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European Institutional Integration and the Educational Divide in Support for the European Union

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Abstract

Since the 1950s, the history of European integration unfolds as a unique social experiment, witnessing the transformation of a non-existent entity into an increasingly institutionalized force. This article delves into the consequences of this ongoing institutionalization on public attitudes towards the institution itself: the European Union (EU). We argue that as European institutional integration advanced, a divide in EU support between more and less educated individuals emerged, with the latter becoming progressively less supportive. Drawing on data from eighty-five waves of the Eurobarometer survey across fifteen countries and over 820,000 individuals from 1976 to 2014, a Bayesian mixed-effects analysis reveals that the gap in support between the more and less educated significantly widened with a country's level of institutional integration. This study emphasizes the necessity of distinguishing institutional effects from temporal patterns in order to enhance our understanding of EU-related public opinion dynamics.

Introduction

It is a precondition for the democratic legitimacy of political institutions that rely on wide support among the general population. However, previous research has established the presence of an educational divide in support for institutions in developed democracies. Less highly educated citizens generally have lower levels of trust in institutions (Arpino and Obydenkova 2020; Bauer and Fatke 2014; Foster and Frieden 2017; McLaren 2012; van Erkel and van der Meer 2016) and are less likely to participate in political life (Kam and Palmer 2008; Persson 2015; Willeck and Mendelberg 2022). This educational divide in institutional support, which we consider part of a larger trend of opinion polarization, has harmful implications for the democratic footing of institutions. Moreover, opinion polarization between groups occupying different social-structural positions undermines social cohesion and can give rise to conflict in society. Therefore, it is important to gain a better understanding of the causes of the educational divide in institutional support.

The educational divide in institutional support has been extensively studied with regard to attitudes towards the European Union (EU). However, existing research is severely constrained by two major shortcomings. First, previous studies have largely neglected the dynamic nature of the relationship between education and support for the EU (for example Anderson 1998; Hooghe and Marks 2005; McLaren 2002). Those studies that consider changes in the educational divide over time focus on relatively short or recent periods, whereas European integration is a long-term process and is, therefore, best investigated over a longer time horizon. For example, past research often exclusively covers the post-Maastricht period after 1992 (for example

Lubbers and Scheepers 2010; Sani and Magistro 2016; Teney and Rupieper 2021), ignoring the earlier decades of institutionalization.

Second, previous research has failed to identify the role of institutional integration, whereas we argue in this article that the progressive trend of European institutionalization could in itself be a catalyst for the growing educational divide in EU support. Existing studies that consider temporal dynamics often build on the assumption that institutional integration increases as time progresses (Hakhverdian et al. 2013; Lubbers and Jaspers 2011; Teney and Rupieper 2021), but they do not explicitly account for the actual progress in European institutional integration, and thus fail to distinguish institutional effects from temporal patterns. Since changes over time may be driven by various factors, reporting a mere time effect does not provide insights into the underlying causal mechanisms of the widening educational divide in EU support.

Equating temporal dynamics with the impact of institutional integration also overlooks the fact that differentiated integration has become a core feature of the EU (Leuffen, Rittberger, and Schimmelfennig 2013). Given that institutional integration has not unfolded uniformly across all member states, with countries selectively participating in EU policies and engaging in activities with varying levels of centralization, it seems misguided to assume that a common time trend would adequately capture the effect of institutionalization. This is particularly true as institutional integration can be reversed, exemplified by the United Kingdom's decision to leave the European Union following the Brexit referendum in 2016. Hence, while European institutional integration has historically represented a progressive trend, substantial variation in EU institutional participation exists across countries and time periods. Since this variation has not been sufficiently considered in previous research, we argue that our understanding of the underlying causes of the educational divide in EU support remains incomplete.

We consider the unique nature of the EU an ideal test case to examine whether and to what extent institutional integration itself serves as a driving force behind educational divergence in support for public institutions. The European integration process represents an exceptional social experiment in that a previously largely un-institutionalized environment has become increasingly institutionalized over a relatively short period of time. Similar processes of institutionalization in individual countries are often characterized by long, complex historical developments that are hard to pinpoint and empirically capture (as reflected in the wide variety of institutional theories; see Jupille and Caporaso 2022). By contrast, the comparatively short history of European integration allows us to precisely define the steps of institutionalization in terms of both their timing and their relative importance (cf. Krieger-Boden and Soltwedel 2013). Moreover, while the central institutions of individual nation-states broadly 'structure political, economic and social interaction' (North 1991, 97), the specific supranational character of European institutional integration has always placed a strong emphasis on the economic realm (Moravcsik 1999; Scharpf 2010), suggesting a close relationship between progressive institutionalization and economically motivated preference formation in the EU.

Consequently, our research question is: *How does European institutional integration affect the educational divide in support for the EU?* We argue that the progressive trend of European institutional integration since the 1950s has implications for opinion formation concerning the EU. Since the potential economic benefits, as well as political and cultural concerns related to European institutional integration, are asymmetrically distributed between individuals with different levels of education, we expect that the more a country integrates institutionally at the European level, the more pronounced the educational divide in EU support should become. To empirically test our hypothesis, we integrate individual-level opinion data from eighty-five pooled waves of the Eurobarometer survey across fifteen countries with a comprehensive index measuring countries' institutional participation at the European level. By adopting this approach, our study stands as the first to directly assess the institutional mechanisms contributing to the widening educational divide in EU support.

The analysis covers more than 820,000 individuals over thirty-eight years (1976–2014), making it, to the best of our knowledge, the richest dataset on the topic of EU support analysed thus far. Results

from Bayesian logistic mixed models confirm that the educational divide in EU support grows larger as institutional integration progresses. In particular, our findings indicate that citizens with low and medium levels of education – often referred to as the 'losers' of European integration and globalization (Kriesi et al. 2008) – become increasingly opposed to the EU with advancing institutionalization. In addition, we focus on a historical case of reversed institutional integration by conducting an explorative event study on the European Monetary System (EMS) crisis of 1992 in Italy and the UK. The findings suggest that, although European institutional integration plays a crucial role in the widening educational gap in EU support, reversing institutional integration does not necessarily result in a convergence of EU-related preferences among different educational groups.

The article proceeds as follows. Section 'Literature review' provides an overview of the extensive literature on the educational divide in support for the EU. The section 'Institutional integration and the educational divide in EU support' explains why we believe European institutional integration to be a missing link connecting empirical findings in the extant literature. The section 'Empirical strategy' elaborates on the empirical strategy, in particular our measurement approach and how we statistically model the data. Based on this empirical strategy we present our findings in the section 'Results', where we also discuss additional sensitivity tests and present our explorative event study. The final section offers our conclusions.

Literature Review

A large body of research has examined the relationship between education and support for the EU, providing a clear empirical picture: lower levels of education are associated with less support for the EU. More specifically, numerous empirical studies have shown that less highly educated citizens are less supportive of EU membership (for example Anderson and Reichert 1996; Dellmuth and Chalmers 2018; Hakhverdian et al. 2013; Kuhn et al. 2016, Lubbers and Scheepers 2010), are less in favour of further European integration (for example, Beaudonnet 2015; Gabel 1998; Gabel and Palmer 1995; Hooghe and Marks 2005; McLaren 2002), and have less trust in EU institutions (for example Foster and Frieden 2017; Lipps and Schraff 2020; Sani and Magistro 2016).

The literature offers three main explanations to account for the positive relationship between education and EU support, which are economic, political, and cultural in nature. First, the economic explanation centres around the 'left-behind thesis' (initially formulated by Gabel 1998; Gabel and Palmer 1995). According to this perspective, individuals with lower levels of education are those who lose out in the context of European integration, since education is positively correlated with potential benefit from greater integration. Based on the premise that certain individual skills are more valuable and transferable in a supranationally integrated economy than others, the left-behind thesis claims that those with higher educational attainment and more marketable occupational skills are better prepared to apply their talents in diverse international settings and to adapt to economic changes in their production sector or region. Consequently, the economic costs and benefits related to European integration are asymmetrically distributed between individuals with different levels of education, with highly educated citizens being regarded as the main beneficiaries, as they have the largest ability to capitalize on the new opportunities presented by an integrated European economy. This perspective aligns with research demonstrating that individuals with higher levels of education tend to perceive greater personal benefits from EU membership (McLaren 2007) and exhibit notably lower concerns about European integration posing a threat to the domestic labour market than their lower-educated counterparts (Baute et al. 2018; Grauel, Heine, and Lahusen 2013).

Second, political explanations have underscored the role of supply-side actors such as political parties and the news media. Given citizens' limited familiarity with and exposure to EU institutions, they often rely on political cues from the domestic political arena and the media as convenient shortcuts for obtaining information about the EU (Anderson 1998). In particular, individuals with lower levels of education are more likely to possess lower levels of political awareness and

EU knowledge compared to their more educated counterparts, making them more prone to follow the party and media cues of Eurosceptic voices (Hobolt 2005; Schuck and De Vreese 2006).

Third, cultural explanations have honed in on the significance of national identity, perceptions of ethnic threat, and cosmopolitan attitudes. According to this cultural perspective, lower-educated individuals are less supportive of the EU because they have a less cosmopolitan worldview and perceive the EU as a threat to their national identity (Inglehart 1970). Numerous empirical studies corroborate that identity concerns are particularly pronounced among those with lower levels of education (for example Lubbers and Jaspers 2011; McLaren 2003), and these concerns are consistently linked to lower levels of support for the EU (Carey 2002; Hooghe and Marks 2005; McLaren 2002; Teney, Lacewell, and De Wilde 2014).

Moreover, providing important nuance to the well-established positive association between education and EU support, a limited number of studies have explored the temporal dynamics of this relationship. These contributions reveal a discernible trend of growing educational divergence in EU approval over time (Hakhverdian et al. 2013; Lubbers and Jaspers 2011; Sani and Magistro 2016). Hakhverdian et al. (2013) draw on Eurobarometer data from 1973 to 2010 in twelve EU countries and find that the positive correlation between the level of education and support for the EU has grown stronger after the signing of the Maastricht Treaty. Similarly, Lubbers and Jaspers (2011), using longitudinal data from a Dutch panel, report that the educational divide in Euroscepticism increased between 1990 and 2008. The authors attribute this trend primarily to an increasing sense of cynicism towards politics and a heightened perception of ethnic threat among individuals with lower levels of education. Finally, Sani and Magistro (2016) analysed European Social Survey data from 2002 to 2012 in twenty European countries. The results of this study suggest that while trust in the European Parliament experienced an overall decline after the economic crisis of 2008 and 2009, this decline was particularly pronounced among less educated individuals.

Institutional Integration and the Educational Divide in EU Support

The preceding literature review indicates that the educational divide in EU support is the result of economic, political, and cultural factors. Furthermore, it highlights that this educational divide has expanded over time, coinciding with the increasing prominence of these factors. Yet, why have these economic, political, and cultural influences become more salient? Is there a common, EU-specific underlying reason, or do these trends simply mirror (global) temporal dynamics? In this article, we argue that the long-term process of European institutional integration is a pivotal yet largely neglected explanation. Before expanding our reasoning, it is important first to clarify what we mean by European institutional integration. In general terms, the 1957 Treaty of Rome can be seen as the official starting point for institutional integration in Europe, when six countries founded what was then called the European Economic Community (EEC) and has since gradually developed into today's twenty-seven-member European Union. The empowerment of core bodies such as the European Commission and the European Court of Justice, together with the latest modifications laid out in the Treaties of the European Union, has increasingly pooled the national sovereignty of EU countries. Progressive institutional integration has resulted in the current multi-level governance system, in which decision-making is shared between national governments and EU institutions (Pierson and Leibfried 1995). In fact, the relative importance of institutions distinguishes European integration from globalization, as the latter is driven by a broader range of factors and processes, including technological advancement and innovations in financial markets (Krieger-Boden and Soltwedel 2013, 1428).

In more specific terms, however, we build on Balassa's (1961) classical account and understand by institutional integration all institutional 'measures designed to abolish discrimination between economic units belonging to different national states' (ibid., 1). Balassa distinguished five distinct but interrelated stages of regional integration which can be applied in the case of the EU. First, a *free-trade area* is formed, abolishing internal tariffs and quotas among member countries.

Second, a *customs union* establishes common external tariffs and quotas. Third, a *common market* eliminates restrictions on internal factor movements. Fourth, an *economic union* leads to a significant degree of policy coordination and legal harmonization. Fifth and finally, *total economic integration* is achieved, with economic policies determined and implemented at a supranational level.

Balassa's perspective on regional integration has proved remarkably prescient in the context of European institutional integration, the development logic of which has closely followed the Balassa steps (Sapir 2011). After the EEC institutionalized a free trade area and thus removed internal trade barriers in 1958 (first stage), the Customs Union of 1968 determined common rules for trade with non-members (second stage). Next, measures were introduced to fully liberalize the movement of goods, services, capital, and workers, reaching an institutional high point in the form of the Single European Act of 1986 and the launch of the European Common Market in 1993 (third stage). European institutional integration has also aimed to co-ordinate national macroeconomic policies (fourth stage). An important historical example of this is the introduction of the EMS in 1979, which linked the currencies of participating countries through the European Exchange Rate Mechanism (ERM) in order to prevent monetary instability. Moving beyond mere coordination, further institutional steps have been taken to address macroeconomic policy at the supranational level (fifth stage), exemplified by the establishment of the Economic and Monetary Union (EMU) in 1999. This decision, which introduced the euro as a common currency and created the European Central Bank (ECB), is arguably the most significant milestone in the history of European institutional integration.

Thus, from the beginning, the primary focus of European institutional integration has been to promote economic integration (Agur, Dorrucci, and Mongelli 2007; Moravcsik 1999).[1] The specifically economic nature of European institutional integration has been described in terms of an asymmetry between 'negative integration' and 'positive integration' (for example Leibfried 2015; Scharpf 1996; Scharpf 1999; Scharpf 2010). While negative integration is a market-making process aimed at the removal of economic barriers, positive integration refers to measures intended to correct negative market effects, for instance in the form of labour market regulations. As described above, the process of European institutional integration has heavily prioritized market-making over market-correcting efforts. Indeed, to date, the EU has not developed a strong social dimension that could act as a counterweight to negative integration (Ferrera 2017). This asymmetry means that European institutional integration has progressed in a way that is particularly beneficial to the highly educated, who are likely to thrive in a European system of increasingly integrated markets. By contrast, the interests of less highly educated individuals are largely unaddressed in this process, making concerns and fears about the EU more likely to grow within this section of the population.

Moreover, as a result of progressive European institutional integration since the 1950s, EU institutions have become more salient to European citizens over time. While European integration was once a non-issue for the general public, and European elections were mere popularity tests for national governments (Reif and Schmitt 1980), the issue has become increasingly relevant to many voters (Hobolt, Spoon, and Tilley 2008). Researchers have labelled this a shift from 'permissive consensus' – where citizens agreed with elites when it came to the pooling of sovereignty – to 'constraining dissensus' (Hooghe and Marks 2008). Hooghe and Marks (2008, 13) claim that the scope and depth of European integration have perceptibly increased and their effects have been magnified because these effects are part of a broader breakdown of national barriers giving rise to mass immigration and intensified economic competition. A noticeable sign of the waning permissive consensus was the decrease in support for the EU after the Maastricht decision on the EMU, commonly referred to as the 'post-Maastricht blues' (Eichenberg and Dalton 2007; Guinaudeau and Schnatterer 2017).

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[1]While a two-way relationship exists between institutional integration and economic integration, research suggests that the effect of institutional integration on economic integration is stronger than the reverse effect of trade deepening on institutional integration (Agur et al. 2007).

Taking these concurrent processes into account, we argue that European institutional integration widens the educational divide in support for the EU. At the beginning of the institutional integration process, the EU was a relatively vague, un-institutionalized project that was broadly aimed at promoting peace and prosperity in post-war Europe. This arguably explains the high levels of public support for European integration in its early developmental stages (see Anderson and Hecht 2018). However, with the expansion of European institutions, their specific economic impetus, with its asymmetric benefit structure, has become more and more apparent. Thus, we expect that the implications of the economic left-behind thesis for EU support should increasingly manifest in line with increasing European institutional integration. Specifically, we expect that the highly educated – who benefit most from progressive integration – will continue to express high levels of support for the EU, whereas individuals with lower levels of education become increasingly sceptical or even opposed to the EU.[2]

In addition, we posit that the same rationale extends to arguments linking political and cultural factors with the educational divide in EU support. As EU institutions grow in significance, disparities in political and cultural beliefs among educational groups are likely to play a more significant role in shaping levels of support for the EU. For instance, the institutionally guaranteed freedom of movement of workers likely magnifies how political and cultural perceptions affect EU support across educational lines. While individuals with higher education levels may perceive the free movement of workers as an opportunity for economic growth, international cooperation, and cultural exchange, those with lower education levels, often relying on political cues from Eurosceptic anti-establishment parties, might increasingly perceive the EU project as a threat to the domestic labour market, national sovereignty, and cultural identity (take the Brexit vote as a case in point, for example, Hobolt 2016).

Thus, in short, we propose the following hypothesis:

Hypothesis *The level of support for the EU is similarly high across all educational groups when the level of institutional integration is low. As institutional integration progresses, a gap opens up between the highly educated and those with lower levels of education, as the former remain firmly supportive of the EU while the latter become gradually less supportive.*

Empirical Strategy

In order to test our theoretical argument empirically, we require three pieces of information: (1) long-term data on individual support for the EU, (2) corresponding details of individuals' levels of education, and (3) a measure that captures the extent of European institutional integration in member states over time. Based on these data points, we attempt to model statistically how support for the EU is shaped by individual educational attainment and whether this relationship varies with the existing degree of institutional integration in the country of an individual's residence.

Measurement

Support for European integration

We measure individual support for the EU using data from the European Commission's Eurobarometer survey. Pooling all eighty-five relevant waves covering the EU-15 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom) between 1976 and 2014,[3] we

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[2]While we acknowledge that the impact of education on the economic returns from progressive European institutional integration may not be entirely uniform and could vary across characteristics like the sector of employment, occupation, or levels of skill specificity, our article primarily concentrates on the overarching impact of education. Our emphasis is on deriving general insights rather than delving into nuanced differences.

[3]Having used the publicly available Mannheim Eurobarometer Trend File (Schmitt and Scholz 2005) for the period 1976–2002, we updated the remaining years ourselves.

draw on the following survey item: *Generally speaking, do you think that (your country's) membership of the European Community/European Union is (1) a good thing, (2) neither good nor bad, or (3) a bad thing?* We turn the three response categories into a binary variable, with a value of 1 indicating support for the EU and a value of 0 indicating indifference or disapproval.

This item has been widely used as an indicator of EU support (for example Anderson and Reichert 1996; Carey 2002; Eichenberg and Dalton 2007) and serves the purpose of our study, as it captures diffuse (regime) approval over an extensive timeframe. By contrast, more specific indicators of EU support, such as preferences on the preferred speed of European integration, are available only for shorter periods and thus impede our long-term perspective. However, acknowledging the potential multidimensionality of EU support (De Vries 2018; De Vreese, Azrout, and Boomgaarden 2019), we will assess the impact of using some of these shorter time series on the sensitivity of our results.

Figure 1 shows the percentage of individuals who support the EU in each EU-15 country across the entire sampling period. The data are weighted, adjusting for socio-demographic criteria and the fact that more than one sample per wave was drawn for reunified Germany (East and West Germany) and the United Kingdom (Great Britain and Northern Ireland). The graph shows that average levels of support vary widely across the EU-15, with some member states exhibiting levels of support consistently above 50 per cent (see Luxembourg and the Netherlands), while support in other countries stays consistently below this threshold (for example Austria). In addition, country-specific trends reveal substantial variation in support levels over time. In particular, a significant decline in support for European integration can be seen in many countries (for example Belgium and Germany) in the 1990s, reflecting public discontent with the Maastricht Treaty, a phenomenon – as mentioned above – known as the post-Maastricht blues (see Eichenberg and Dalton 2007).

European institutional integration

European integration is characterized by its geographically concentrated nature and its historical progression, driven primarily by institutional advancement (Krieger-Boden and Soltwedel 2013). To measure the precise degree of institutional progress, an additive index of institutional participation by countries at the European level has been developed at the ECB (Dorrucci et al. 2002). This index meticulously accounts for institutional changes by assigning scores to each (economically) relevant event of European institutional integration from the inception of the European Community in 1957 onwards. These events are grouped into the five Balassa stages of regional integration (Balassa 1961), which closely reflect the historical institutional development of the EU as discussed in the section 'Institutional integration and the educational divide in EU support'.

To illustrate how the index works, we provide a few examples that show how it scores significant institutional events in each of the five stages. For instance, the index considers the abolition of quotas (index score of 4) a crucial event for forming a free-trade area (first stage) and completing the customs union (second stage). Moreover, the directive of 1988 requiring full liberalization of capital movements (index score of 5) is understood as a seminal event in establishing a common market (third stage). As another example, the launch of the EMS in 1979 (index score of 4) enters the index as an important development in building an economic union (fourth stage). Finally, introducing a single monetary and exchange rate policy in 1999 (index score of 5) is seen as a key event on the way to total economic integration (fifth stage). More details on the measurement criteria, indicators, and scores used to construct the index can be found in Dorrucci et al. (2002, 33–41).

The first version of the index included only the six founding members but was later expanded to incorporate the remaining nine EU-15 countries that joined the EU between 1973 and 1995, covering the years from 1957 to 2004 (Dorrucci et al. 2005). Krieger-Boden and Soltwedel (2013) revised the index by time-smoothing data over accession periods and taking into account pre-accession membership of the European Free Trade Association as well as exemptions of some acceding countries, such as Denmark and the UK, from the Schengen Area and the EMU. More recently, Tober (2022) updated the index for the years from 2005 to 2014 based on another
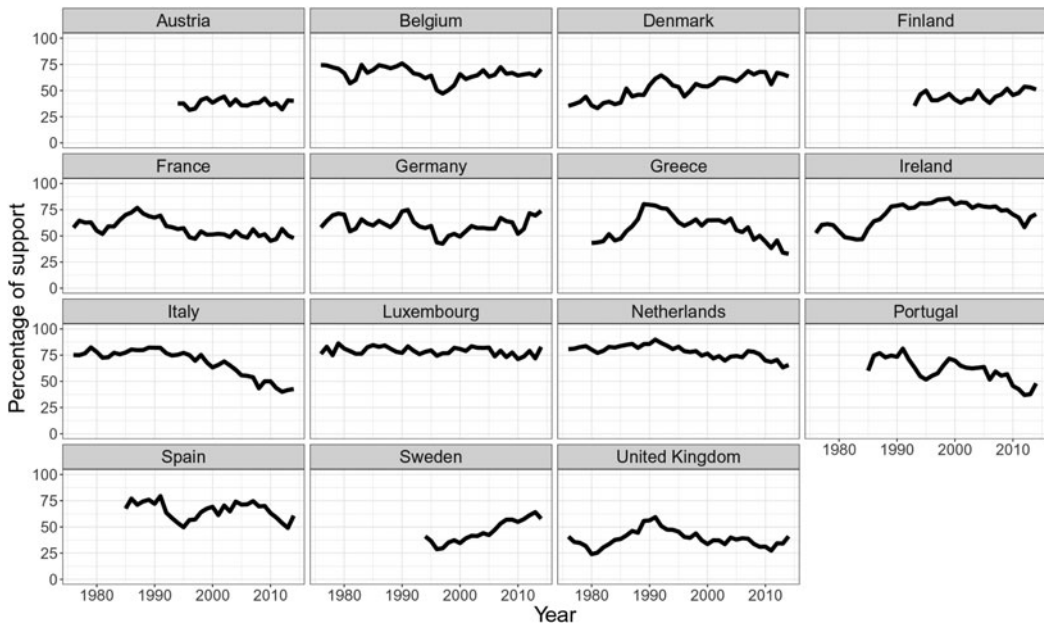
Figure 1. Percentage of individuals supportive of the EU in the EU-15, 1976–2014 (weighted data).

ECB index capturing the most economically important institutional integration events over this period (for this ECB index, see Dorrucci et al. 2015). An example of an important event of institutional integration in this period is the establishment of the Single Supervisory Mechanism that was implemented in 2014 as part of the European Banking Union (index score of 2).

Based on this updated index, Figure 2 plots the level of European institutional integration in each EU-15 country between 1957 and 2014. The light lines in the background of each panel indicate the trends in other countries. The graph clearly shows the institutional head start enjoyed by the six founding member states (Belgium, France, Germany, Italy, Luxembourg, and the Netherlands) in the early decades of European integration compared to countries that joined the EU in later years. Although the six founding members commonly exhibit the highest levels of institutional integration at given points in time, moments also appear where one or other of the founding countries falls slightly behind their peers, for instance when France withdrew from the 'currency snake' in 1974 or when Italy abandoned the rules of the ERM in 1992. Such cases of reversed institutional integration highlight the non-linear and cross-nationally differentiated nature of the European institutional integration process and underscore the importance of theoretically and empirically distinguishing the effects of institutional integration from mere time dynamics.

Educational attainment

To measure respondents' educational attainment, we rely on the following question from the Eurobarometer: *How old were you when you finished your full-time education?* The answer categories range from *up to 14 years* to *22 years and older*. Following previous research (for example, Hakhverdian et al. 2013; Kuhn et al. 2016), we transform this scale into a three-item categorical variable where low educational attainment stands for those who finished their education at fifteen years of age or younger, medium represents those finishing their full-time education at sixteen to nineteen years old, and high covers all respondents who were twenty or more years old when they finished education. These intervals roughly correspond to the completion of lower secondary, upper secondary, and tertiary education. We exclude those individuals who are still studying due to our (partial) focus on the labour market returns of education.
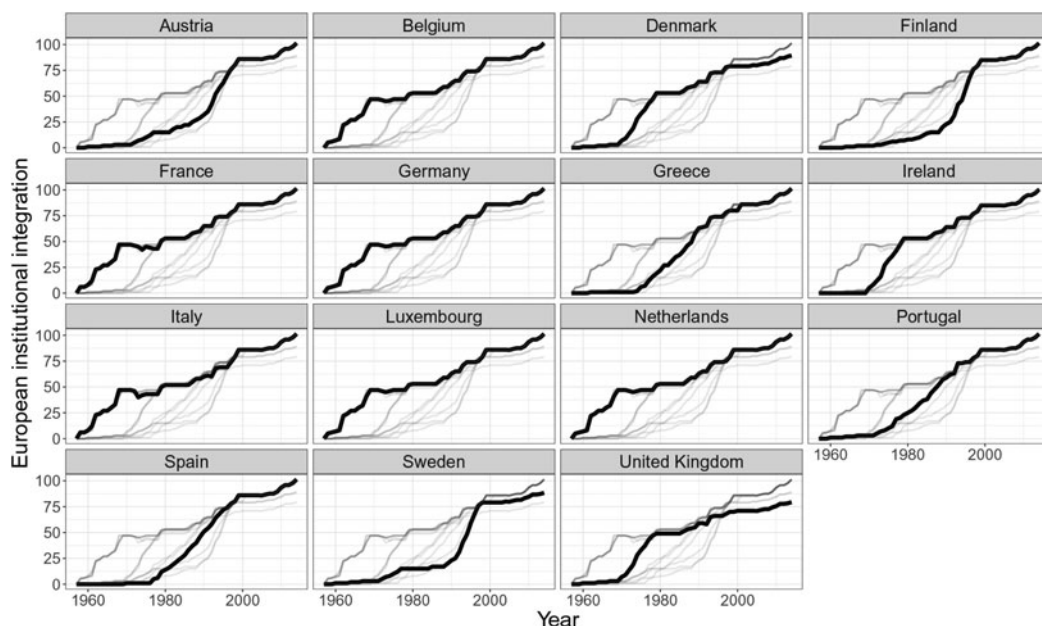
Figure 2. European institutional integration in the EU-15, 1957–2014.

This measure of education is admittedly crude and has two major shortcomings. Firstly, it may not fully capture differences in schooling intensity, as variations in starting ages of compulsory education across countries and potential gap years in educational trajectories are not considered. Secondly, the uniform duration of different types of educational programmes within and across countries masks qualitative distinctions between qualifications, resulting in differences in competencies and labour market value. However, research also suggests that the duration of schooling is strongly correlated with other education indicators (Schröder and Ganzeboom 2014). Therefore, while our choice is partly influenced by a lack of alternatives in the Eurobarometer, we contend that this measurement approach serves as an acceptable proxy for the level of education.

Figure 3 plots the percentage of individuals supportive of the EU against the level of European institutional integration conditional on our three categories of educational attainment. The data are pooled across space and time; thus, a dot can refer to multiple countries and years (all the country-year observations at that particular value of European institutional integration). This descriptive exercise provides supporting evidence for our argument that deepening levels of institutional integration are associated with larger educational divides in support for the EU. While levels of EU support among the highly educated remain relatively stable as institutional integration progresses, the relationship becomes increasingly negative as we move to medium and low levels of education, which suggests that higher institutional integration reduces EU support, in particular, among less highly educated citizens. However, this descriptive analysis does not control for alternative explanatory factors nor does it account for potential country- and time-specific variation. Specifically, relying solely on Figure 3 makes it challenging to determine whether the observed correlation is a result of European institutional integration or an inherent time-related pattern. Thus, our modelling approach will address these issues in detail below.

Control variables
In the subsequent regression analysis, we consider a series of additional explanatory factors that might influence support for the EU at both the individual and country levels. At the individual
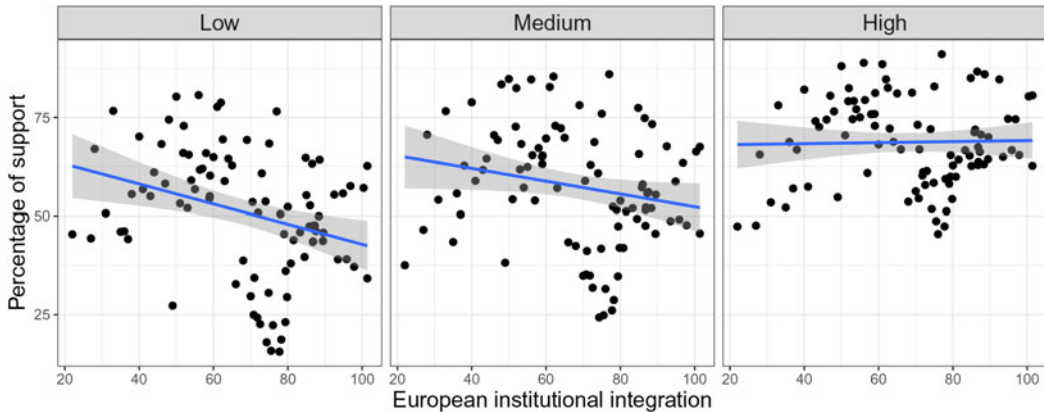
Figure 3. Percentage of individuals supportive of the EU conditional on European institutional integration and educational attainment (weighted data).

level, we rely on additional variables from the Eurobarometer surveys to account for respondents' age, gender, marital status, self-placement on a political Left-Right scale (ranging from 1 = Left to 10 = Right), and whether or not they are unemployed[4] or retired. Another potentially important individual determinant of support for European integration is income. However, we do not control for income for two reasons. First, the Eurobarometer does not measure income in a consistent manner that would allow between- and within-country comparisons, as the applied income categories vary between countries and survey waves. Second, and more importantly, conditioning on income would cause overcontrol bias (see Elwert and Winship 2014), as education is a crucial determinant of income and thus controlling for income would impede the identification of the causal effect of education on support for the EU.

At the country level, we control for the annual level of unemployment (obtained from the AMECO database) as a measure of the overall socio-economic situation of a country, annual social security transfers as a percentage of GDP (obtained from the OECD National Accounts Statistics database) as a measure of the generosity of the welfare state, and the annual degree of globalization as captured by the KOF Globalisation Index (Gygli et al. 2019) as an alternative cause of structural change in the observed period.

Statistical specification

To model the impact of education and European institutional integration on support for the EU, we estimate Bayesian logistic mixed models. The regression formula is given by:

$$\text{Response}_{ict} \sim \text{Bernoulli}\left(P(\text{Support}_{ict})\right)$$

$$\text{logit}\left(P(\text{Support}_{ict})\right) = \text{Education}_{ict}\beta_1 + \text{Integration}_{ct}\beta_2 + (\text{Education}_{ict} \cdot \text{Integration}_{ct})\beta_3$$
$$+ x'_{ict}\lambda_1 + z'_{ct}\lambda_2 + \text{Country}'_{c-1}\lambda_3 + \eta_t + \xi_{ct} + \psi_\alpha + \epsilon_{ict}$$

$$\beta_1, \beta_2, \beta_3, \lambda_1, \lambda_2, \lambda_3 \sim \text{Normal}\,(0, 1)$$

$$\eta_t, \xi_{ct} \sim \text{Student}\,(4, 0, 1)$$

$$\psi_\alpha \sim \text{Student}\,(3, 0, 2.5)$$

where Response_{ict} is the binary response of individual i from country c at time t to the Eurobarometer question asking whether European integration in one's country is a good (= 1)

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[4]It is well-established empirically that individual unemployment is inversely related to a person's level of education (e.g. Nickell 1979), and thus controlling for the former may capture part of the causal effect of the latter. However, given that the causes and consequences of individual unemployment are complicated, we decided to control for this severe labour market outcome nonetheless.

or a neutral/bad (= 0) thing. $P(\text{Support}_{ict})$ is the probability that an individual considers the EU a good thing, which we constrain to the probability space between 0 and 1 using the logit-link function. On the right-hand side of the regression equation, Education_{ict} is the individual's level of education (low, medium, or high), Integration_{ct} is the degree of European institutional integration in country c at time t, and ($\text{Education}_{ict} \cdot \text{Integration}_{ct}$) is the interactive term between these two variables of interest. We expect the corresponding coefficient β_3 to be positive, signalling an increasing divide along educational lines as European institutional integration progresses.

In addition, x'_{ict} and z'_{ct} are vectors of individual- and country-level controls, ψ_α is the grand mean of all responses across time and space, and ϵ_{ict} is the error term. To account for the cross-classified structure of the data, that is countries measured over time with different respondents at each time point, we include country-fixed slopes ($\text{Country}'_{c-1}$) as well as variance components for years (η_t) and country-years (ξ_{ct}).[5] This structure allows us to distinguish the effect of European institutional integration from general time-related patterns and mitigates the influence of other country- and time-specific factors, such as the changing composition in the level of education over time due to an increasing share of highly educated individuals.

We estimate these parameters in a Bayesian framework based on 5,000 Markov chain Monte Carlo iterations (of which 2,000 are discarded as burn-in to ensure better posterior approximation) using the `brms` package in R (Bürkner 2017). The Bayesian approach handles complex inference problems effectively (Jackman 2009) and tends to produce conservative results in non-linear hierarchical models with a small number of groups and cross-level interactions (Stegmueller 2013). We put normal priors with mean 0 and a standard deviation of 1 on all population-level effects. Since our full sample consists of 822,430 complete observations (820,688 when country-level controls are included), this prior will be easily overcome by the data. For the variance components, we follow the recommendation by Gelman (2006) and Gelman et al. (2008) and apply weakly regularizing priors from the half-student-t family. Finally, to improve convergence and enhance comparability between regression coefficients from binary and continuous variables, we centre the latter and scale them by two times their standard deviation (Gelman 2007).

Results

Figure 4 presents standardized logit coefficients (posterior means) and 95 per cent credible intervals from three models: (1) a base model with no interaction term included, (2) a model that includes the interaction between education and European institutional integration, and (3) a version of the interaction model that additionally accounts for other country-level factors. Since the coefficients of control variables in a regression are difficult to causally interpret (Keele et al. 2020), we discuss only our variables of interest below.

As expected, we find that higher levels of education are associated with more support for the EU. The effect is particularly strong for highly educated individuals. By contrast, we find that greater levels of European institutional integration are negatively associated with support for the EU. To provide a more intuitive understanding of the logit coefficients, Figure 5 presents average predicted probabilities of the effects of both variables on support for the EU. We calculate these average predicted probabilities by holding our main variables of interest at fixed values (the three levels of education and five equally spaced values from the full observed range of European institutional integration, respectively) while allowing the remaining variables to take on all values observed in the dataset (cf. Hanmer and Kalkan 2013). The corresponding predictions are based on 1,000 draws from the posterior distribution. Looking first at the effect of education (Panel A), the results suggest that moving from a low to a medium level of education is associated with an increase of roughly 7 percentage points in the probability of EU support (from 52 per cent to 59

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[5]Including country-random effects instead of country-fixed slopes proved computationally too expensive. However, the two approaches are analytically equivalent (see Hoffman and Walters 2022, 676).
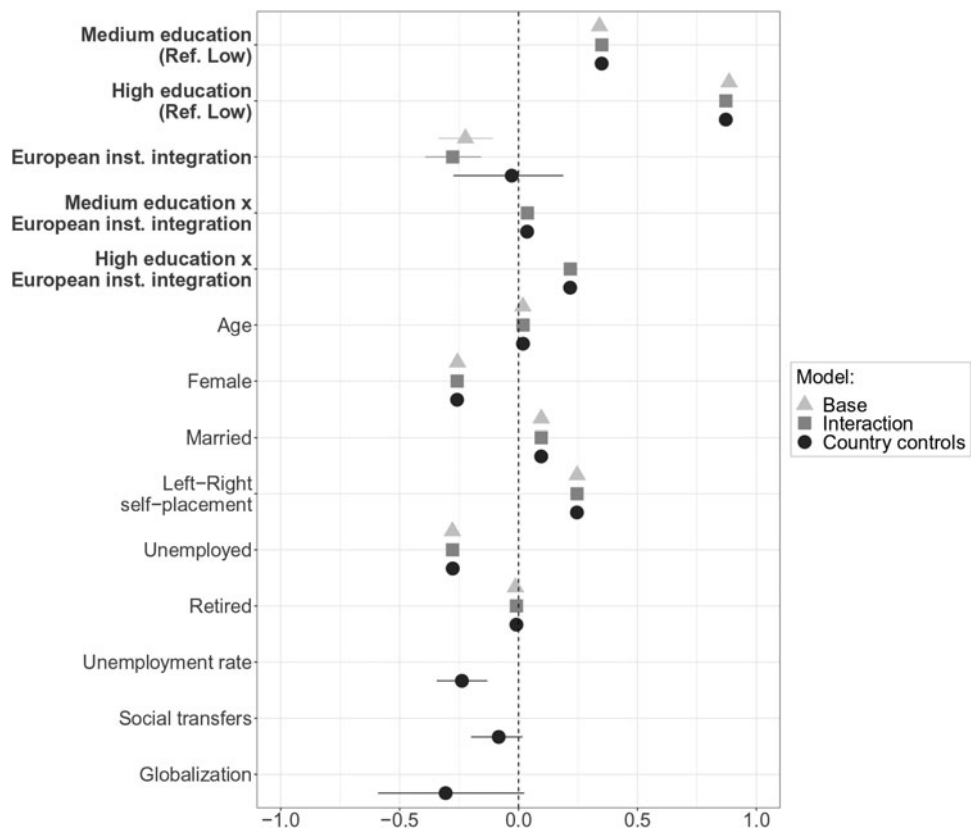
Figure 4. Standardized logit coefficients (posterior means) and 95 per cent credible intervals from Bayesian logistic mixed models.
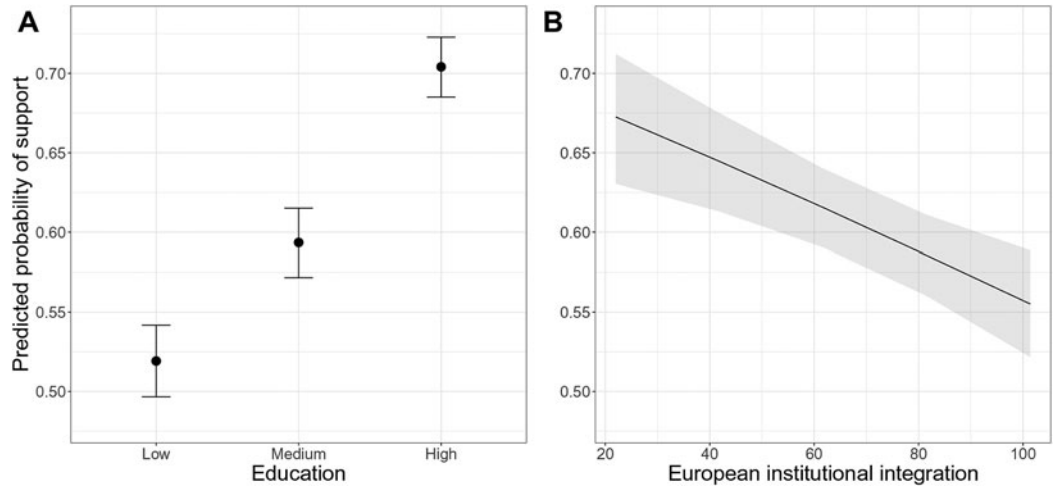

Figure 5. Average predicted probabilities of supporting the EU conditional on education (Panel A) and European institutional integration (Panel B), base model.

per cent). In turn, moving from a medium to a high level of education leads to an additional increase of 11 percentage points in the probability of supporting the EU (from 59 to 70 per cent). In the case of the country-specific degree of European institutional integration (Panel B), we find that a one standard deviation increase in the level of integration (about equal to a 15 point increase in the index or the difference between the UK and the most integrated countries in 2005) yields a decline of roughly 2 percentage points in the probability of supporting the EU. Simulating a change from the lowest to the highest observed value of European institutional integration reduces the probability of support by roughly 12 percentage points.

We argue above that the progressive trend of European institutional integration results in an increasing split in the degree of support for the EU along educational lines. To test this argument, our second and third models, seen in Figure 4, add interaction terms between European institutional integration and the level of education. In line with our argument, we find a positive, statistically significant interactive relationship that holds when other country-level controls are included. To facilitate interpretation, Figure 6 shows the effect of European institutional integration on the average predicted probability of EU support conditional on education. The resulting graph is remarkably similar to our descriptive Figure 3. The probability of EU support among the highly educated remains relatively stable at around 70 per cent as European institutional integration increases. Since support among these individuals is already at very high levels when the degree of institutional integration is low, it may be subject to a ceiling effect with relatively little room for further increases. From this point of view, the stable trend over time is impressive.

By contrast, support among individuals with medium and low educational attainment declines substantially with increased integration, in particular among the low attainment group. In the case of the latter, a one standard deviation increase in European institutional integration is associated with a decline of roughly 3 percentage points in the probability of EU support. Over the entire observed range of European institutional integration, the probability of support decreases by about 15 percentage points among those with low levels of education. For individuals with medium educational attainment, the corresponding declines are roughly 2.5 percentage points in response to a one standard deviation increase in European institutional integration and 13 percentage points over the full observed range of European institutional integration.

Sensitivity of main results. We report a series of sensitivity tests in the Online Appendix that assess whether our main findings persist under alternative specifications. First, we estimate our base model with survey weights (see Fig. A1). Second, we include a random slope for education in our interaction model (see Fig. A1). Third, we additionally control for a squared transformation of the political Left-Right scale (see Fig. A2). Fourth, we include variables capturing egotropic and sociotropic economic concerns (see Fig. A2). Fifth, we add a measure of exclusive national identity (see Fig. A2). Sixth, we assess the sensitivity of our education coding using a standardized version of the original variable from the Eurobarometer (see Fig. A3). Seventh, we use two alternative response variables. The first of the two asks the respondents whether they think their country has benefited from EU membership (see Fig. A4). The second alternative response variable measures an individual's preferred speed of European integration (see Fig. A4). Finally, we test the robustness of our results by using data from five waves of the European Social Survey instead of the Eurobarometer (see Fig. A5). Our main findings are substantially unaffected by these alternative modelling and measurement strategies.

Explorative event study of the 1992 EMS crisis. In attempting to shed additional light on the relationship between institutional integration and the educational divide in EU support, an interesting question to consider is the following: What happens to the educational gap in EU support in the event of reversed institutional integration? To explore this question, Figure 7 presents the results from an event study that examines the impact of the 1992 EMS crisis on the approval of the EU in Italy and the UK. On 16 September 1992, both countries were forced to exit the ERM amidst economic turmoil and speculative attacks on their currencies, which made maintaining fixed exchange rates economically too costly. This day is considered a pivotal event in modern financial
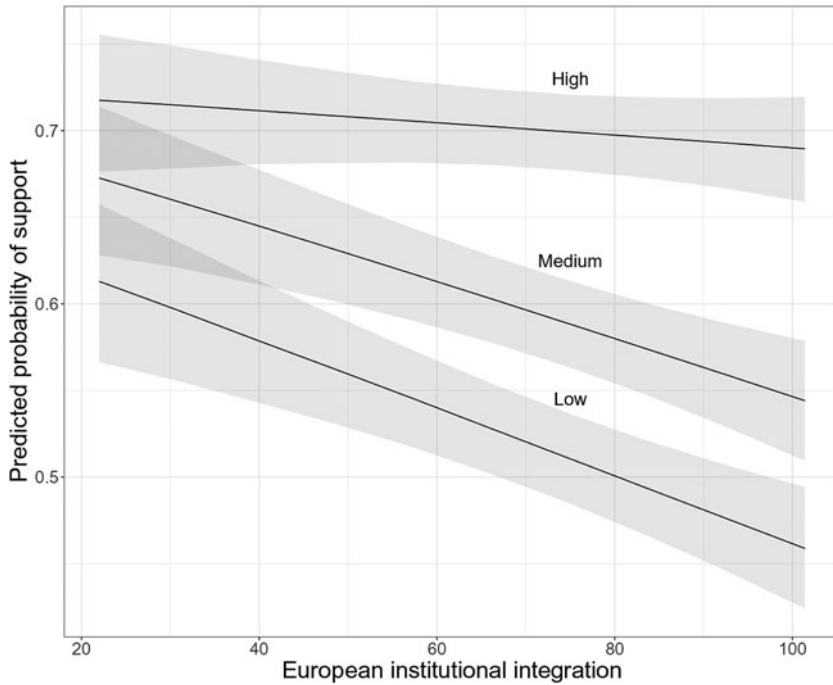
Figure 6. Effect of European institutional integration on the average predicted probability of EU support conditional on education, interaction model.
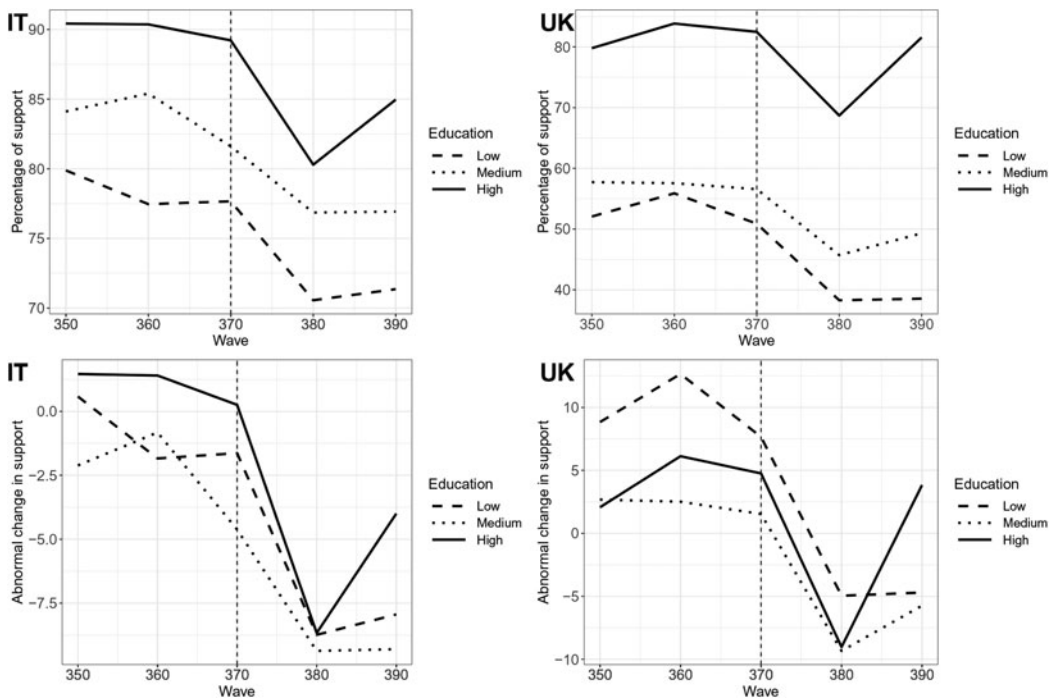

Figure 7. Event study of the impact of the 1992 EMS crisis on EU support across educational groups in Italy (IT) and the United Kingdom (UK) (weighted data).
Note on Eurobarometer waves: 350 = spring 1991, 360 = autumn 1991, 370 = spring 1992, 380 = autumn 1992, 390 = spring 1993.

history, and its economic ramifications (including higher unemployment in the two countries) as well as its extensive media coverage earned it the title 'Black Wednesday' (Eichengreen 2008, 168–78). The crisis lends itself to an event-study design for two reasons. First, the forced exit of both countries from the ERM provides a clear-cut historic intervention. Second, the Eurobarometer coincidentally surveyed both countries immediately after they left the ERM.

The horizontal axes of all panels in Figure 7 list five Eurobarometer waves covering a period before and after the intervention. More specifically, it covers support among our three educational groups over a period of two years between the spring of 1991 (wave 350) and the spring of 1993 (wave 390). We take the spring wave of 1992 (wave 370) as the cutoff point, after which we might expect the results of the crisis to be apparent. The data collection from the subsequent autumn wave of 1992 (wave 380) started on 28 September 1992 in Italy and 23 September 1992 in the UK. Hence, in both cases, the fieldwork took place very shortly after these countries were forced to leave the ERM on 16 September 1992.[6]

The upper panels show that the average level of support for the EU in each educational group dropped substantially between the spring and autumn waves of 1992, with the relatively stable pre-intervention levels of support (individuals with medium educational attainment in Italy excluded) suggesting that this drop was indeed due to the EMS crisis. However, the upper panels reveal that support for the EU among citizens with high educational attainment quickly rebounded, recovering about half of the losses seen in the Italian case and almost all losses seen in the case of the UK by the spring of 1993. By contrast, average support levels among individuals with low and medium levels of education remained largely flat after the initial drop.

The lower panels compare these observed trends to the mean levels of support indicated in the five Eurobarometer waves immediately preceding the observation period (autumn 1988 to autumn 1990), where *abnormal change* equals the *observed trends* minus the *mean of pre-observation trends*. The results suggest that support for the EU in both Italy and the UK fell below the pre-observation mean after the exit of these countries from the ERM, with the change relative to the pre-observation mean being similar across educational groups. At the same time, this analysis also reveals the rapid recovery of support among the highly educated. In the UK in particular, support among individuals with high educational attainment dropped sharply below the pre-observation mean after the intervention (autumn 1992) but regained a level above the pre-observation mean by the next wave (spring 1993). Similar dynamics can be seen in the case of Italy, although somewhat less pronounced.

These results indicate that although European institutional integration is an important determinant of the growing educational divide in EU support, reversing institutional integration does not necessarily lead to a convergence of EU-related preferences among educational groups. The observed patterns reveal a common initial response to the ERM crisis across all education levels, with EU support declining among all of them. However, individuals with higher levels of education exhibited a swift recovery in their approval of the EU, whereas the same rebound did not occur for those with lower and medium levels of education. In our view, this implies that highly educated citizens quickly reassessed European integration as advantageous (whether in economic, political, and/or cultural terms), despite the challenges posed by the ERM. Conversely, for individuals with lower and medium levels of education, the ERM crisis and its economic implications seemed to reinforce existing concerns. More generally, our explorative event study suggests that the impact of reversed institutional integration on the educational divide in EU support may hinge on the specific circumstances surrounding such a reversal. A reversal in response to a shock (as seen in the ERM crisis, where a macroeconomic shock occurred) is unlikely to close the gap in EU support across educational lines.

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[6]The UK withdrew the pound sterling from the ERM on 16 September 1992. Italy did not officially leave the ERM, but devalued the lira twice, on 14 and 16 September 1992, thus effectively abandoning the ERM.

Concluding Discussion

How can we explain the growing educational divide in support for the EU over time? This article has argued that the historical process of European institutional integration is itself a crucial and so far overlooked factor behind this trend. Drawing on eighty-five waves of the Eurobarometer survey (1976–2014) and applying a Bayesian mixed-effects modelling approach, we have found that progressive institutional integration substantially widens the educational gap in support for the EU. Specifically, our findings show that citizens with low and medium levels of education become increasingly less supportive of the EU as institutional integration progresses, whereas the highly educated remain strongly in favour of the EU. Thus, as institutional integration advances, education assumes a progressively important role in shaping EU support. We explain this by arguing that European institutional integration leads to an increasingly bifurcated perception of the economic, political, and cultural implications of the EU between individuals with lower and higher levels of education.

A limited number of preceding studies have also indicated that the impact of education on support for the EU has intensified over time, which is attributed to the heightened significance of economic, political, and cultural factors (Hakhverdian et al. 2013; Lubbers and Jaspers 2011; Sani and Magistro 2016). However, the reasons behind the increased salience of these influences remained unclear; in particular, whether there exists an EU-specific underlying cause for this trend or if it merely mirrors broader global temporal dynamics. Distinguishing between an institutional effect and a mere time effect is crucial, as the trajectory and speed of European institutional integration is the result of concrete political decision-making and institutional reforms.

We believe that these insights yield wider policy implications. If institutional integration itself triggers Euroscepticism among low and medium educated individuals, this signals challenges for the democratic legitimacy of the EU. How can this dilemma be overcome? While the results of our explorative event study suggest that simply reversing European institutional integration may not be a solution to this problem, our findings do not necessarily imply that winning the support for the less highly educated is an impossibility. For instance, developing a stronger social dimension of European integration could have the potential to slow down or reverse the widening educational divide in support for the EU, provided that a stronger 'Social Europe' shifts citizens' perceptions of the EU as an elite project towards a view of the EU as benefiting wider sections of society. In this regard, existing research suggests that less highly educated citizens are indeed more in favour of EU-level social policy initiatives than the highly educated (Baute and Meuleman 2020; Baute and Pellegata 2022; Gerhards et al. 2019). However, as EU support is not driven exclusively by economic interests and welfare concerns, a more socially oriented EU may not be a panacea to counteract growing Euroscepticism among the lower educated.

We conclude this article by highlighting three remaining questions for future research. First, our research is unable to assess the relative importance of economic, political, and cultural factors for the educational gap in support for the EU. While a straightforward explanation for our findings is the asymmetric distribution of economic costs and benefits associated with advancing EU institutionalization, it is essential to recognize that political and cultural factors may also serve as catalysts. In this context, political entrepreneurs could potentially play a crucial role, as they have increased the salience of supranational issues in the public debate (Walter 2021), and extant work shows that the less highly educated are more receptive to their anti-EU framing (Goodwin, Hix, and Pickup 2020). We anticipate that populist parties have experienced greater success in mobilizing less highly educated voters as institutional integration has progressed. Additionally, cultural factors, such as exclusive national identities and perceptions of ethnic threat, may have been heightened among the less educated segment of the population with the advancement of European institutional integration (cf. Lubbers and Jaspers 2011). Therefore, future research should examine the interplay between macro-level EU institutionalization processes on the one hand and micro-level economic, political, and cultural determinants of support for the EU on the other.

A second promising direction for future research is to expand the scope of countries under investigation. In particular, it may be fruitful to examine whether institutional integration has had a similar effect on educational differences in support for the EU in its Eastern member states, which joined the EU in the enlargements of 2004 and 2007. *A priori*, it is not clear whether we should expect similar dynamics among these newer members. For instance, in contrast to the EU-15, the Eastern countries' late entry to the EU implies that they joined at a time of already very high levels of European institutional integration, which might attenuate the potential impact of further integration. Moreover, given that the economies of the Eastern EU members are structurally different from those of the EU-15, the potential economic benefits of progressive European institutionalization might not primarily benefit highly educated individuals, but could also accrue to the less highly educated segments of these countries' societies. Comparing educational differences in support for the EU between old and new member states should thus enhance our understanding of how and to what degree economic considerations explain the effect of progressive European institutional integration on the educational divide in public attitudes towards the EU.

Finally, our results have potential implications beyond the EU context. While we acknowledge the distinctiveness of European integration, we believe that our findings may apply to other contexts as well, including at the national level. In this regard, we consider the EU and its predominantly economically driven institutional integration process (which allows for relatively concrete predictions of who should gain and who should lose out) a significant case study, demonstrating how asymmetries between the winners and losers in progressive institutionalization affect public support for the relevant institution as a whole. Overall, the results of this study suggest that addressing disparities in perceived economic benefits, as well as political and cultural concerns among different segments of the population, is crucial for maintaining the legitimacy of any institution, irrespective of the specific context.

References

Agur I, Dorrucci E and Mongelli FP (2007) Testing the links between institutional integration and trade deepening: Clues from Europe. *Open Economies Review* **18**, 599–612.

Anderson CJ (1998) When in doubt, use proxies: Attitudes toward domestic politics and support for European integration. *Comparative Political Studies* **31**, 569–601.

Anderson CJ and Hecht JD (2018) The preference for Europe: Public opinion about European integration since 1952. *European Union Politics* **19**, 617–638.

Anderson CJ and Reichert MS (1996) Economic benefits and support for membership in the E.U.: A cross-national analysis. *Journal of Public Policy* **15**, 231–249.

Arpino B and Obydenkova AV (2020) Democracy and political trust before and after the great recession 2008: The European Union and the United Nations. *Social Indicators Research* **14**, 395–415.

Balassa B (1961) *The Theory of Economic Integration.* London: Allen Unwin.

Bauer PC and Fatke M (2014) Direct democracy and political trust: Enhancing trust, initiating distrust–or both? *Swiss Political Science Review* **20**, 49–69.

Baute S and Meuleman B (2020) Public attitudes towards a European minimum income benefit: How (perceived) welfare state performance and expectations shape popular support. *Journal of European Social Policy* **30**, 404–420.

Baute S et al. (2018) European integration as a threat to social security: Another source of Euroscepticism? *European Union Politics* **19**, 209–232.

Baute S and Pellegata A (2022) Multi-level blame attribution and public support for EU welfare policies. *West European Politics* **46**, 1369–1395.

Baute S and Tober T (2024) Replication Data for: European Institutional Integration and the Educational Divide in Support for the European Union. Available from https://doi.org/10.7910/DVN/DE74Q4, Harvard Dataverse, V1.

Beaudonnet L (2015) A threatening horizon: The impact of the welfare state on support for Europe. *Journal of Common Market Studies* **53**, 457–475.

Bürkner P (2017) Brms: An R package for Bayesian multilevel models using Stan. *Journal of Statistical Software* **80**, 1–28.

Carey S (2002) Undivided loyalties: Is national identity an obstacle to European integration? *European Union Politics* **3**, 387–413.

De Vreese CH, Azrout R and Boomgaarden HG (2019) One size fits all? Testing the dimensional structure of EU attitudes in 21 countries. *International Journal of Public Opinion Research* **31**, 195–219.

De Vries CE (2018) *Euroscepticism and the Future of European Integration*. Oxford: Oxford University Press.

Dellmuth LM and Chalmers AW (2018) All spending is not equal: European Union public spending, policy feedback and citizens' support for the EU. *European Journal of Political Research* **57**, 3–23.

Dorrucci E, et al. (2002) European integration: What lessons for other regions? The case of Latin America. European Central Bank Working Paper Series: Working Paper No. 185. Available from https://ssrn.com/abstract=358260 (accessed 9 June 2023).

Dorrucci E et al. (2005) The path of European institutional and economic integration: What lessons for Latin America? *Journal of Economic Integration* **20**, 217–251.

Dorrucci E, et al. (2015) The Four Unions 'PIE' on the Monetary Union 'CHERRY': A new index of European institutional integration. ECB Occasional Paper (160). Available from https://ssrn.com/abstract=2548992 (accessed 9 June 2023).

Eichenberg RC and Dalton RJ (2007) Post-Maastricht blues: The transformation of citizen support for European integration, 1973–2004. *Acta Politica* **42**, 128–152.

Eichengreen B (2008) *Globalizing Capital: A History of the International Monetary System*, 2nd ed., Princeton: Princeton University Press.

Elwert F and Winship C (2014) Endogenous selection bias: The problem of conditioning on a collider variable. *Annual Review of Sociology* **40**, 31–53.

Ferrera M (2017) The European social union: A missing but necessary 'political good'. In Vandenbroucke F, Barnard C and de Baere G (eds), *A European Social Union After the Crisis*. Cambridge: Cambridge University Press, 47–67.

Foster C and Frieden J (2017) Crisis of trust: Socio-economic determinants of Europeans' confidence in government. *European Union Politics* **18**, 511–535.

Gabel MJ (1998) Public support for European integration: An empirical test of five theories. *The Journal of Politics* **60**, 333–354.

Gabel MJ and Palmer HD (1995) Understanding variation in public support for European integration. *European Journal of Political Research* **27**, 3–19.

Gelman A (2006) Prior distributions for variance parameters in hierarchical models. *Bayesian Analysis* **1**, 515–533.

Gelman A (2007) Scaling regression inputs by dividing by two standard deviations. *Statistics in Medicine* **27**, 2865–2873.

Gelman A et al. (2008) A weakly informative default prior distribution for logistic and other regression models. *The Annals of Applied Statistics* **2**, 1360–1383.

Gerhards J et al. (2019) *European Solidarity in Times of Crisis: Insights From a Thirteen-Country Survey*. London: Routledge.

Goodwin M, Hix S and Pickup M (2020) For and against Brexit: A survey experiment of the impact of campaign effects on public attitudes toward EU membership. *British Journal of Political Science* **50**, 481–495.

Grauel J, Heine J and Lahusen C (2013) Who is afraid of the (big bad) European Union? European integration and fears about job losses. In Arts W and Halman L (eds), *Value Contrasts and Consensus in Present-Day Europe: Painting Europe's Moral Landscapes*. Leiden: Brill, 19–43.

Guinaudeau I and Schnatterer T (2017) Measuring public support for European integration across time and countries: The 'European mood' indicator. *British Journal of Political Science* **49**, 1187–1197.

Gygli S et al. (2019) The KOF Globalisation Index revisited. *The Review of International Organizations* **14**, 543–574.

Hakhverdian A et al. (2013) Euroscepticism and education: A longitudinal study of 12 EU member states, 1973–2010. *European Union Politics* **14**, 522–541.

Hanmer MJ and Kalkan KO (2013) Behind the curve: Clarifying the best approach to calculating predicted probabilities and marginal effects from limited dependent variable models. *American Journal of Political Science* **57**, 263–277.

Hobolt SB (2005) When Europe matters: The impact of political information on voting behaviour in EU referendums. *Journal of Elections, Public Opinion & Parties* **15**, 85–109.

Hobolt SB (2016) The Brexit vote: A divided nation, a divided continent. *Journal of European Public Policy* **23**, 1259–1277.

Hobolt SB, Spoon J-J and Tilley J (2008) A vote against Europe? Explaining defection at the 1999 and 2004 European parliament elections. *British Journal of Political Science* **39**, 93–115.

Hoffman L and Walters RW (2022) Catching up on multilevel modeling. *Annual Review of Psychology* **73**, 659–689.

Hooghe L and Marks G (2005) Calculation, community and cues: Public opinion on European integration. *European Union Politics* **6**, 419–443.

Hooghe L and Marks G (2008) A postfunctionalist theory of European integration: From permissive consensus to constraining dissensus. *British Journal of Political Science* **39**, 1–23.

Inglehart R (1970) Cognitive mobilization and European identity. *Comparative Politics* **3**, 45–70.

Jackman S (2009) *Bayesian Analysis for the Social Sciences*. Wiley.

Jupille J and Caporaso JA (2022) *Theories of Institutions*. Cambridge: Cambridge University Press.

Kam CD and Palmer CL (2008) Reconsidering the effects of education on political participation. *Journal of Politics* **70**, 612–631.

Keele L et al. (2020) The causal interpretation of estimated associations in regression models. *Political Science Research and Methods* **8**, 1–13.

Krieger-Boden C and Soltwedel R (2013) Identifying European economic integration and globalization: A review of concepts and measures. *Regional Studies* **47**, 1425–1442.

Kriesi H et al. (2008) *West European Politics in the Age of Globalization*. Cambridge: Cambridge University Press.

Kuhn T et al. (2016) An ever wider gap in an ever closer union: Rising inequalities and Euroscepticism in 12 West European democracies, 1975–2009. *Socio-Economic Review* **14**, 27–45.

Leibfried S (2015) Social policy: Left to the judges and the markets? In Wallace H, Wallace W and Pollack MA (eds), *Policy-Making in the European Union*, 7th ed. Oxford: Oxford University Press, 253–281.

Leuffen D, Rittberger B and Schimmelfennig F (2013) *Differentiated Integration: Explaining Variation in the European Union*. Basingstoke: Palgrave Macmillan.

Lipps J and Schraff D (2020) Regional inequality and institutional trust in Europe. *European Journal of Political Research* **60**, 892–913.

Lubbers M and Jaspers E (2011) A longitudinal study of Euroscepticism in the Netherlands: 2008 versus 1990. *European Union Politics* **12**, 21–40.

Lubbers M and Scheepers P (2010) Divergent trends of Euroscepticism in countries and regions of the European Union. *European Journal of Political Research* **49**, 787–817.

McLaren L (2002) Public support for the European Union: Cost/benefit analysis or perceived cultural threat? *The Journal of Politics* **64**, 551–566.

McLaren L (2007) Explaining mass-level Euroscepticism: Identity, interests, and institutional distrust. *Acta Politica* **42**, 233–251.

McLaren LM (2003) Anti-immigrant prejudice in Europe: Contact, threat perception, and preferences for the exclusion of migrants. *Social Forces* **81**, 909–936.

McLaren LM (2012) The cultural divide in Europe: Migration, multiculturalism, and political trust. *World politics* **64**, 199–241.

Moravcsik A (1999) *The Choice for Europe: Social Purpose & State Power From Messina to Maastricht*. UCL Press.

Nickell S (1979) Education and lifetime patterns of unemployment. *Journal of Political Economy* **87**, 117–131.

North DC (1991) Institutions. *The Journal of Economic Perspectives* **5**, 97–112.

Persson M (2015) Education and political participation. *British Journal of Political Science* **45**, 689–703.

Pierson P and Leibfried S (1995) Multitiered institutions and the making of social policy. In Leibfried S and Pierson P (eds), *European Social Policy. Between Integration and Fragmentation*. Washington, DC: The Brookings Institution, 1–40.

Reif K and Schmitt H (1980) Nine second-order national elections: A conceptual framework for the analysis of European election results. *European Journal of Political Research* **8**, 3–44.

Sani GMD and Magistro B (2016) Increasingly unequal? The economic crisis, social inequalities and trust in the European parliament in 20 European countries. *European Journal of Political Research* **55**, 246–264.

Sapir A (2011) European integration at the crossroads: A review essay on the 50th anniversary of Bela Balassa's theory of economic integration. *Journal of Economic Literature* **49**, 1200–1229.

Scharpf FW (1996) Negative and positive integration in the political economy of European welfare states. In Marks G et al. (eds), *Governance in the European Union*. London: SAGE Publications, 15–39.

Scharpf FW (1999) *Governing in Europe: Effective and Democratic?* Oxford: Oxford University Press.

Scharpf FW (2010) The asymmetry of European integration, or why the EU cannot be a 'Social Market Economy'. *Socio-Economic Review* **8**, 211–250.

Schmitt H and Scholz E (2005) The Mannheim Eurobarometer Trend File, 1970–2002. Available from https://doi.org/10.3886/ICPSR04357.v1 (accessed 9 June 2023).

Schröder H and Ganzeboom HB (2014) Measuring and modelling level of education in European societies. *European Sociological Review* **30**, 119–136.

Schuck AR and De Vreese CH (2006) Between risk and opportunity: News framing and its effects on public support for EU enlargement. *European Journal of Communication* **21**, 5–32.

Stegmueller D (2013) How many countries for multilevel modeling? A comparison of frequentist and Bayesian approaches. *American Journal of Political Science* **57**, 748–761.

Teney C, Lacewell OP and De Wilde P (2014) Winners and losers of globalization in Europe: Attitudes and ideologies. *European Political Science Review* **6**, 575–595.

Teney C and Rupieper LK (2021) A new social conflict on globalisation-related issues in Germany? A longitudinal perspective. Available from https://doi.org/10.31235/Osf.Io/4xqke (accessed 9 June 2023).

Tober T (2022) European institutional integration, trade unions and income inequality. *Socio-Economic Review* **20**, 351–371.

van Erkel PFA and van der Meer TWG (2016) Macroeconomic performance, political trust and the great recession: A multilevel analysis of the effects of within-country fluctuations in macroeconomic performance on political trust in 15 EU countries, 1999–2011. *European Journal of Political Research* **55**, 177–197.

Walter S (2021) The backlash against globalization. *Annual Review of Political Science* **2**, 421–442.

Willeck C and Mendelberg T (2022) Education and political participation. *Annual Review of Political Science* **25**, 89–110.