political Science*, 39(1), pp. 1-23. https://doi.org/10.1017/S0007123408000409.

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

Inglehart, R. (1977). *The Silent Revolution. Changing Values and Political Styles Among Western Publics*. Princeton, New Jersey: Princeton University Press.

Kania, V./Karolewski, I. P. (2013). EU governance and European identity. *Living Reviews in European Governance*, 8(1), pp. 5-59. https://doi.org/10.12942/lreg-2013-1.

Koopmans, R./Zürn, M. (2019). Cosmopolitanism and Communitarism - How Globalization is Reshaping Politics in the Twenty-First Century. In: P. De Wilde, R. Koopmans, W. Merkel, O. Strijbis, M. Zürn (Eds.), *The Struggle Over Borders. Cosmopolitanism and Communitarianism.* New York: Cambridge University Press. Pp. 1-34.

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

Landes, F. (2020). Can Money Buy Love?: The Impact of EU Cohesion Policy on European Identity. In: E. Donat, S. Meyer & G. Abels (Eds.), *European Regions: Perspectives, Trends and Developments in the 21st Century*. Bielefeld: transcript Verlag. Pp. 129-144. https://doi.org/10.1515/9783839450697-009.

Leuffen, D./Rittberger, B./Schimmelfennig, F. (2022). *Integration and Differentiation in the European Union. Theory and Policies*. Cham: Palgrave Macmillan.

Maxwell. R. (2019). Cosmopolitan Immigration Attitudes in Large European Cities: Contextual or Cosmopolitan Effects? *American Political Science Review*, 113(2), pp. 456-474. https://doi.org/10.1017/S0003055418000898.

Maxwell, R. (2020). Geographic Divides and Cosmopolitanism: Evidence from Switzerland. *Comparative Political Studies*, 53(13), pp. 2061-2090. https://doi.org/10.1177/0010414020912289.

Osterloh, S. (2011). Can regional transfers buy public support? Evidence from EU structural policy. ZEW Discussion Paper No. 11-011.

Pausch, M. (2021). The future of polarisation in Europe: relative cosmopolitanism and democracy. *European Journal of Futures Research*, 9(12), pp. 1-11. https://doi.org/10.1177/0010414020912289.

Pichler, F. (2008). How Real Is Cosmopolitanism in Europe? *Sociology*, 42(6), pp. 1107-1126. https://doi.org/10.1177/0038038508096936.

Regulation (EC) 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS). http://data.europa.eu/eli/reg/2003/1059/oj (Last access: 22 November 2023).

Risse, T. (2003). The Euro between national and European identity. *Journal of European Public Policy*, 10(4), pp. 487-505. https://doi.org/10.1080/1350176032000101235

Sarstedt, M./Mooi, E. (2014). *A Concise Guide to Market Research. The Process, Data, and Methods Using IBM SPSS Statistics*. 2nd ed. Berlin/Heidelberg: Springer.

Schimmelfennig, F. (2018). Theorien der europäischen Integration. In: P. Becker & B. Lippert (Eds.), *Handbuch Europäische Union*. Wiesbaden: Springer Fachmedien. Pp. 1-13. https://doi.org/10.1007/978-3-658-17436-1_7-1.

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

Windzio, M. (2013). Binäre logistische Regression. In: *Regressionsmodelle für Zustände und Ereignisse*. Studienskripten zur Soziologie. Springer VS, Wiesbaden. https://doi.org/10.1007/978-3-531-18852-2_3.

Appendix

Appendix 1: Shares of the levels of identification with the EU

European Identity

		Häufigkeit	Prozent	Gültige Prozente	Kumulierte Prozente
Gültig	low	24	11,7	11,7	11,7
	middle	71	34,6	34,6	46,3
	high	110	53,7	53,7	100,0
	Gesamt	205	100,0	100,0	

Appendix 2: Output script of the logistic regression model 1

Logistische Regression (DV = Low EU Identity)

Zusammenfassung der Fallverarbeitung

Ungewichtete Fälle[a]		N	Prozent
Ausgewählte Fälle	Einbezogen in Analyse	205	100,0
	Fehlende Fälle	0	,0
	Gesamt	205	100,0
Nicht ausgewählte Fälle		0	,0
Gesamt		205	100,0

a. Wenn die Gewichtung wirksam ist, finden Sie die Gesamtzahl der Fälle in der Klassifizierungstabelle.

Codierung abhängiger Variablen

Ursprünglicher Wert	Interner Wert
,00	0
low	1

Codierungen kategorialer Variablen

		Häufigkeit	Parametercodierung (1)	Parametercodierung (2)
Perception of EU Membership	A good thing	160	,000	,000
	A bad thing	14	1,000	,000
	Neither good nor bad	31	,000	1,000
Feedback of Policy Efficiency	Very effective	26	,000	,000
	Somewhat effective	69	1,000	,000
	Not so effective	110	,000	1,000
Regional Attachment	low	30	1,000	,000
	middle	69	,000	1,000
	high	106	,000	,000
Awareness of Funds (umcodiert)	No	111	1,000	
	Yes	94	,000	
Awareness of Funded Projects (umcodiert)	No	130	1,000	
	Yes	75	,000	
Instrumental Benefits (umcodiert)	No	166	1,000	
	Yes	39	,000	

Block 0: Anfangsblock

Klassifizierungstabelle[a,b]

Beobachtet			Vorhergesagt: Low European Identity (Dummy) ,00	Vorhergesagt: Low European Identity (Dummy) low	Prozentsatz der Richtigen
Schritt 0	Low European Identity (Dummy)	,00	181	0	100,0
		low	24	0	,0
	Gesamtprozentsatz				88,3

a. Konstante in das Modell einbezogen.

b. Der Trennwert lautet ,500

Variablen in der Gleichung

		RegressionskoeffizientB	Standardfehler	Wald	df	Sig.	Exp(B)
Schritt 0	Konstante	-2,020	,217	86,503	1	<,001	,133

Variablen nicht in der Gleichung

			Wert	df	Sig.
Schritt 0	Variablen	Instrumental Benefits (umcodiert)(1)	,751	1	,386
		Awareness of Funds (umcodiert)(1)	4,761	1	,029
		Awareness of Funded Projects (umcodiert)(1)	,645	1	,422
		Regional Attachment	11,649	2	,003
		Regional Attachment(1)	11,377	1	<,001
		Regional Attachment(2)	,246	1	,620
		Feedback of Policy Efficiency	3,827	2	,148
		Feedback of Policy Efficiency(1)	3,515	1	,061
		Feedback of Policy Efficiency(2)	3,224	1	,073
		Perception of EU Membership	17,636	2	<,001
		Perception of EU Membership(1)	14,105	1	<,001
		Perception of EU Membership(2)	2,066	1	,151
	Gesamtstatistik		30,705	9	<,001

Block 1: Methode = Einschluß

Omnibus-Tests der Modellkoeffizienten

		Chi-Quadrat	df	Sig.
Schritt 1	Schritt	25,544	9	,002
	Block	25,544	9	,002
	Modell	25,544	9	,002

Modellzusammenfassung

Schritt	-2 Log-Likelihood	Cox & Snell R-Quadrat	Nagelkerkes R-Quadrat
1	122,488[a]	,117	,228

a. Schätzung beendet bei Iteration Nummer 6, weil die Parameterschätzer sich um weniger als ,001 änderten.

Hosmer-Lemeshow-Test

Schritt	Chi-Quadrat	df	Sig.
1	4,070	7	,772

Kontingenztabelle für Hosmer-Lemeshow-Test

		Low European Identity (Dummy) = ,00		Low European Identity (Dummy) = low		
		Beobachtet	Erwartet	Beobachtet	Erwartet	Gesamt
Schritt 1	1	20	20,554	1	,446	21
	2	23	23,074	1	,926	24
	3	24	24,838	2	1,162	26
	4	22	20,985	0	1,015	22
	5	22	21,267	1	1,733	23
	6	22	20,868	1	2,132	23
	7	19	19,706	3	2,294	22
	8	15	16,190	6	4,810	21
	9	14	13,518	9	9,482	23

Klassifizierungstabelle[a]

Beobachtet			Vorhergesagt		
			Low European Identity (Dummy)		Prozentsatz der Richtigen
			,00	low	
Schritt 1	Low European Identity (Dummy)	,00	181	0	100,0
		low	22	2	8,3
	Gesamtprozentsatz				89,3

a. Der Trennwert lautet ,500

Variablen in der Gleichung

		RegressionskoeffizientB	Standardfehler	Wald	df	Sig.	Exp(B)	95% Konfidenzintervall für EXP(B)	
								Unterer Wert	Oberer Wert
Schritt 1[a]	Instrumental Benefits (umcodiert)(1)	-,076	,720	,011	1	,916	,926	,226	3,797
	Awareness of Funds (umcodiert)(1)	,810	,543	2,226	1	,136	2,247	,776	6,508
	Awareness of Funded Projects (umcodiert)(1)	,007	,544	,000	1	,990	1,007	,347	2,926
	Regional Attachment			5,523	2	,063			
	Regional Attachment(1)	1,294	,618	4,377	1	,036	3,646	1,085	12,252
	Regional Attachment(2)	,015	,584	,001	1	,980	1,015	,323	3,189
	Feedback of Policy Efficiency			1,541	2	,463			
	Feedback of Policy Efficiency(1)	-,766	,849	,814	1	,367	,465	,088	2,455
	Feedback of Policy Efficiency(2)	-,016	,720	,000	1	,982	,984	,240	4,032
	Perception of EU Membership			11,091	2	,004			
	Perception of EU Membership(1)	2,186	,674	10,508	1	,001	8,899	2,373	33,369

	Perception of EU Membership(2)	,885	,590	2,248	1	,134	2,423	,762	7,702
	Konstante	-3,018	,996	9,183	1	,002	,049		

a. In Schritt 1 eingegebene Variablen: Instrumental Benefits (umcodiert), Awareness of Funds (umcodiert), Awareness of Funded Projects (umcodiert), Regional Attachment, Feedback of Policy Efficiency, Perception of EU Membership.

Korrelationsmatrix

		Konstante	Instrumental Benefits (umcodiert)(1)	Awareness of Funds (umcodiert)(1)	Awareness of Funded Projects (umcodiert)(1)	Regional Attachment(1)	Regional Attachment(2)	Feedback of Policy Efficiency(1)	Feedback of Policy Efficiency(2)	Perception of EU Membership(1)	Perception of EU Membership(2)
Schritt 1	Konstante	1,000	-,505	-,256	-,200	-,112	-,261	-,548	-,575	-,058	-,057
	Instrumental Benefits (umcodiert)(1)	-,505	1,000	-,092	-,199	-,003	,087	,037	-,031	-,099	-,029
	Awareness of Funds (umcodiert)(1)	-,256	-,092	1,000	-,104	-,199	-,097	-,001	,015	,011	,109
	Awareness of Funded Projects (umcodiert)(1)	-,200	-,199	-,104	1,000	-,163	-,103	,054	,060	,072	-,055
	Regional Attachment(1)	-,112	-,003	-,199	-,163	1,000	,465	,020	-,037	,102	-,171
	Regional Attachment(2)	-,261	,087	-,097	-,103	,465	1,000	,079	,020	-,049	-,068
	Feedback of Policy Efficiency(1)	-,548	,037	-,001	,054	,020	,079	1,000	,700	-,037	-,102
	Feedback of Policy Efficiency(2)	-,575	-,031	,015	,060	-,037	,020	,700	1,000	-,134	-,111
	Perception of EU Membership(1)	-,058	-,099	,011	,072	,102	-,049	-,037	-,134	1,000	,233
	Perception of EU Membership(2)	-,057	-,029	,109	-,055	-,171	-,068	-,102	-,111	,233	1,000

Appendix 3: Output script of the logistic regression model 2

Logistische Regression (DV = Medium EU Identity)

Zusammenfassung der Fallverarbeitung

Ungewichtete Fälle[a]		N	Prozent
Ausgewählte Fälle	Einbezogen in Analyse	205	100,0
	Fehlende Fälle	0	,0
	Gesamt	205	100,0
Nicht ausgewählte Fälle		0	,0
Gesamt		205	100,0

a. Wenn die Gewichtung wirksam ist, finden Sie die Gesamtzahl der Fälle in der Klassifizierungstabelle.

Codierung abhängiger Variablen

Ursprünglicher Wert	Interner Wert
,00	0
middle	1

Codierungen kategorialer Variablen

		Häufigkeit	Parametercodierung (1)	Parametercodierung (2)
Perception of EU Membership	A good thing	160	,000	,000
	A bad thing	14	1,000	,000
	Neither good nor bad	31	,000	1,000
Feedback of Policy Efficiency	Very effective	26	,000	,000
	Somewhat effective	69	1,000	,000
	Not so effective	110	,000	1,000
Regional Attachment	low	30	1,000	,000
	middle	69	,000	1,000
	high	106	,000	,000
Awareness of Funds (umcodiert)	No	111	1,000	

	Yes	94	,000	
Awareness of Funded Projects (umcodiert)	No	130	1,000	
	Yes	75	,000	
Instrumental Benefits (umcodiert)	No	166	1,000	
	Yes	39	,000	

Block 0: Anfangsblock

Klassifizierungstabelle[a,b]

Beobachtet			Vorhergesagt		
			Middle European Identity (Dummy)		Prozentsatz der Richtigen
			,00	middle	
Schritt 0	Middle European Identity (Dummy)	,00	134	0	100,0
		middle	71	0	,0
	Gesamtprozentsatz				65,4

a. Konstante in das Modell einbezogen.

b. Der Trennwert lautet ,500

Variablen in der Gleichung

		RegressionskoeffizientB	Standardfehler	Wald	df	Sig.	Exp(B)
Schritt 0	Konstante	-,635	,147	18,723	1	<,001	,530

Variablen nicht in der Gleichung

			Wert	df	Sig.
Schritt 0	Variablen	Instrumental Benefits (umcodiert)(1)	1,721	1	,190
		Awareness of Funds (umcodiert)(1)	2,679	1	,102
		Awareness of Funded Projects (umcodiert)(1)	,362	1	,547

		Regional Attachment	7,420	2	,024
		Regional Attachment(1)	,064	1	,800
		Regional Attachment(2)	6,335	1	,012
		Feedback of Policy Efficiency	4,613	2	,100
		Feedback of Policy Efficiency(1)	4,591	1	,032
		Feedback of Policy Efficiency(2)	3,019	1	,082
		Perception of EU Membership	3,787	2	,151
		Perception of EU Membership(1)	1,567	1	,211
		Perception of EU Membership(2)	1,788	1	,181
	Gesamtstatistik		15,063	9	,089

Block 1: Methode = Einschluß

Omnibus-Tests der Modellkoeffizienten

		Chi-Quadrat	df	Sig.
Schritt 1	Schritt	15,530	9	,077
	Block	15,530	9	,077
	Modell	15,530	9	,077

Modellzusammenfassung

Schritt	-2 Log-Likelihood	Cox & Snell R-Quadrat	Nagelkerkes R-Quadrat
1	248,983[a]	,073	,101

a. Schätzung beendet bei Iteration Nummer 4, weil die Parameterschätzer sich um weniger als ,001 änderten.

Hosmer-Lemeshow-Test

Schritt	Chi-Quadrat	df	Sig.
1	8,868	8	,354

Kontingenztabelle für Hosmer-Lemeshow-Test

		Middle European Identity (Dummy) = ,00		Middle European Identity (Dummy) = middle		
		Beobachtet	Erwartet	Beobachtet	Erwartet	Gesamt
Schritt 1	1	19	18,684	3	3,316	22
	2	19	17,285	3	4,715	22
	3	17	15,734	4	5,266	21
	4	14	15,122	7	5,878	21
	5	11	14,042	10	6,958	21
	6	10	12,153	9	6,847	19
	7	11	12,881	10	8,119	21
	8	16	11,890	6	10,110	22
	9	12	10,580	10	11,420	22
	10	5	5,628	9	8,372	14

Klassifizierungstabelle[a]

			Vorhergesagt		
			Middle European Identity (Dummy)		Prozentsatz der Richtigen
	Beobachtet		,00	middle	
Schritt 1	Middle European Identity (Dummy)	,00	114	20	85,1
		middle	51	20	28,2
	Gesamtprozentsatz				65,4

a. Der Trennwert lautet ,500

Variablen in der Gleichung

		RegressionskoeffizientB	Standardfehler	Wald	df	Sig.	Exp(B)	95% Konfidenzintervall für EXP(B)	
								Unterer Wert	Oberer Wert
Schritt 1[a]	Instrumental Benefits (umcodiert)(1)	,321	,433	,552	1	,458	1,379	,591	3,219
	Awareness of Funds (umcodiert)(1)	,359	,331	1,179	1	,277	1,432	,749	2,738
	Awareness of Funded Projects (umcodiert)(1)	-,073	,336	,047	1	,828	,929	,481	1,796
	Regional Attachment			4,995	2	,082			
	Regional Attachment(1)	,151	,476	,101	1	,751	1,163	,458	2,954
	Regional Attachment(2)	,741	,342	4,708	1	,030	2,099	1,074	4,100
	Feedback of Policy Efficiency			2,894	2	,235			
	Feedback of Policy Efficiency(1)	-,563	,503	1,253	1	,263	,569	,212	1,526
	Feedback of Policy Efficiency(2)	,023	,463	,002	1	,961	1,023	,412	2,537
	Perception of EU Membership			2,241	2	,326			
	Perception of EU Membership(1)	,548	,580	,895	1	,344	1,730	,556	5,387
	Perception of EU Membership(2)	,545	,426	1,642	1	,200	1,725	,749	3,974
	Konstante	-1,312	,587	4,996	1	,025	,269		

a. In Schritt 1 eingegebene Variablen: Instrumental Benefits (umcodiert), Awareness of Funds (umcodiert), Awareness of Funded Projects (umcodiert), Regional Attachment, Feedback of Policy Efficiency, Perception of EU Membership.

Korrelationsmatrix

		Konstante	Instrumental Benefits (umcodiert)(1)	Awareness of Funds (umcodiert)(1)	Awareness of Funded Projects (umcodiert)(1)	Regional Attachment(1)	Regional Attachment(2)	Feedback of Policy Efficiency(1)	Feedback of Policy Efficiency(2)	Perception of EU Membership(1)	Perception of EU Membership(2)
Schritt 1	Konstante	1,000	-,494	-,143	-,231	-,053	-,233	-,611	-,621	-,011	-,014
	Instrumental Benefits (umcodiert)(1)	-,494	1,000	-,176	-,136	,000	,059	,005	-,038	-,075	-,063

	Awareness of Funds (umcodiert)(1)	-,143	-,176	1,000	-,134	-,211	-,142	,005	,032	-,015	,138
	Awareness of Funded Projects (umcodiert)(1)	-,231	-,136	-,134	1,000	-,143	-,118	,054	,047	,056	-,063
	Regional Attachment(1)	-,053	,000	-,211	-,143	1,000	,375	,030	-,041	-,015	-,185
	Regional Attachment(2)	-,233	,059	-,142	-,118	,375	1,000	,056	,030	-,035	-,066
	Feedback of Policy Efficiency(1)	-,611	,005	,005	,054	,030	,056	1,000	,734	-,005	-,069
	Feedback of Policy Efficiency(2)	-,621	-,038	,032	,047	-,041	,030	,734	1,000	-,093	-,102
	Perception of EU Membership(1)	-,011	-,075	-,015	,056	-,015	-,035	-,005	-,093	1,000	,140
	Perception of EU Membership(2)	-,014	-,063	,138	-,063	-,185	-,066	-,069	-,102	,140	1,000

Appendix 4: Output script of the logistic regression model 3

Logistische Regression (DV = High EU Identity)

Zusammenfassung der Fallverarbeitung

Ungewichtete Fälle[a]		N	Prozent
Ausgewählte Fälle	Einbezogen in Analyse	205	100,0
	Fehlende Fälle	0	,0
	Gesamt	205	100,0
Nicht ausgewählte Fälle		0	,0
Gesamt		205	100,0

a. Wenn die Gewichtung wirksam ist, finden Sie die Gesamtzahl der Fälle in der Klassifizierungstabelle.

Codierung abhängiger Variablen

Ursprünglicher Wert	Interner Wert
,00	0
high	1

Codierungen kategorialer Variablen

		Häufigkeit	Parametercodierung (1)	Parametercodierung (2)
Perception of EU Membership	A good thing	160	,000	,000
	A bad thing	14	1,000	,000
	Neither good nor bad	31	,000	1,000
Feedback of Policy Efficiency	Very effective	26	,000	,000
	Somewhat effective	69	1,000	,000
	Not so effective	110	,000	1,000
Regional Attachment	low	30	1,000	,000
	middle	69	,000	1,000
	high	106	,000	,000
Awareness of Funds (umcodiert)	No	111	1,000	
	Yes	94	,000	
Awareness of Funded Projects (umcodiert)	No	130	1,000	
	Yes	75	,000	
Instrumental Benefits (umcodiert)	No	166	1,000	
	Yes	39	,000	

Block 0: Anfangsblock

Klassifizierungstabelle[a,b]

Beobachtet	Vorhergesagt: High European Identity (Dummy) ,00	Vorhergesagt: High European Identity (Dummy) high	Prozentsatz der Richtigen

Schritt 0	High European Identity (Dummy)	,00	0	95	,0
		high	0	110	100,0
	Gesamtprozentsatz				53,7

a. Konstante in das Modell einbezogen.

b. Der Trennwert lautet ,500

Variablen in der Gleichung

		RegressionskoeffizientB	Standardfehler	Wald	df	Sig.	Exp(B)
Schritt 0	Konstante	,147	,140	1,096	1	,295	1,158

Variablen nicht in der Gleichung

			Wert	df	Sig.
Schritt 0	Variablen	Instrumental Benefits (umcodiert)(1)	3,277	1	,070
		Awareness of Funds (umcodiert)(1)	8,813	1	,003
		Awareness of Funded Projects (umcodiert)(1)	1,193	1	,275
		Regional Attachment	14,392	2	<,001
		Regional Attachment(1)	5,838	1	,016
		Regional Attachment(2)	4,335	1	,037
		Feedback of Policy Efficiency	10,835	2	,004
		Feedback of Policy Efficiency(1)	10,583	1	,001
		Feedback of Policy Efficiency(2)	7,928	1	,005
		Perception of EU Membership	20,008	2	<,001
		Perception of EU Membership(1)	13,075	1	<,001
		Perception of EU Membership(2)	4,852	1	,028

	Gesamtstatistik	40,581	9	<,001

Block 1: Methode = Einschluß

Omnibus-Tests der Modellkoeffizienten

		Chi-Quadrat	df	Sig.
Schritt 1	Schritt	45,290	9	<,001
	Block	45,290	9	<,001
	Modell	45,290	9	<,001

Modellzusammenfassung

Schritt	-2 Log-Likelihood	Cox & Snell R-Quadrat	Nagelkerkes R-Quadrat
1	237,801[a]	,198	,265

a. Schätzung beendet bei Iteration Nummer 5, weil die Parameterschätzer sich um weniger als ,001 änderten.

Hosmer-Lemeshow-Test

Schritt	Chi-Quadrat	df	Sig.
1	1,808	7	,970

Kontingenztabelle für Hosmer-Lemeshow-Test

		High European Identity (Dummy) = ,00		High European Identity (Dummy) = high		
		Beobachtet	Erwartet	Beobachtet	Erwartet	Gesamt
Schritt 1	1	20	18,823	1	2,177	21
	2	14	15,237	8	6,763	22
	3	13	13,299	8	7,701	21
	4	11	11,493	11	10,507	22
	5	10	10,256	13	12,744	23
	6	10	8,290	11	12,710	21

	7	6	6,380	16	15,620	22
	8	5	5,512	16	15,488	21
	9	6	5,710	26	26,290	32

Klassifizierungstabelle[a]

Beobachtet			Vorhergesagt		
			High European Identity (Dummy)		Prozentsatz der Richtigen
			,00	high	
Schritt 1	High European Identity (Dummy)	,00	53	42	55,8
		high	23	87	79,1
	Gesamtprozentsatz				68,3

a. Der Trennwert lautet ,500

Variablen in der Gleichung

		RegressionskoeffizientB	Standardfehler	Wald	df	Sig.	Exp(B)	95% Konfidenzintervall für EXP(B)	
								Unterer Wert	Oberer Wert
Schritt 1[a]	Instrumental Benefits (umcodiert)(1)	-,188	,430	,191	1	,662	,829	,357	1,924
	Awareness of Funds (umcodiert)(1)	-,705	,340	4,295	1	,038	,494	,254	,962
	Awareness of Funded Projects (umcodiert)(1)	,045	,344	,017	1	,895	1,047	,533	2,056
	Regional Attachment			5,840	2	,054			
	Regional Attachment(1)	-,943	,489	3,728	1	,053	,389	,149	1,014
	Regional Attachment(2)	-,710	,350	4,105	1	,043	,492	,247	,977
	Feedback of Policy Efficiency			6,007	2	,050			
	Feedback of Policy Efficiency(1)	,787	,504	2,440	1	,118	2,197	,818	5,898

	Feedback of Policy Efficiency(2)	-,059	,471	,016	1	,901	,943	,374	2,375
	Perception of EU Membership			11,098	2	,004			
	Perception of EU Membership(1)	-2,859	1,070	7,139	1	,008	,057	,007	,467
	Perception of EU Membership(2)	-,967	,447	4,677	1	,031	,380	,158	,913
	Konstante	1,111	,583	3,630	1	,057	3,039		

a. In Schritt 1 eingegebene Variablen: Instrumental Benefits (umcodiert), Awareness of Funds (umcodiert), Awareness of Funded Projects (umcodiert), Regional Attachment, Feedback of Policy Efficiency, Perception of EU Membership.

Korrelationsmatrix

		Konstante	Instrumental Benefits (umcodiert)(1)	Awareness of Funds (umcodiert)(1)	Awareness of Funded Projects (umcodiert)(1)	Regional Attachment(1)	Regional Attachment(2)	Feedback of Policy Efficiency(1)	Feedback of Policy Efficiency(2)	Perception of EU Membership(1)	Perception of EU Membership(2)
Schritt 1	Konstante	1,000	-,470	-,152	-,248	-,043	-,209	-,610	-,633	-,016	-,023
	Instrumental Benefits (umcodiert)(1)	-,470	1,000	-,214	-,119	,005	,049	,002	-,051	-,069	-,066
	Awareness of Funds (umcodiert)(1)	-,152	-,214	1,000	-,133	-,172	-,138	,008	,069	,026	,163
	Awareness of Funded Projects (umcodiert)(1)	-,248	-,119	-,133	1,000	-,145	-,121	,040	,042	,057	-,068
	Regional Attachment(1)	-,043	,005	-,172	-,145	1,000	,342	-,006	-,060	,020	-,134
	Regional Attachment(2)	-,209	,049	-,138	-,121	,342	1,000	,038	,020	-,008	-,048
	Feedback of Policy Efficiency(1)	-,610	,002	,008	,040	-,006	,038	1,000	,737	-,019	-,082
	Feedback of Policy Efficiency(2)	-,633	-,051	,069	,042	-,060	,020	,737	1,000	-,039	-,085
	Perception of EU Membership(1)	-,016	-,069	,026	,057	,020	-,008	-,019	-,039	1,000	,066
	Perception of EU Membership(2)	-,023	-,066	,163	-,068	-,134	-,048	-,082	-,085	,066	1,000

Declaration of Authorship

We hereby certify that the presented Master's Project paper with the title "EU Cohesion Policy and Identification with the EU: The case of German rural regions" was written independently and with no other help than the indicated sources. Those parts, which resemble other works word by word or by meaning, are marked in every single instance through the naming of the source, also the used secondary literature, and the reliance on those arguments is clearly indicated. We further declare that we have not submitted this paper at any time in order to obtain a degree/mark.

Magdeburg, 24.11.2023 L. Ziebell

Place and time, signature

_____

Place and time, signature

Magdeburg, 24.11.23,

_____

Place and time, signature