Preferences for redistribution and demand for redistributive policies in Europe

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Abstract

This paper seeks to identify and analyse the economic and non-economic factors associated with European citizens' preferences for income redistribution, as well as the extent to which these preferences translate into consistent voting behaviour. To this end, we employ data from the European Social Survey (ESS) to examine the personal, social, economic, labour market (including status and occupation), and cultural determinants of redistributive preferences across EU member states and candidate countries in the Balkan region. Particular attention is given to the relationship between income inequality, major economic crises (specifically the Great Recession of 2007/2008 and the COVID-19 pandemic), and the evolution of redistributive preferences in Europe. Our findings show that previously established positive relationship between income inequality and pro-redistribution preferences, is moderated by income position, trust in political institutions, altruism, and conservatism.

In the second part of the paper, we focus on a selected group of EU countries and combine ESS data on individual redistributive preferences and self-reported voting behaviour with party-level information from the Chapel Hill Experts Survey (CHES), which provides insights into political parties' stances on state intervention to reduce income inequality. We further investigate the factors influencing the strength of the association between redistributive preferences and subsequent voting choices. Our findings reveal a robust link between strong support for redistribution and voting for parties that advocate redistributive policies. Moreover, we find that individuals situated in the upper tiers of the income distribution, those who exhibit greater political trust, hold favourable views towards immigrants, and identify with left-wing ideologies exhibit a higher consistency between their redistributive preferences and electoral choices.

1. Introduction

During the COVID-19 crisis, concerns about potentially escalating income and wealth inequalities gained significant attention among academics, the public, and policymakers. In response, extensive redistributive measures were introduced across nearly all European countries, irrespective of the governing parties' political orientation. This widespread adoption of redistributive policies stood in stark contrast to the response to the 2008 global financial crisis, when austerity emerged as the prevailing approach. The substantial public spending implemented during the COVID-19 crisis succeeded in averting a sharp and enduring increase in inequality (see Meyer et al., 2025). Nevertheless, the easing of fiscal constraints elicited varied levels of support and enthusiasm, largely due to concerns about the long-term implications of relaxing financial discipline. Beyond crisis periods, public budgetary considerations have traditionally been a key argument for those advocating for a limited governmental role in redistributive policy. However, ideological commitments to the free market, and apprehensions regarding the potentially distortive effects of redistribution on individual behaviour, have played an even more prominent role.

Despite the widespread support such positions receive among large segments of the electorate and within political discourse, income redistribution and social protection through taxation and transfers remain two core objectives of the modern welfare state (Alesina and Giuliano, 2011). Indeed, numerous policy initiatives aimed at reducing inequality continue to persist across virtually all developed economies. Somewhat surprisingly, however, the extent to which the redistributive role of the state reflects voters' preferences has been the subject of relatively limited empirical investigation (e.g., Corneo, 2001; Corneo and Neher, 2015). While the assumption that democracies implement the distributive preferences of the median voter is both intuitively appealing and widely adopted in theoretical models, it is challenged by a range of factors (Harms and Zink, 2003). Uneven political participation across the income distribution, the bundling of redistributive issues with other political domains (such as ideology, values, rights, and trust), opportunistic behaviour by politicians, and the influence of bureaucrats and interest groups may all obstruct the translation of majority-supported levels of redistribution into actual policy outcomes (see, among others, Corneo and Neher, 2015; Herwartz and Theilen, 2017; Roemer and Roemer, 2009; Bénabou, 2000; Yamamura, 2014; Scervini, 2012; Milanovic, 2000).

This paper seeks to analyse the demand for redistributive policies among European citizens and to assess the extent to which such preferences align with voting behaviour. To this end, we first examine the individual, social, economic, labour market (including employment status and occupation), and cultural determinants of preferences for redistribution. Particular attention is paid to the relationship between

income inequality and the evolution of redistributive preferences in Europe, with a specific focus on major crisis episodes—namely, the Great Recession of 2007/2008 and the COVID-19 crisis. Subsequently, we investigate the extent to which stronger preferences for redistribution translate into electoral support for political parties that advocate redistributive policies across Europe. We further identify and map the economic and non-economic factors that influence the strength of this relationship. Empirically, we draw on micro-data from multiple waves of the European Social Survey (ESS), combining information on individuals' redistributive preferences and self-reported voting behaviour with data from the Chapel Hill Experts Survey (CHES), which captures political parties' stances on the role of the state in addressing income inequality.

The paper is structured as follows. The next section provides an overview of the relevant literature concerning the determinants of preferences for redistribution. Section 3 outlines the data sources and key variables employed in the analysis. Section 4 presents, in a step-by-step manner, the empirical methods used to map preferences for redistribution across Europe, along with the corresponding results. Specifically, Section 4.1 offers descriptive evidence on preferences for redistribution (PFR) in Europe and their evolution in conjunction with the major crises of recent decades. Section 4.2 estimates the socio-demographic and cultural profiles associated with PFR, while Section 4.3 examines the role of income inequality in shaping individual preferences within the European context. Section 5 turns to the methodology and findings concerning the relationship between preferences for redistribution and voting behaviour. The analysis in this section is limited to a subset of countries, due to two main constraints: (i) the substantial data processing required to match self-reported individual voting behaviour with party-level information; and (ii) limitations in temporal alignment between waves of the European Social Survey (ESS) and the Chapel Hill Experts Survey (CHES). The selected countries—Germany, Portugal, Slovenia, and Sweden—ensure representation of the major European regions (Western, Southern, Central, and Northern Europe), while also capturing the institutional and cultural diversity across the continent. Section 6 provides a summary of the main findings and concludes.

2. Literature background

The conceptual and empirical background for our analysis is extensive, and providing a detailed review of the literature is beyond the scope of this paper (for recent surveys, see Bonnet et al., 2024, or Mengel and Weidenholzer, 2023). We limit our review here to a selection of key contributions, aimed at illustrating the complexity of the forces at play, ranging from individual economic and non-economic drivers to the

influence of aggregate economic and institutional factors. Although many of the factors discussed are interconnected, they are presented separately for clarity and illustration.

In relation to the drivers of individual preferences for redistribution (PFR), the literature has primarily focused on the role of demographic and economic factors. Women are generally found to have higher PFR, while individuals living with a partner or married tend to have lower PFR. Having children is typically associated with higher PFR, although some studies suggest no effect (see Alesina and Giuliano, 2011; Olivera, 2014; Georgiadis and Manning, 2012). PFR are usually positively correlated with age once other determinants, such as income and education, are accounted for (Georgiadis and Manning, 2012). Several studies have also emphasised the heterogeneity of PFR across demographic groups defined by race, religion, immigration status, and social group identification (Alesina and Ferrara, 2005; Keely and Tan, 2008; Grimalda et al., 2018; Fong and Luttmer, 2009, 2011; Alesina and Stantcheva, 2020; Stegmueller et al., 2012).

Focusing on economic factors, particularly income, the Melzer–Richard (1981) model predicts that individuals with lower incomes are more likely to have stronger preferences for redistribution (PFR). This finding has been consistently confirmed and applies to both subjective and objective income measures in developed and developing countries (Alesina and Giuliano, 2011; Haggard et al., 2013; Olivera, 2014, 2015; Georgiadis and Manning, 2012). Higher levels of education are often associated with lower PFR, due to expectations of higher future income (Alesina and Giuliano, 2011) and, consequently, a reduced willingness to contribute more intensively to redistribution. Individuals also vary in their degree of risk aversion: since redistribution can act as a form of insurance against adverse income shocks, more risk-averse individuals are expected to demand more of it (Varian, 1980; Gärtner et al., 2017). In a related vein, expectations about future fortunes have been incorporated into the so-called POUM (prospects of upward mobility) hypothesis (Benabou and Ok, 2001). According to this hypothesis, some individuals who are currently poorer than the average optimally choose to oppose redistribution policies due to their optimistic expectations of becoming wealthier than average in the future, driven by various factors (e.g., Alesina et al., 2018; Agranov and Palfrey, 2020; Sands, 2017). Personal history, such as experiencing long spells of unemployment, has also been found to weaken the relationship between present income position and PFR (Alesina and Giuliano, 2011; Olivera, 2014).

A substantial body of literature has, rather than focusing solely on an individual's income, examined the role of income inequality (whether actual or perceived) in shaping preferences for redistribution (PFR). Despite the extensive empirical evidence produced, the findings remain inconclusive (Piketty, 1995;

Benabou and Ok, 2001; Haggard et al., 2013; Olivera, 2014, 2015). Many studies suggest that more unequal countries tend to demand more redistribution (Kerr, 2014; Aristei and Perugini, 2010; Magni, 2020). Previous research has also highlighted an increase in preferences for redistribution in Europe during periods of rising inequalities, particularly in the aftermath of the 2008 economic crisis (e.g., Olivera, 2014, 2015).

However, other studies present contrasting findings, suggesting that individuals living in contexts of higher inequality (and with greater acceptance of such inequality) tend to be less supportive of redistribution (e.g., Roth and Wohlfart, 2018; Almas et al., 2020; Buser et al., 2020; Grimalda et al., 2018).

In addition to strictly economic factors, individual cultural and ideological beliefs can shape preferences for redistribution (PFR) and moderate the effects of other drivers, particularly income inequality. These beliefs are linked to individuals' degree of inequality aversion, selfishness, and concern for efficiency (Bolton and Ockenfels, 2000; Engelmann and Strobel, 2004; Fehr et al., 2006). On the other hand, they also influence the perception and tolerability of inequality. Extensive empirical evidence confirms that stronger beliefs in meritocracy and fair opportunities are associated with weaker PFR, as individuals perceive their position on the income ladder as primarily the result of personal effort and responsibility (Alesina and Glaeser, 2004; Fong, 2001; Alesina and Ferrara, 2005; Alesina and Angeletos, 2005). Meritocratic beliefs, in fact, provide a buffer against the exposure to income and wealth inequalities, as trust in personal effort as the main driver of social success diminishes the sense of guilt directed at the rich (Bullock, 2008), while offering a potential pathway for the poor (Mijs, 2021). Experimental studies on the redistribution of income based on merit rather than luck largely support these findings (Krawczyk, 2010; Cappelen et al., 2023). However, Mollerstrom et al. (2015) observe that third-party decision-makers in charge of redistribution do not always compensate for uncontrollable luck. Cappelen et al. (2022) highlight the role of uncertainty regarding the source of income inequality, noting that when it is difficult to identify the causes of inequality, individuals tend to adopt more egalitarian attitudes. Finally, a recent strand of the literature has explored the endogeneity of beliefs in relation to economic status, examining how people form beliefs about the role of effort versus luck to justify their successful economic outcomes (Lobeck, 2023; Valero, 2021). Many of the factors discussed above converge into individual self-positioning in terms of political beliefs and ideology, which can, in turn, influence voting behaviour. The question of whether and to what extent governments should redistribute is one of the primary dividing issues between the political left and right, particularly on economic matters (Alesina and Giuliano, 2011; Alesina et al., 2018). Boeri et al. (2021) suggest that, with the decline of social-democratic parties across Europe, individuals have become more open to voting for new parties emerging from civil society movements.

Another set of factors that can shape individual preferences for redistribution (PFR) and moderate the link between PFR and inequality relates to individuals' trust in politicians and public institutions, which is shaped by their responsiveness, reliability, openness, fairness, and integrity (OECD, 2017; Murtin et al., 2018; OECD, 2021). Once again, empirical evidence on this issue is not conclusive, allowing for contrasting interpretations. Some studies have found that low and declining trust in government (particularly regarding its effectiveness and reliability) undermines support for redistributive policies (see Hetherington, 2006; Rudolph and Evans, 2005; Kuziemko et al., 2015; Stantcheva, 2021). Support for a larger welfare state and stronger redistribution tends to decrease when citizens believe that corruption is widespread, leading to concerns about wasteful spending and the ineffectiveness of benefits in reaching those who need them most (Algan et al., 2016). However, other studies offer different conclusions. For instance, using informational experiments, Peyton (2020) finds that increasing or decreasing people's trust in government by providing information about civil servants' honesty or corruption does not lead to significant or statistically meaningful changes in demand for redistribution. In a study using data from Sweden, Edlund (2006) suggests that individuals who distrust the welfare state may be more concerned about the limited resources allocated to it, and thus support increased social spending. Additionally, those who perceive themselves as treated unfairly by other policies may demand more progressive taxation as a form of compensation. Conversely, those who view the government as open and fair may be less inclined to support redistributive taxation (Scheve and Stasavage, 2016).

3. Data and key variables

Our empirical analysis is based on two primary data sources: (i) the European Social Survey (ESS), which provides not only demographic, social, and economic background information but also individual-level data on preferences for redistribution, values, and self-reported voting behaviour of European citizens; and (ii) the Chapel Hill Expert Survey (CHES), which offers data on party positioning regarding ideology, policy issues, and international relations for national parties in many countries around the world. The first dataset is primarily used to map citizens' preferences for redistribution (PFR) across the European Union, considering individual demographic, social, economic, and cultural characteristics, as well as the country-level degree of income inequality (using data from the World Income Inequality Database – WIID). In the second stage of the analysis, ESS data on PFR and voting behaviour are linked, for a select number of countries, to party-level information from the CHES.

3.1. European Social Survey (ESS) data

The European Social Survey (ESS) is a biennial survey that measures a diverse array of attitudes, beliefs, and behaviours (including voting), along with a wide range of socio-demographic and economic variables. We use data from all eleven waves of the ESS, spanning from 2002 to 2023. In total, we include data from 31 countries, of which 26 are EU Member States (with data for Malta missing), and the remaining 5 are EU candidate countries from the Western Balkans.[1] The countries vary significantly in the number of ESS rounds they have participated in, with some participating in all waves (Belgium, Germany, Spain, Finland, France, Hungary, Ireland, the Netherlands, Poland, Portugal, Sweden, and Slovenia), while others participated in only one wave (Albania, North Macedonia, Romania, and Kosovo). The total sample size for our analysis is 424,585 respondents; the distribution of this sample over time and across countries is provided in Table A1 in the Appendix.

The ESS variables used in the analysis are listed and defined in Table A2 in the Appendix. Our key variable, preferences for redistribution (PFR), is derived from the question: *"Using this card, please say to what extent you agree or disagree with each of the following statements: the government should take measures to reduce differences in income levels".* The variable generated from this question (labelled 'gincdif' in the ESS dataset) is one of the core ESS variables, making it available for all countries and waves. Responses are recorded on a 5-point Likert scale, where 1 represents "Agree strongly" and 5 represents "Disagree strongly". In our analysis, we reverse the scale so that higher values correspond to higher preferences for redistribution. Additionally, from the discrete PFR variable, we created two dichotomous variables: (i) PFR_d1, which is coded as 1 if PFR equals five (agree strongly) and 0 otherwise; and (ii) PFR_d2, which is coded as 1 if PFR equals four (agree) or five (agree strongly), and 0 otherwise. These two dummy variables are used to test the robustness of our main results.

The set of demographic, social, and economic individual characteristics includes gender, age, education (primary, secondary, tertiary), household size, the number of children under 14 years old in the household, marital status, labour market status (employed, student, unemployed, retired, and other inactive groups), and income decile. Gender, education, marital status, and labour market status are incorporated into the regression analysis as a set of dichotomous variables, with each representing a distinct category (for example, for education, we have two dichotomous variables distinguishing between the three education levels).

[1] Albania, Kosovo, Montenegro, North Macedonia and Serbia. At the moment of writing of this report Kosovo has the status of "Potential candidate". See: https://commission.europa.eu/strategy-and-policy/policies/eu-enlargement_en

To analyse the cultural correlates of preferences for redistribution, we make use of the extensive set of cultural and values-related variables available in the ESS, which have been selected in accordance with the theoretical and empirical literature outlined in the previous section:

- Altruism variables (such as beliefs that people must be treated equally and have equal opportunities, and that it is important to help others and care for their well-being) range from 1 (Not like me at all) to 6 (Very much like me)[2]. Higher values indicate greater altruism.
- Trust variables (including trust in politicians, the country's parliament, and the legal system) range from 0 (No trust at all) to 10 (Complete trust). Higher values reflect higher levels of trust
- Political Conservativism - Liberalism variables (Self-placement on a left-right scale[3], attitudes towards the LGBT population,[4] immigration (immigration is good or bad for the country's economy and whether many or few immigrants should be allowed from poorer countries outside Europe[5]), as well as religiousness. These variables are measured on different scales, with higher values indicating a more liberal stance.
- Satisfaction variables (such as satisfaction with the national government, the functioning of democracy, and the current state of the economy) range from 0 (Extremely dissatisfied) to 10 (Extremely satisfied).

As detailed in section 4.2, due to the high correlation between some of these variables, we use principal component analysis (PCA) to summarise the information they provide into four components, which are then used in the regression analysis.

Finally, we use the ESS data on voting behaviour, specifically the variable 'prtvd(*)' (which indicates the party voted for in the last national elections in the country), as the key to link individual voting behaviour with party characteristics described in the CHES data.

[2] The original variable ranges from 1 (Very much like me) to 6 (Not like me at all) and was recoded so that those who express the highest altruism score 6 and those expressing the lowest altruism score 1.

[3] The original variable ranging from 0 (Left) to 10 (Right) was recoded so that those who place themselves on the left side of the political spectrum have 10 and those who are on the right have 0 on the scale; hence., higher values describe more liberal beliefs.

[4] The original variable was agreement with the statement "Gays and lesbians free to live life as they wish", expressed on a 5 point Likert type scale, ranging from 1 (Agree strongly) to 5 (Disagree strongly). The variable was recoded so that the higher values represent more liberal beliefs. i.e. 1 (Disagree strongly) to 5 (Agree strongly).

[5] The original variable ranges from 1 (Allow many to come and live here) to 4 (Allow none) and was recoded so that higher values represent more liberal beliefs. i.e. 1 (Allow none) to 4 (Allow many to come and live here).

3.2. Chapel Hill Expert Survey (CHES) data

The Chapel Hill Expert Survey (CHES) provides expert assessments of the positions of political parties across a wide range of domains[6]. These include support for traditional values, liberal lifestyles, and multiculturalism, as well as a comprehensive set of economic issues, such as views on the role of the state in the economy and market deregulation. For the purposes of our analysis, we utilise data from the regular CHES waves conducted in 2002, 2006, 2010, 2014, and 2019, as well as the Special Editions undertaken in 2017 and 2023. The 2023 edition is particularly relevant, as it is the only wave conducted after the COVID-19 pandemic.

To capture parties' positions on redistribution, we use the variable 'lrecon', which reflects the general stance of a party on the economic left–right spectrum. Experts evaluate this dimension based on the following prompt: "Parties can be classified in terms of their stance on economic issues such as privatisation, taxes, regulation, government spending, and the welfare state. Parties on the economic left want government to play an active role in the economy. Parties on the economic right want a reduced role for government." Experts respond using a scale from 0 (extreme left) to 10 (extreme right). For consistency with the PFR variable in our analysis (where higher values denote stronger preferences for redistribution), we recode this variable inversely, so that 0 corresponds to the extreme right and 10 to the extreme left. This variable is employed in our study due to its availability across all CHES waves (2002–2023) and its strong correlation with both the party's position on redistribution (0.91) and other economic policy positions (e.g., market deregulation and taxation).

To link the ESS and CHES datasets, we use the voting behaviour data from the ESS alongside party identifiers from the CHES. The matching process was carried out using string matching and manual adjustment of party names across the two datasets. We also aligned the data by election year, as the ESS question on voting refers to the most recent national election, whereas the CHES data corresponds to the most recent election year (this is recorded as a variable in the CHES dataset).

Our analysis is limited to a subset of countries for two main reasons: (i) the substantial effort required to process and match self-reported voting behaviour from the ESS with party-level data from the CHES; and (ii) limitations in the temporal alignment between ESS waves and CHES surveys. The selected countries—Germany, Portugal, Sweden, and Slovenia—ensure coverage across Europe's main geographical regions (Western, Southern, Northern, and Central Europe) and capture a diversity of institutional and cultural contexts. For these four countries, available ESS and CHES data were successfully matched for all years

[6] See: https://www.chesdata.eu.

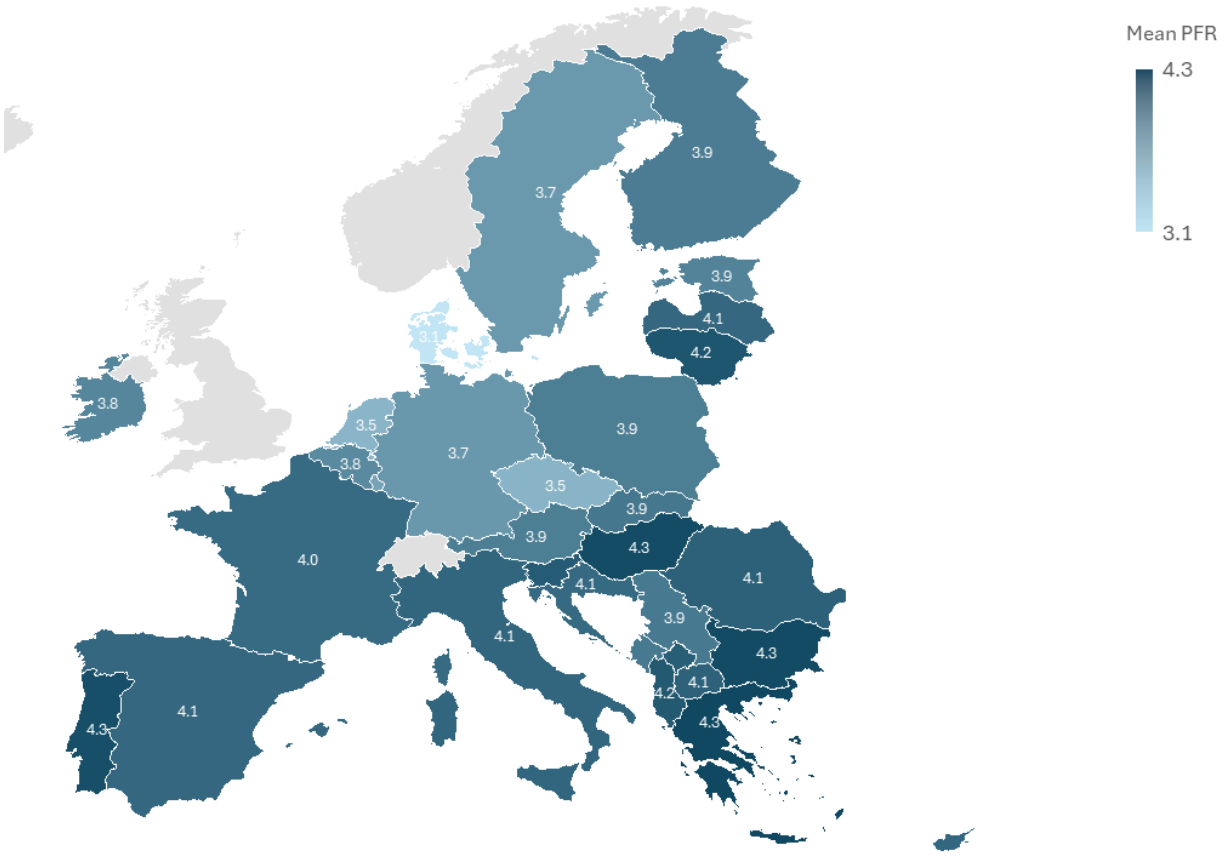
between 2002 and 2023. Matching was achieved in approximately 80% of cases: for 52,936 individuals out of 66,039 who reported having voted, we were able to identify the corresponding party positions on the economic and political left–right spectrum.

4. Preferences for redistribution - Trends and determinants

4.1. Descriptive statistics on preferences for redistribution

Figure 1 displays the average levels of preferences for redistribution (PFR) across EU Member States and candidate countries, based on all available years of data.

Figure 1. Government should reduce differences in income levels – mean on a 5-point scale (1-Strongly disagree; 5 – Strongly agree)

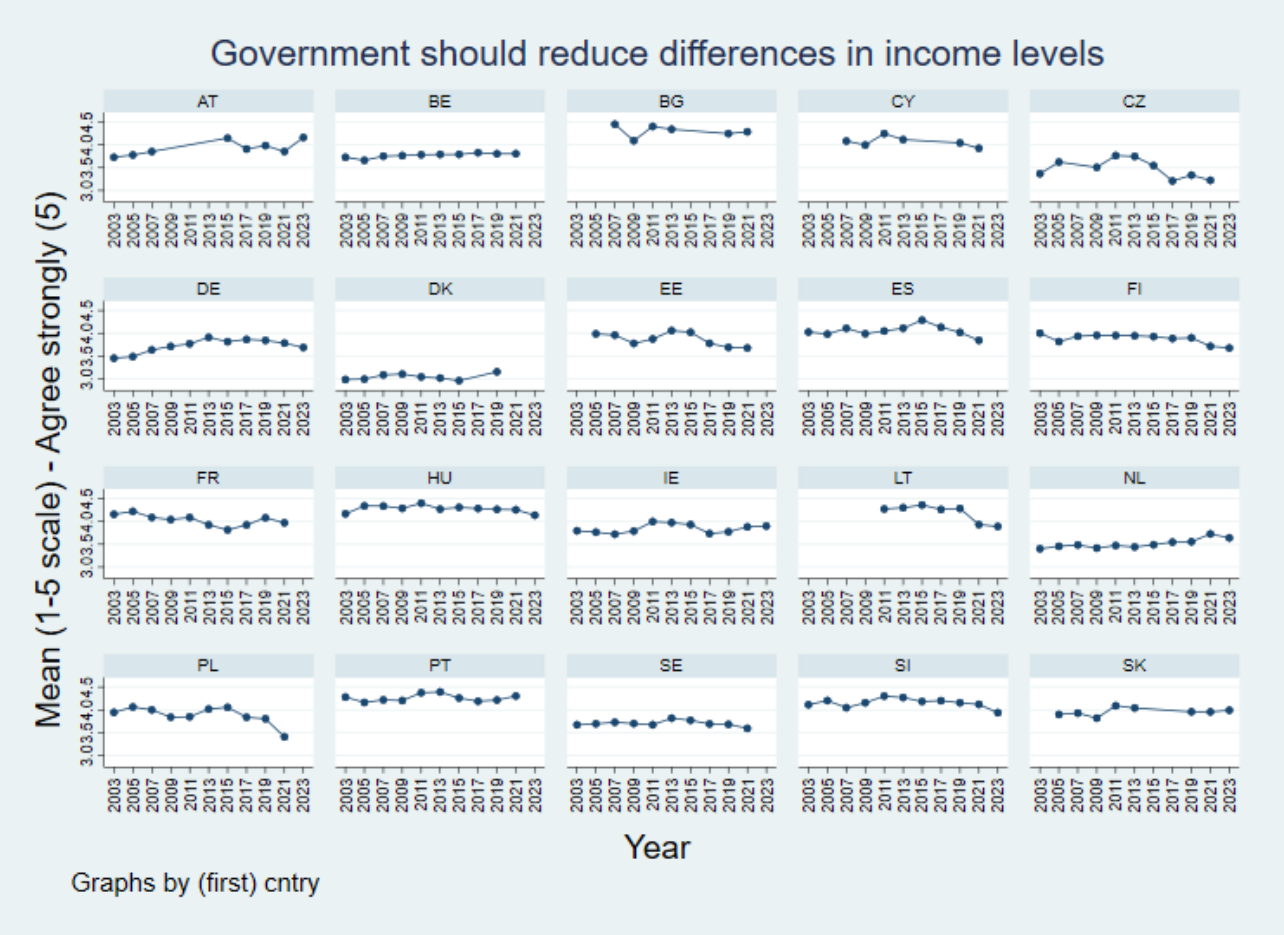


Source: Own calculation based on ESS data (2002-2023)

Preferences for redistribution tend to be highest in Southern Europe, with Greece, Portugal, and Bulgaria exhibiting the strongest support. Notably, Hungary and Lithuania also show comparatively high levels of PFR. Conversely, weaker preferences for redistribution are observed in a number of countries located primarily in continental and Northern Europe, including Denmark—which records the lowest average level of PFR (3.1)—as well as the Netherlands, the Czech Republic, and Luxembourg.

Figure 2 presents the trends of the average PFR over the analysed period (2003-2023) in countries for which we have data for 6 waves or more. The diagrams indicate a high variability of trends between countries. While some countries have stable PFR, such as Belgium, Hungary and Denmark (with a standard deviation across waves of 0.06 scale points or less), in other countries, such as the Czech Republic, Poland and Germany, variability of PFR across waves is much higher and the standard deviation is 0.18 or higher.

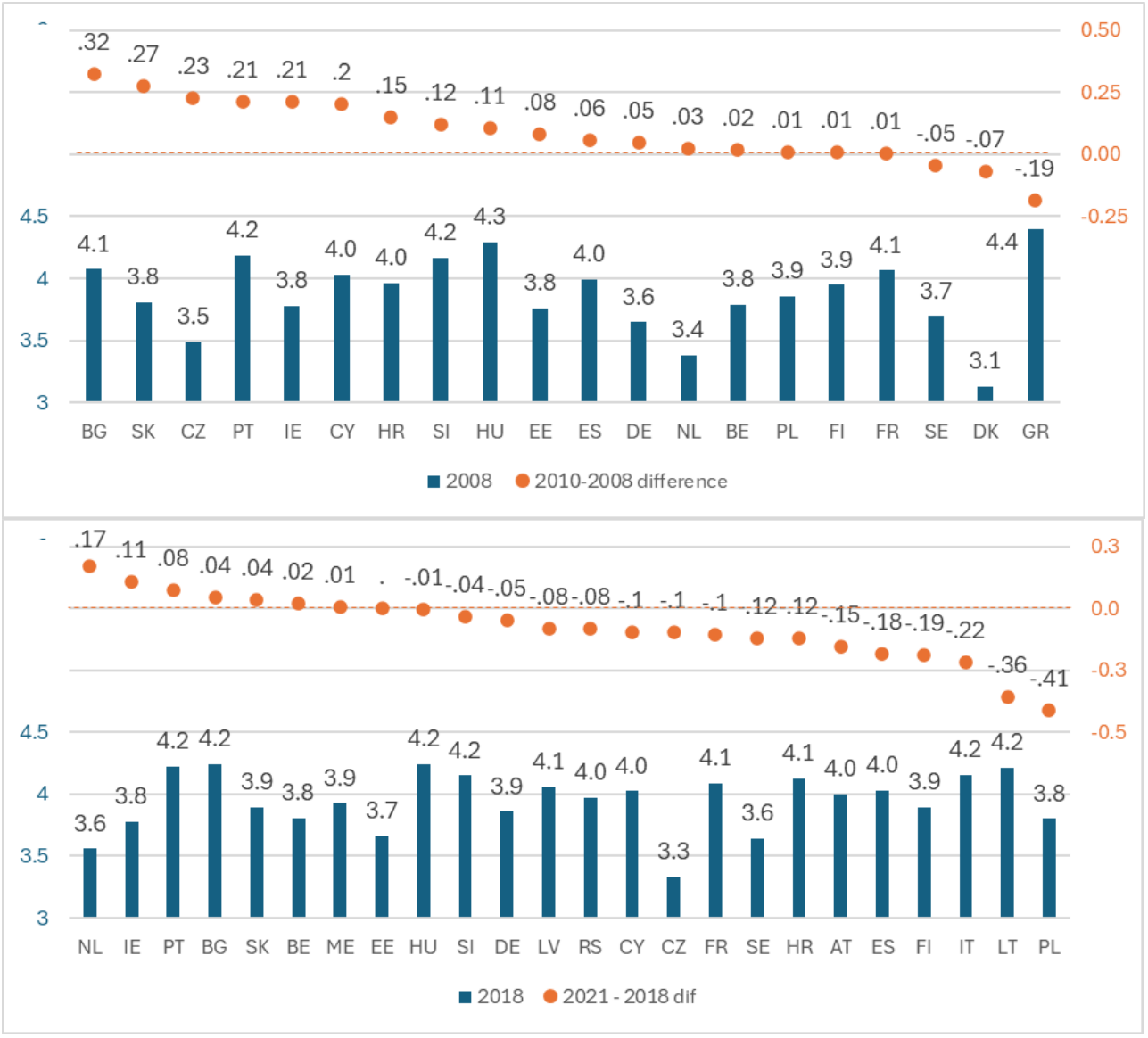
Figure 2. PFR trends (2003-2023) for countries which have data for 6 or more waves



Source: Own calculation based on ESS data (2002-2023)

Previous research has shown that preferences for redistribution (PFR) tend to rise in Europe during periods of increasing inequality, particularly in the context of economic crises (Olivera, 2014; 2015). The 2008 economic crisis led to a widespread surge in PFR, largely in response to the austerity measures implemented by many governments. As illustrated in the upper panel of Figure 3, the most significant increases were observed in Southern and Central European countries—namely Bulgaria, Slovakia, Czechia, Cyprus, Slovenia, and Hungary—as well as in Ireland. Olivera (2014) found that greater increases in monthly unemployment rates during the crisis were associated with stronger increases in demand for redistribution.

Figure 3. PFR changes after the 2008 economic crisis (upper) and after the COVID-19 crisis (lower panel)



Source: Own calculation based on ESS data (2002-2023)

In contrast, countries in Western and Northern Europe—such as Germany, the Netherlands, Belgium, Finland, France, Sweden, and Denmark—as well as Poland, did not show statistically significant changes in PFR. Interestingly, Greece, despite experiencing the most severe crisis and harshest austerity policies, recorded a decline in PFR.

The economic crisis triggered by the COVID-19 pandemic had a markedly different impact on demand for redistribution (Figure 3, lower panel). While preferences for redistribution increased in a few countries—notably the Netherlands, Ireland, and Portugal—most EU member states experienced either a decline or no significant change. The most substantial decreases were observed in Poland and Lithuania, with PFR falling by 0.41 and 0.36 scale points, respectively. Significant reductions also occurred in Italy, Finland, Spain, Austria, Croatia, Sweden, France, and Czechia. In the remaining EU countries, changes in PFR were not statistically significant. This muted or negative response in redistribution preferences may be attributed to the extensive support measures implemented across Europe during the pandemic, which likely mitigated economic hardship and reduced perceived need for further redistribution. An alternative explanation, put forward by Cappelen et al. (2021), suggests that the crisis underscored the role of individual decision-making and responsibility, potentially increasing public tolerance for its unequal economic outcomes.

4.2. Socio-demographic and cultural profiles associated with preferences for redistribution

In this section, we employ regression analysis to estimate the socio-demographic and cultural profiles associated with preferences for redistribution (PFR). The full list of variables used in the analysis is presented in Table A2 in the Appendix. Drawing on individual-level data from the ESS, we assess the extent to which these factors independently contribute to explaining variation in PFR. Although the PFR variable is measured on a Likert-type ordinal scale, previous research (e.g., Norman, 2010; Brown, 2011) shows that ordinary least squares (OLS) estimation often produces comparable results to those obtained from models designed for ordinal data. As such, we use OLS as our primary estimation strategy due to the ease of interpretation. To test the robustness of our findings, we also estimate an ordinal probit model using the original PFR variable, along with probit models using the recoded binary PFR variables: PFR_d1 (coded as 1 if the respondent "strongly agrees" with redistribution, and 0 otherwise) and PFR_d2 (coded as 1 if the respondent "agrees" or "strongly agrees", and 0 otherwise). In all specifications, we include county-time fixed effects to account for random variations in PFR caused by external shocks. For all estimation procedures (OLS, ordinal probit, and probit), we employ robust clustered standard errors at the

county-year level. Although the covariates are individual-level variables, residual autocorrelation may indeed arise due to higher-level aggregation at the country-year level.

Socio-demographic profiles

When analysing the socio-demographic characteristics associated with PFR, we consider the following variables: gender, age (and its square), marital status, household size, number of children, education, labour market status, and income decile. We estimate the following model:

$$PFR_{tci} = \alpha + \beta_2 * SocDemo_{tci} + \gamma_{tc} + \varepsilon_{tci} \quad (1)$$

Where the level of PFR of individual i, in country c, at ESS round t is regressed on the vector of socio-demographic characteristics $SocDemo_{tci}$ listed. In addition, we control for the country-round fixed effects Y_{tc}.

Table A3 in the Appendix reports the regression results. We present findings for the full sample of countries, as well as for subsamples representing six European regions (Western EU, Northern EU, Southern EU, Baltics, Central EU, and the Balkans)[7]. The results suggest that the main determinants of PFR are largely consistent across regions. Men, married individuals, and those with children tend to have lower PFR, whereas a larger household size is associated with higher PFR. Higher education and income are both linked to lower PFR. Compared to the employed, students exhibit lower PFR levels, though this effect is significant only in Central Europe. Conversely, the unemployed, pensioners, and other inactive individuals display higher PFR than those who are employed. PFR generally increases with age but peaks around 55, after which the effect begins to decline. The Balkan countries emerge as an exception to the overall picture, as many variables do not reach statistical significance—likely due to their significantly smaller sample size.

7 Countries are divided into six regions: 1. Western Europe: DE, IE, NL, FR, AT, BE, LU; 2. Northern Europe: FI, SE, DK; 3. Southern Europe: ES, PT, GR, IT, CY; 4. Baltics: EE, LT, LV; 5. Central Europe: CZ, HU, PL, SI, BG, SK, HR, RO; 6. Balkans: RS, ME, MK, XK, AL.

Cultural profiles

Given the high correlation among variables describing individual cultural profiles, we begin our analysis with a principal component analysis (PCA) to identify key dimensions and mitigate multicollinearity issues. The results reveal the presence of four distinct factors (see Table A4 in the Appendix). To enhance interpretability, we apply an oblique (promax) rotation. The first factor *(Trust)* exhibits the highest loadings on variables measuring trust in and satisfaction with institutions. The second factor *(Immigrants)* captures positive attitudes toward immigrants, as defined by two ESS variables: whether immigrants are seen as good or bad for the economy, and preferences regarding immigration levels from poorer countries. The third factor *(Altruism)* is characterised by strong loadings on variables related to personal values of equality and helping others. The fourth factor *(Conservatism)* is most strongly associated with religiousness but also includes negative attitudes toward the LGBT population and self-placement on the left-right political spectrum.

In the next step of the analysis, we analyse the association of cultural values to PFR by adding the four factors extracted from the principal component analysis ($CultD_{tci}$) to the baseline model described in Equation 1. The augmented empirical model reads as follows:

$$PFR_{tci} = \alpha + \beta_2 * SocDemo_{tci} + \beta_3 * CultD_{tci} + \gamma_{tc} + \varepsilon_{tci} \quad (2)$$

Results, reported in Table 1, indicate that *Trust/Satisfaction with institutions* is negatively associated with PFR. This correlation is likely explained by negative general attitudes toward institutions, which suggest that citizens perceive the government as insufficiently addressing income inequality. This can be interpreted in the context of the PFR variable's definition: when satisfaction with the work done by institutions is low, citizens tend to demand more extensive redistributive action. In other words, a lack of trust or dissatisfaction with institutional performance might drive individuals to seek stronger government intervention in the form of redistribution.

Consistent with ex-ante expectations, *altruism* is positively associated with PFR, indicating that part of the stronger PFR is driven by altruistic motives. Furthermore, there is a negative correlation between PFR and *conservatism*, suggesting that, as expected, political orientation and ideology play a significant role in shaping PFR. Left-leaning or more liberally oriented individuals are generally more supportive of redistribution. These results are largely consistent across all six European regions.

Lastly, there is a positive correlation between favourable attitudes towards *migrants* and PFR in the overall sample. However, this relationship appears to be driven primarily by the subsamples from Western, Nordic, and Southern EU countries. The coefficients for the other groups of countries (Baltics, Balkans, and Central EU) are not statistically significant.

Table 1. Association between PFR and cultural factors (summary)

	all	Western Europe	Northern Europe	Southern Europe	Baltics	Central Europe	Balkans
Trust/Satisfaction with institutions	-0.076***	-0.078***	-0.107***	-0.052***	-0.075***	-0.074***	-0.066**
	(0.004)	*(0.005)*	*(0.009)*	*(0.008)*	*(0.011)*	*(0.007)*	*(0.024)*
Attitudes towards Immigrants	0.085***	0.133***	0.188***	0.087***	0.012	-0.009	-0.031
	(0.007)	*(0.008)*	*(0.017)*	*(0.016)*	*(0.009)*	*(0.007)*	*(0.021)*
Altruism	0.102***	0.096***	0.132***	0.085***	0.085***	0.092***	0.166***
	(0.004)	*(0.007)*	*(0.005)*	*(0.009)*	*(0.014)*	*(0.007)*	*(0.029)*
Conservatism	-0.086***	-0.098***	-0.093***	-0.072***	-0.052***	-0.078***	-0.015
	(0.005)	*(0.008)*	*(0.009)*	*(0.012)*	*(0.011)*	*(0.011)*	*(0.021)*
Observations	174,765	68,442	25,370	19,635	14,680	42,529	4,109
R-squared	0.161	0.124	0.260	0.070	0.151	0.172	0.103

Notes: This table represents regression coefficients from the estimation of the cultural profile of the PFR. Besides the variables in the table, all regressions include controls for a set of socio-demographic variables and country/time fixed effects. Full results are presented in Table A5 in the Appendix. Clustered (country/time) and robust standard errors in parentheses. Significance levels are marked as *** p<0.01, ** p<0.05, * p<0.1.

Source: Own calculation based on ESS data (2002-2023)

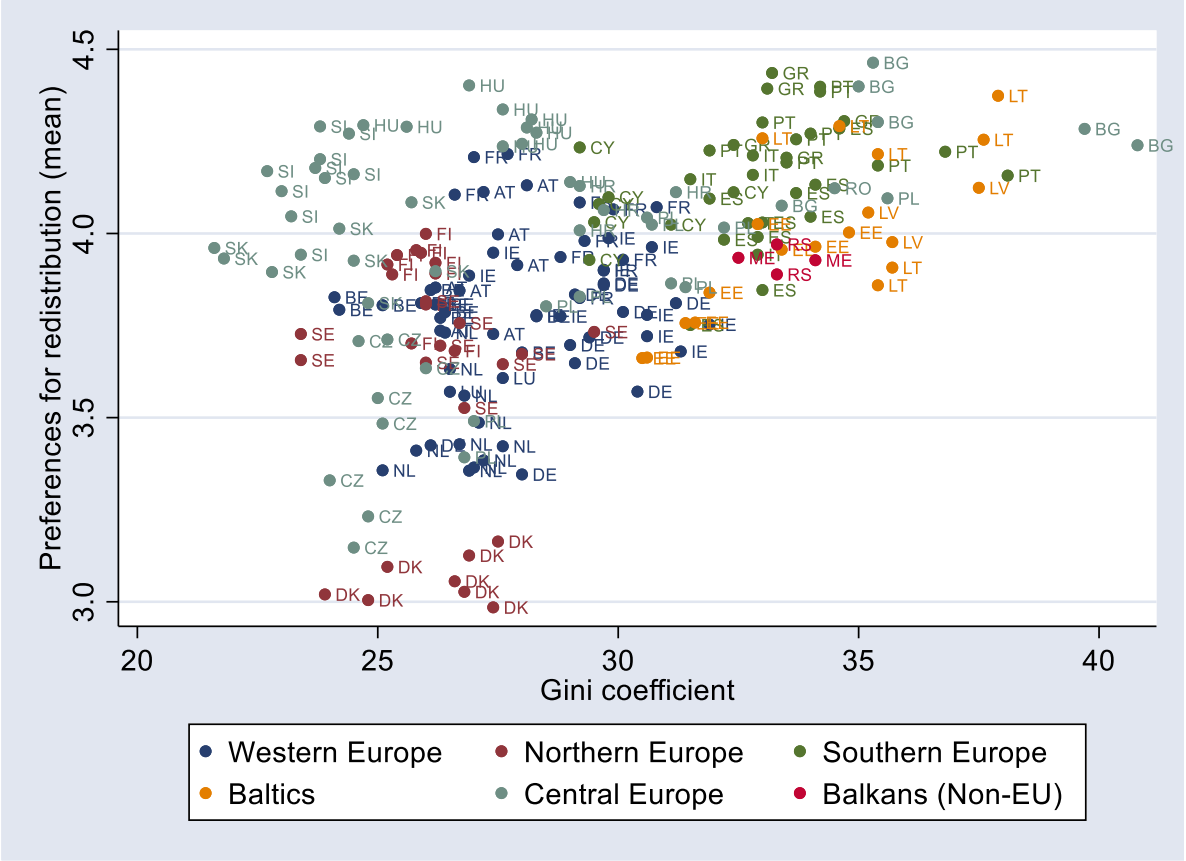
4.3. Inequality and preferences for redistribution

As discussed in Section 2, extensive literature has highlighted that in countries with higher levels of inequality, the demand for redistribution is higher. To investigate if this applies to our sample as well, we use data on inequality (Gini index) from the WIID – World Income Inequality Database and match them with the data from ESS via country-year identifiers.

As preliminary descriptive evidence, Figure 4 plots the Gini coefficient levels and average PFR for each country/year available in our analysis (a total of 193 observations). Results indicate a strong positive and

statistically significant correlation (0.459) between the two variables[8]. Some Central European countries such as Slovenia, Slovakia and Hungary, exhibit higher levels of PFR despite relatively low inequality. When we exclude this group of countries, the correlation increases to 0.640.

Figure 4. Correlation between Gini coefficient and PFR



Source: Own calculation based on ESS and WIID data (2002-2023)

In the next step of the analysis, we investigate whether this association can be explained by the socio-demographic and cultural profile variables considered in the previous section, or if the positive relationship between inequality in the country and PFR survives independently of individual characteristics. To this aim, we estimate the following model:

$$PFR_{tci} = \alpha + \beta_2 * SocDemo_{tci} + \beta_3 * CultD_{tci} + \beta_4 * Gini_{tc} + \gamma_t + \delta_c + \varepsilon_{tci} \quad (3)$$

[8] We check the robustness of this result by correlating the value of the Gini lagged by one year with the current level of PFR, and the level of correlation is about the same (0.476).

In all specifications, aside from the listed covariates, we use country and year fixed effects separately to account for random effects on PFR caused by external shocks. Unlike in the previous specification, the presence of a country/year level regressor (Gini index) prevents the inclusion of country/year fixed effects. In all regressions, robust standard errors are clustered at the country-year level. Results, available in Table 2, suggest that the association between the Gini index and PFR persists even after accounting for socio-demographic and cultural variables.

Table 2. Association between inequality and PFR (summary)

	Correlation	Model 1	Model 2	Model 3
Gini coefficient	0.039***	0.019***	0.014**	0.013**
	(0.004)	*(0.007)*	*(0.007)*	*(0.007)*
Year and country fixed effects		x	x	x
Socio-demographic controls			x	x
Cultural determinants				x

Notes: This table represents regression coefficients from the estimation of the association between country-level inequality (Gini coefficient) and individual PFR. Regressions include, cumulatively, year and country fixed effects (Model 1), socio-demographic variables (Model 2), and cultural variables (Model 3). Full results for Models 2 and 3 are presented in Table A6 in the Appendix. Clustered (country/time) and robust standard errors in parentheses. Significance levels are marked as *** p<0.01, ** p<0.05, * p<0.1.

Source: Own calculation based on ESS and WIID data (2002-2023)

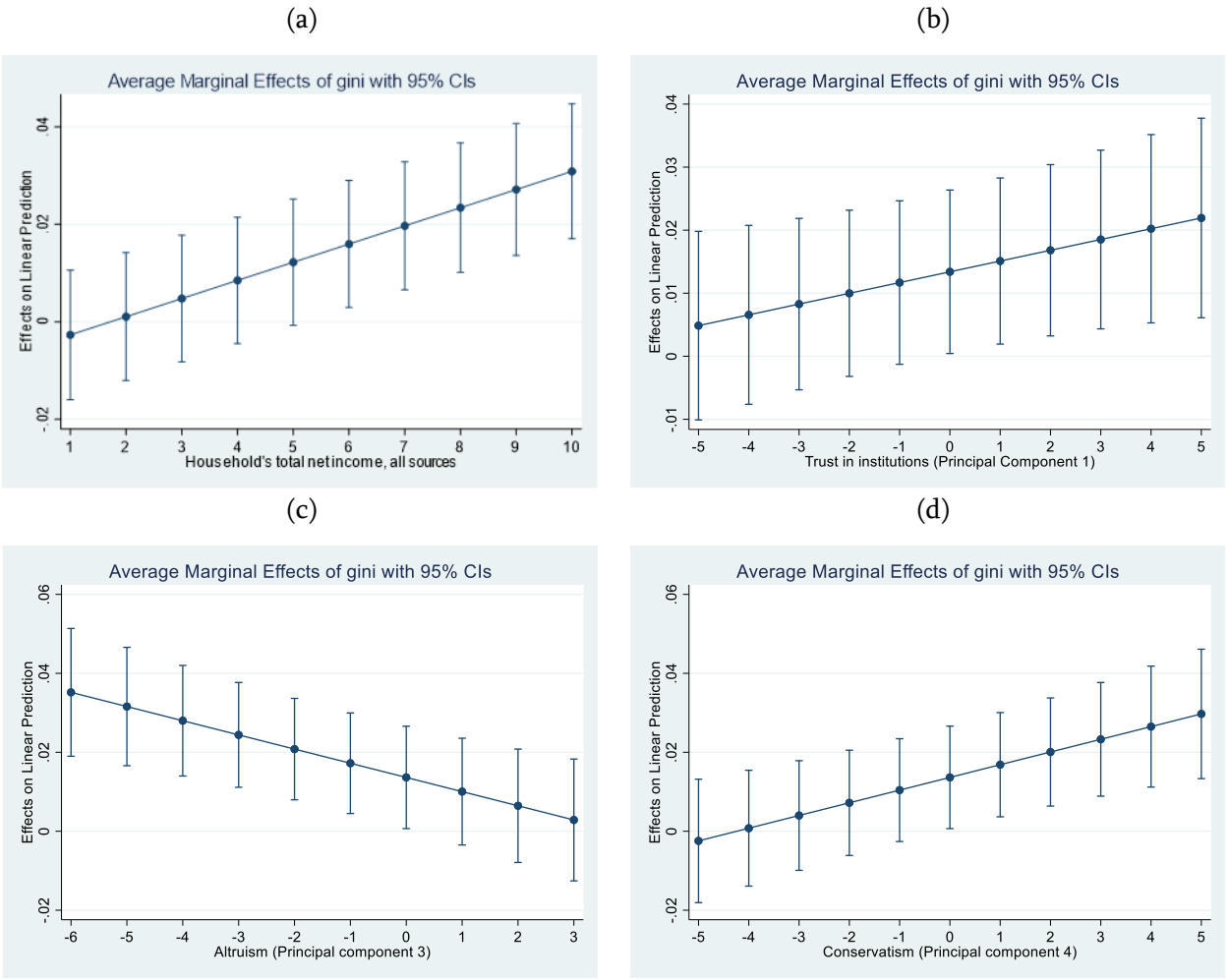
To further investigate the nature of the association between Gini and PFR, we augment equation 3 with interaction terms between country-level income inequality and a set of key individual characteristics (income[9] and cultural values). This enhanced empirical model (equation 4) enables us to assess whether the relationship between Gini and PFR remains consistent across different characteristics or varies based on these factors.

$$PFR_{tci} = \alpha + \beta_2 * SocDemo_{tci} + \beta_3 * CultD_{tci} + \beta_4 * Gini_{tc} + \beta_5 * Inc_{tci} * Gini_{tc} + \beta_6 * CultD_{tci} * Gini_{tc} + \gamma_t + \delta_c + \varepsilon_{tci} \quad (4)$$

[9] In order to simplify the specification, in this model we use income decile as continuous variable instead of set of dummy variables. We do this so that we can simplify the interpretation of the interaction between the impact of Gini and income. Results suggest that the effects of other variables do not vary if income is defined via one continue variable or set of dummy variables (compare tables A5 and A6 in the Appendix).

Results, presented in Table A6 in the Appendix, suggest that the association between income inequality and PFR is strongly moderated by income, altruism, trust in institutions, and conservatism. These moderating effects are independent and exert a simultaneous influence on the Gini-PFR association. To simplify the presentation of these interactions, we calculated the association between the Gini index and PFR at various levels of these moderating variables (see Figure 5, marginal effects).

Figure 5. Association between Gini and PFR at different levels of income and cultural variables (marginal effects)



Notes: Marginal effects based on the estimations reported in Table A6 in the Appendix

Source: Own calculation based on ESS and WIID data (2002-2023)

Diagram (a) in Figure 5 indicates that the positive inequality/PFR link is statistically significant for individuals in the upper part of the income distribution only (above the 6th decile), while it is insignificant for those with income around the median or below. As indicated by the results from Section 4.2, lower-income individuals generally exhibit higher preferences for redistribution, so they don't need to observe high inequality in the economic system to demand more redistribution. Conversely, higher-income

individuals typically have lower PFR, but these preferences are more responsive to changes in income inequality. The remaining diagrams in Figure 5 indicate that the inequality effect on PFR is statistically significant for above-average levels of trust in institutions and conservatism (diagrams (b) and (d), respectively), and below-average levels of altruism (diagram (c)). As already highlighted in Section 4.2, individuals with low trust in institutions, a less conservative ideology, and higher altruism generally support redistribution. Results in Figure 5 add that higher income inequality can also prompt individuals with high trust, high conservative values, and low altruism to increase their PFR.

5. Voters' behaviour and preferences for redistribution

In this section, we investigate the link between PFR and the characteristics of the party chosen in the elections. To this end, we use the information on voting behavior available in ESS to link individual data on the party voted for to the Chapel Hill Expert Survey (CHES) data, which provides expert assessments of political parties' economic left-right positions across several domains. For the reasons explained in Section 3, the analysis is limited to a sub-sample of four countries (Germany, Portugal, Slovenia, and Sweden). Due to the objectives of the analysis, the sample is restricted to ESS respondents who declared having voted in the elections. Abstention from voting poses a potential risk of distortion if the abstention rate is not balanced across distributions of PFR or ideological self-positioning. For the countries considered here, this issue seems to be of limited importance, as asymmetries in the abstention rates are not large[10].

To examine the consistency between PFR and voting behaviour, we estimate the following model:

$$LRecon_{tci} = \alpha + \beta_1 * PFR_{tci} + \beta_2 * CultD_{tci} + \beta_5 * SocDemo_{tci} + \gamma_t + \delta_c + \varepsilon_{tci} \qquad (5)$$

[10] The participation rate (the share of those who voted in the last elections out of the total individuals eligible to vote) for the sample of the four countries amounts to 83%. Participation is lower for those who agree or strongly agree that the government should play a stronger role in reducing income differences (81%), compared to 86% for the other individuals. However, this difference is not statistically significant once we control for demographic characteristics that are typically associated with the decision to vote or abstain. If we look at the participation rate across the ideological distribution (left, centre, right), computed on the smaller sample of those who declared their self-positioning, the overall participation rate rises to 86%. The difference in participation rates between self-declared left and right individuals is negligible (88% and 89%, respectively) and not statistically significant. In contrast, the participation rate is lower for respondents who place themselves at the centre of the political spectrum (83%).

Where the voting behaviour, defined by the political party's position on economic matters $LRecon_{tci}$ is regressed on PFR, and controlling for the cultural variables ($CultD_{tci}$) and socio-demographic characteristics ($SocDemo_{tci}$) described in the previous section. We also include year and country fixed effects and cluster the standard errors at the country/year/party level. As explained in Section 3.2, to ease the interpretation of coefficients $LRecon_{tci}$ was recoded so that the higher scores indicate extreme left positions. We also remind that we use this general variable on the party position on economic matters $LRecon_{tci}$, rather than the one specific to the parties' position on redistribution because it is available in all waves of CHES (from 2002 to 2023) and the correlation between the two variables (when both are available) is very high (0.91).

Results from the estimation of equation (5) are presented in Table 3. They suggest a strong consistency between PFR and voting behavior, indicating that individuals who support higher levels of redistribution are more likely to vote for parties that, according to CHES data, advocate for a more active government role in the economy, including stronger endorsement for redistributive policies. This effect is slightly attenuated with the introduction of personal values variables—conservatism, trust in institutions, and attitudes towards migrants—but remains statistically significant. The effect of altruism on voting behavior is insignificant and is thus excluded from the specification. Additionally, we find that, as expected, voting for economically left-leaning parties is associated with lower levels of conservatism and more positive attitudes towards migrants. Support for leftist parties is also linked to lower levels of trust in politicians, the country's parliament, and the legal system.

Table 3. Determinants of voting for the economic left-right position of the party voted, PFR and personal values

	Model 1	Model 2	Model 3	Model 4
PFR	0.486***	0.421***	0.407***	0.288***
	(0.039)	*(0.039)*	*(0.038)*	*(0.029)*
Conservativism		-0.315***	-0.304***	-0.304***
		(0.027)	*(0.026)*	*(0.024)*
Trust			-0.076***	-0.128***
			(0.022)	*(0.019)*
Immigrants				0.600***
				(0.033)

Notes: This table represents regression coefficients from the estimation of equation 5. Regression estimates controls for a set of socio-demographic variables, and country and time fixed effects. Full results are presented in Table A6 in the Appendix. Clustered (country/time/party) and robust standard errors in parentheses. Significance levels are marked as *** p<0.01, ** p<0.05, * p<0.1. Source: Own calculation based on ESS and CHES data (2002-2023)

To further investigate the association between voting behavior and PFR, we augment equation (5) with interaction terms between PFR and variables describing individual income position and cultural values. This allows us to assess whether the relationship between voting behavior and PFR remains consistent across different characteristics or varies based on these factors. Thus, we estimate the following model:

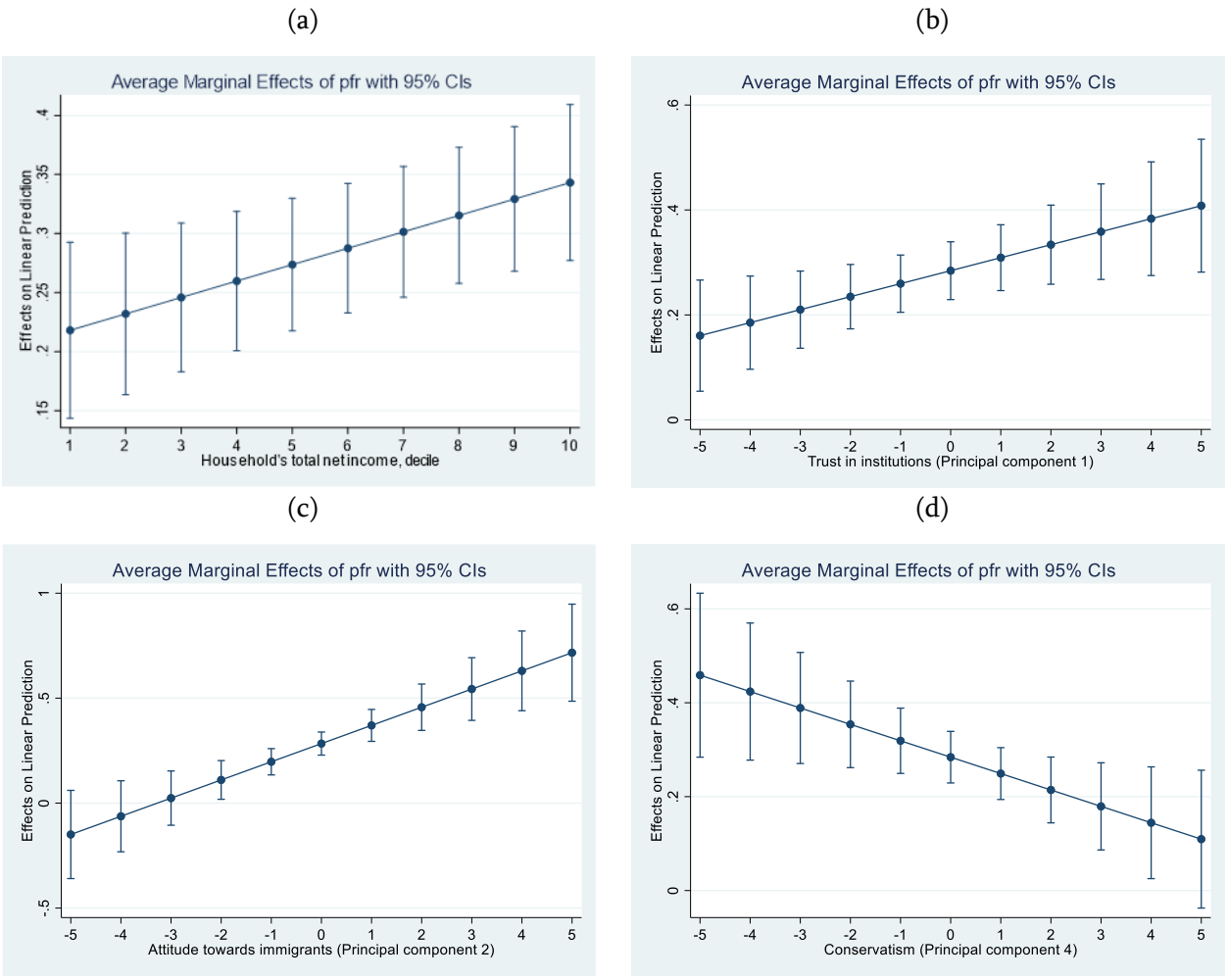
$$LRecon_{tci} = \alpha + \beta_1 * PFR_{tci} + \beta_2 * CultD_{tci} + \beta_3 * SocDemo_{tci} + \beta_4 * Inc_{tci} * PFR_{tci} + \beta_5 * CultD_{tci} * PFR_{tci} + \gamma_t + \delta_c + \varepsilon_{tci} \quad (6)$$

Results, presented in Table A8 in the Appendix, suggest that the association between voting behavior and PFR is strongly moderated by income, altruism, trust in institutions, and conservatism. These moderating effects are independent and suggest their simultaneous influence on the PFR-voting behavior consistency. To simplify the presentation of these interactions, as done in the previous section, we graphically illustrate the association between PFR and voting for parties supporting a stronger (and redistributive) role of the state in the economy at various levels of the key variables.

Results are illustrated in Figure 6. Specifically, panel (a) reveals that the association between PFR and voting for parties with a leftist position on economic issues is stronger for individuals with higher incomes compared to lower-income ones. This evidence is compatible with various possible explanations that cannot be tested here but represent a promising development of our research. One possibility is that better economic conditions are associated with characteristics (primarily, education) that ensure a better capacity to align one's preferences and vote for the political party that is closest to them. Similarly, such individuals are less likely to be captured by right-wing political parties with a populist narrative. Another possibility is that for high-income individuals, the salience of redistributive issues, within the range of topics covered by political parties, is higher than for low-income individuals, which tightens the link between PFR and voting for pro-redistribution parties. This asymmetry in salience might be because some high-income individuals who have experienced (personal or household) income mobility patterns in the past acknowledge the beneficial role of redistribution and express their vote accordingly. On the other hand, low-income individuals might be more sensitive to political discourses that directly link their relative economic condition to other factors (e.g., immigration, unemployment due to international competition, etc.), which often populate the narratives of certain right-wing political organizations. This, in turn, weakens the link between PFR and voting for economically left-leaning parties, although it remains significant even at lower-income levels.

Panel (b) of Figure 6 suggests that greater trust in institutions strengthens the link between PFR and voting for political parties with a redistributive agenda. This higher consistency supports the idea that trusting politicians and the institutions responsible for making and enforcing decisions ensures that individuals' preferences and political choices will be effectively translated into policy action. In contrast, the link is weaker when individuals believe there is a high probability that agents (politicians) will deviate from their commitments and diverge from the voters' preferences once elected. This can occur due to the politicians' utility functions or the influence of other actors (e.g., bureaucrats and pressure groups) (see Lane, 2009; Kiser and Karceski, 2017).

Figure 6. Association between PFR and the position of the party voted on the role of the State in the economy (and redistribution) at different levels of income and cultural variables (marginal effects)



Notes: Marginal effects based on the estimations reported in Table A8 in the Appendix

Source: Own calculation based on ESS and CHES data (2002-2023)

The bottom panels of Figure 6 highlight that for more conservative voters and those with negative attitudes toward migrants link between PFR and supporting left-leaning parties is non-existant. This means that these persons could support right-leaning parties, even if they have high PFR. In both cases, the interpretation of this outcome is likely related to the salience of different policy-making domains.

Panel (c) of Figure 6 shows that the consistency between PFR and voting for redistributive parties is stronger when individuals have a positive attitude toward immigration. However, this consistency disappears for those who perceive immigration as detrimental to the economy and believe that immigration from low-income countries should be limited. Individuals who view immigration as a threat to their economic position (such as a higher probability of unemployment or downward pressure on wages), or for other reasons (e.g., concerns about personal security or national cultural identity), may prioritize immigration over other issues. Consequently, despite supporting redistribution (high PFR), they may not vote for left-leaning political parties, which tend to advocate for a more inclusive and open approach toward immigration flows (see Alesina et al., 2023; Moriconi et al., 2019; Barone et al., 2016; Bellucci et al., 2019; Elsner and Concannon, 2020).

Finally, panel (d) of Figure 6 can be seen as a generalization of the interpretation just mentioned. It indicates that voters with strong conservative views (both in general and on civil rights, often influenced by stronger religious attachments) may support redistribution but might not vote for parties with leftist economic stances. For these individuals, social policies and redistribution likely play a secondary role compared to other issues, which are more decisive in guiding their voting behavior away from parties advocating for a stronger (redistributive) role in the economy.

6. Summary and final remarks

The redistribution of income and social protection through taxes and transfers remain fundamental objectives of the modern welfare state, with numerous policy initiatives aimed at reducing inequality across virtually all developed economies. However, the extent to which the redistributive role of the state aligns with the preferences of voters has been the subject of limited empirical research. While the presumption that democracies implement the distributional preferences of the median voter is intuitively appealing and commonly assumed in theoretical models, this view is increasingly challenged by factors recognized in both the theoretical and empirical literature.

This paper sought to analyze the demand for redistributive policies among European citizens and assess the empirical consistency of these preferences with voting behavior. To this end, we first examined the individual, social, economic, labor market status, and cultural factors driving preferences for redistribution. We also explored how income inequality and crisis episodes (the Great Recession of 2007/2008 and the COVID-19 crisis) relate to the evolution of redistribution preferences in Europe. Finally, we investigated the extent to which preferences for redistribution translate into voting behavior for political parties supporting redistributive policies and mapped the economic and extra-economic factors influencing the strength of this link.

Empirically, we combined micro-data from various waves of the European Social Survey (ESS) on individual preferences for redistribution and self-reported voting behavior with information on the stance of political parties regarding the role of government in addressing income inequality, as described by the Chapel Hill Expert Survey (CHES). After summarizing the relevant literature on the drivers of redistribution preferences, we described the characteristics and key variables of the two primary data sources (ESS and CHES). We then outlined the empirical methods used to map preferences for redistribution across European countries, including all EU member states and five countries in the Balkan region, and presented the results of our analysis. Specifically, we focused on several individual characteristics (e.g., income, demographics, and cultural profiles) as well as the impact of crisis events and income inequality on redistribution preferences.

Our findings indicate that the individual drivers of redistribution preferences are largely consistent with the existing literature. Furthermore, we find that the COVID-19 crisis was associated with a decrease in demand for redistribution in the majority of the countries analyzed, marking an interesting contrast with the global financial crisis at the end of the 2000s, during which demand for redistribution increased. Additionally, we confirm previous findings suggesting a positive relationship between income inequality and pro-redistribution preferences, while also demonstrating that this relationship is influenced by economic - e.g., income position - and cultural - e.g., trust in political institutions, altruism, and conservatism - factors. In other words, for individuals with high trust, high conservative values, and low altruism higher income inequality can also prompt higher demand for redistribution.

In the second part of the analysis, we investigated the link between redistribution preferences and voting behavior. This analysis was limited to a smaller number of countries due to (i) the intensive data processing required to match self-reported individual voting behavior with party-level information, and (ii) data limitations regarding the timing mismatch between ESS and CHES waves. The selection of Germany,

Portugal, Slovenia, and Sweden ensured coverage of diverse macro-geographical regions (Western, Southern, Central, and Northern Europe) as well as institutional and cultural differences. Our findings indicate a general consistency between stronger preferences for redistribution and voting for parties that support a more significant role of the state in the economy and in reducing inequalities. However, we also identify factors that moderate this consistency. Specifically, higher consistency is found among individuals who are positioned in the upper part of the income distribution, trust political institutions, have a positive attitude toward immigrants, and hold leftist ideologies. Furthermore, consistency between preferences and voting is non-existent for persons with extreme anti-immigrant and conservative views, indicating lower salience of preferences when voting for these persons.

Although our analysis is primarily descriptive and does not aim to establish causal links, it offers several important implications. These include: (i) an unintended consequence of extensive income support measures during the COVID-19 crisis may have been a decline in public support for redistribution; (ii) inequality not only directly influences preferences for redistribution but can also act as a signal, prompting individuals with high incomes, low altruism, and conservative values to adjust their views on inequality and redistribution; and (iii) preferences for redistribution are strong predictors of voting behavior, but ideological commitments, low levels of trust in politicians and institutions, and negative attitudes toward migrants may lead some individuals with high preferences for redistribution to vote for parties supporting right-wing positions on economic decisions.

From a policy perspective, these results highlight the importance of designing redistributive measures that maintain public support over the long term. Policymakers should recognize that while crisis-driven interventions may temporarily alleviate economic distress, they may also reduce demand for future redistribution, potentially undermining long-term social cohesion. Additionally, policies aimed at reducing inequality should consider the role of values and institutional trust, as fostering trust in government and promoting inclusive social attitudes can strengthen public support for redistributive policies.

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APPENDIX A

Table A1. Sample of individuals included in the analysis by country and ESS wave

	1	2	3	4	5	6	7	8	9	10	11	Total
	2002	*2004*	*2006*	*2008*	*2010*	*2012*	*2014*	*2016*	*2018*	*2021*	*2023*	
AT	2,257	2,256	2,405	-	-	0	1,795	2,010	2,499	2,003	2,354	17,579
BE	1,899	1,778	1,798	1,760	1,704	1,869	1,769	1,766	1,767	1,341	1,594	19,045
BG	-	-	1,400	2,230	2,434	2,260	-	-	2,198	2,718	-	13,240
CY	-	-	995	1,215	1,083	1,116	-	-	781	875	685	6,750
CZ	1,360	3,026	0	2,018	2,386	2,009	2,148	2,269	2,398	2,476	-	20,090
DE	2,919	2,870	2,916	2,751	3,031	2,958	3,045	2,852	2,358	8,725	2,420	36,845
DK	1,506	1,487	1,505	1,610	1,576	1,650	1,502	-	1,572	-	-	12,408
EE	0	1,989	1,517	1,661	1,793	2,380	2,051	2,019	1,904	1,542	-	16,856
ES	1,729	1,663	1,876	2,576	1,885	1,889	1,925	1,958	1,668	2,283	1,844	21,296
FI	2,000	2,022	1,896	2,195	1,878	2,197	2,087	1,925	1,755	1,577	1,563	21,095
FR	1,503	1,806	1,986	2,073	1,728	1,968	1,917	2,070	2,010	1,977	1,771	20,809
GR	2,566	2,406	-	2,072	2,715	-	-	-	-	2,799	2,757	15,315
HR	-	-	-	1,484	1,649	-	-	-	1,810	1,592	1,563	8,098
HU	1,685	1,498	1,518	1,544	1,561	2,014	1,698	1,614	1,661	1,849	2,118	18,760
IE	2,046	2,286	1,800	1,764	2,576	2,628	2,390	2,757	2,216	1,770	2,017	24,250
IT	1,207	-	-	-	0	960	0	2,626	2,745	2,640	2,865	13,043
LT	-	-	-	-	1,677	2,109	2,250	2,122	1,835	1,659	1,365	13,017
LU	1,552	1,635	-	-	-	-	-	-	-	-	-	3,187
LV	-	-	-	1,980	-	-	-	-	918	1,023	-	3,921
NL	2,364	1,881	1,889	1,778	1,829	1,845	1,919	1,681	1,673	1,470	1,695	20,024
PL	2,110	1,716	1,721	1,619	1,751	1,898	1,615	1,694	1,500	2,065	1,442	19,131
PT	1,511	2,052	2,222	2,367	2,150	2,151	1,265	1,270	1,055	1,838	1,373	19,254
RO	-	-	-	2,146	-	-	-	-	-	-	-	2,146
SE	1,999	1,948	1,927	1,830	1,497	1,847	1,791	1,551	1,539	2,287	1,230	19,446
SI	1,519	1,442	1,476	1,286	1,403	1,257	1,224	1,307	1,318	1,252	1,248	14,732
SK	0	1,512	1,766	1,810	1,856	1,847	-	-	1,083	1,418	1,442	12,734
AL	-	-	-	-	-	1,201	-	-	-	-	-	1,201
ME	-	-	-	-	-	-	-	-	1,200	1,278	-	2,478
MK	-	-	-	-	-	-	-	-	-	1,429	-	1,429
RS	-	-	-	-	-	-	-	-	2,043	1,505	1,563	5,111
XK	-	-	-	-	-	1,295	-	-	-	-	-	1,295
Total	33,732	37,273	32,613	41,769	40,162	41,348	32,391	33,491	43,506	53,391	34,909	424,585

Source: European Social Survey data

Table A2. List of variables

Variable name	Variable description
ESS-based variables	
Female	Gender, female = 1
Age	Age at the start of the interview
Age2	Square of the age variable
Education	Highest level of education attained with three levels of education: primary (baseline, corresponding to ISCED I and II groups), secondary (ISCED III and IV) and tertiary (ISCED V and VI), based on the variable *eisced* from the ESS questionnaire
Edu2	Secondary education (ISCED III and IV),
Edu3	Tertiary education (ISCED V and VI)
Hsize	Number of people living regularly as member of household
Nchild	Number of children in the household
Married	Martial status, Married = 1, other statuses (single, divorced, widowed) = 0 based on variables *marital*, *marital1* and *marital2* in ESS questionnaire
Labour market status	with five groups: employed (baseline), students, unemployed, retired and other inactive groups (Unemployed not looking for work, Permanently sick or disabled, Housework, looking after children, care or other), based on the variable *mnactic* from the ESS questionnaire
Student	Labour market status, Student = 1
Unemployed	Labour market status, Unemployed = 1
Retired	Labour market status, Retired = 1
Other inactive	Labour market status, Other inactive = 1
Income decile	based on *hinctnt* and *hinctnta* variables
Cultural determinants (Original variables)	• Important that people are treated equally and have equal opportunities • Important to help people and care for others well-being • Self-placement on left right scale • Gays and lesbians free to live life as they wish • Trust in politicians • Trust in country's parliament • Trust in the legal system • Immigration bad or good for country's economy • Allow many/few immigrants from poorer countries outside Europe • How religious are you? • How satisfied with the national government • How satisfied with the way democracy works in country • How satisfied with the present state of economy in country
Cultural determinants Principal Components	Principal components (PC_1-PC_4) identified starting from the original variables (see Table A4 for the details of the PC analysis)
Trust (PC_1)	First principal component from cultural determinants analysis
Immigrants (PC_2)	Second principal component from cultural determinants analysis

Altruism (PC_3)	Third principal component from cultural determinants analysis
Conservativism (PC_4)	Fourth principal component from cultural determinants analysis
PFR	Preferences for redistribution (1 to 5) (higher values mean preference for a stronger role of the government in reducing income differences). Based on the variable *gincdif* in the ESS questionnaire (reverse scale)
PFR_d1	Dummy variable =1 if PFR=5 and 0 otherwise
PFR_d2	Dummy variable =1 if PFR=5 or 4 and 0 otherwise
Party voted	ESS variable '*prtvd(*)*', party voted for in the last national elections in country (*)

CHES-based variables

Lrecon	General position of the party on the left-right economic spectrum (0-10 scale). The variable is recoded on a 0 (extreme right) to 10 (extreme left) scale for the aims of our analysis.
Galtan	General position of the party on the left-right political spectrum (0-10 scale). The variable is recoded on a 0 (extreme right) to 10 (extreme left) scale for the aims of our analysis.

Table A3. Association between PFR and socio-demographic factors

	all	Western Europe	Northern Europe	Southern Europe	Baltics	Central Europe	Balkans
Female	0.090***	0.096***	0.204***	0.044***	0.053**	0.063***	0.019
	(0.007)	*(0.010)*	*(0.012)*	*(0.014)*	*(0.017)*	*(0.010)*	*(0.038)*
Age	0.014***	0.017***	0.030***	0.006*	0.009***	0.010***	0.008
	(0.001)	*(0.001)*	*(0.003)*	*(0.003)*	*(0.002)*	*(0.002)*	*(0.006)*
Age2	-0.000***	-0.000***	-0.000***	-0.000**	-0.000**	-0.000***	-0.000
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*
Edu2	-0.052***	-0.068***	-0.114***	-0.031**	-0.003	-0.070***	-0.010
	(0.008)	*(0.013)*	*(0.017)*	*(0.013)*	*(0.020)*	*(0.016)*	*(0.039)*
Edu3	-0.196***	-0.168***	-0.215***	-0.116***	-0.169***	-0.351***	0.018
	(0.017)	*(0.027)*	*(0.039)*	*(0.034)*	*(0.033)*	*(0.036)*	*(0.148)*
Hsize	0.029***	0.032***	0.028***	-0.003	0.018**	0.038***	0.025*
	(0.003)	*(0.005)*	*(0.009)*	*(0.006)*	*(0.008)*	*(0.005)*	*(0.011)*
Nchild	-0.042***	-0.055***	-0.052***	-0.006	-0.052***	-0.026***	-0.007
	(0.004)	*(0.007)*	*(0.009)*	*(0.012)*	*(0.012)*	*(0.007)*	*(0.015)*
Married	-0.024***	-0.028**	-0.023*	-0.026*	0.022	-0.013	-0.053
	(0.006)	*(0.011)*	*(0.014)*	*(0.015)*	*(0.016)*	*(0.011)*	*(0.050)*
Student	-0.063***	-0.037	-0.029	-0.037	-0.035	-0.128***	-0.093
	(0.013)	*(0.023)*	*(0.028)*	*(0.023)*	*(0.047)*	*(0.028)*	*(0.082)*
Unemployed	0.085***	0.083**	0.150***	0.078***	0.080*	0.098***	-0.031
	(0.014)	*(0.032)*	*(0.043)*	*(0.019)*	*(0.042)*	*(0.025)*	*(0.033)*
Retired	0.066***	0.066***	0.115***	-0.018	0.075**	0.077***	-0.074
	(0.009)	*(0.016)*	*(0.023)*	*(0.019)*	*(0.028)*	*(0.016)*	*(0.073)*
Other inactive	0.042***	0.071***	0.094***	-0.007	0.041	0.036**	-0.077
	(0.010)	*(0.016)*	*(0.025)*	*(0.016)*	*(0.026)*	*(0.016)*	*(0.052)*
2nd decile	0.003	0.031	0.015	-0.002	-0.026	-0.003	-0.132
	(0.011)	*(0.021)*	*(0.034)*	*(0.021)*	*(0.024)*	*(0.017)*	*(0.066)*
3rd decile	-0.022*	0.001	0.013	0.000	-0.004	-0.060***	-0.115
	(0.012)	*(0.021)*	*(0.031)*	*(0.025)*	*(0.030)*	*(0.019)*	*(0.081)*
4th decile	-0.046***	-0.050*	-0.015	-0.026	0.026	-0.074***	-0.123
	(0.014)	*(0.026)*	*(0.038)*	*(0.029)*	*(0.032)*	*(0.024)*	*(0.098)*
5th decile	-0.068***	-0.072***	-0.009	-0.029	0.007	-0.128***	-0.131
	(0.015)	*(0.024)*	*(0.036)*	*(0.040)*	*(0.040)*	*(0.027)*	*(0.093)*
6th decile	-0.101***	-0.126***	-0.055	-0.038	-0.011	-0.147***	-0.122
	(0.016)	*(0.026)*	*(0.041)*	*(0.042)*	*(0.051)*	*(0.025)*	*(0.089)*
7th decile	-0.143***	-0.182***	-0.090*	-0.035	-0.077	-0.185***	-0.103
	(0.017)	*(0.028)*	*(0.047)*	*(0.042)*	*(0.050)*	*(0.029)*	*(0.099)*
8th decile	-0.211***	-0.260***	-0.159***	-0.076	-0.126**	-0.252***	-0.104
	(0.018)	*(0.025)*	*(0.051)*	*(0.047)*	*(0.053)*	*(0.032)*	*(0.142)*
9th decile	-0.285***	-0.364***	-0.273***	-0.096**	-0.223***	-0.268***	-0.121
	(0.021)	*(0.034)*	*(0.052)*	*(0.045)*	*(0.058)*	*(0.042)*	*(0.181)*

	all	Western Europe	Northern Europe	Southern Europe	Baltics	Central Europe	Balkans
10th decile	-0.490***	-0.587***	-0.503***	-0.287***	-0.285***	-0.472***	-0.313*
	(0.024)	*(0.037)*	*(0.058)*	*(0.043)*	*(0.085)*	*(0.045)*	*(0.140)*
Constant	3.797***	3.359***	1.853***	3.864***	3.592***	4.152***	4.029***
	(0.033)	*(0.046)*	*(0.090)*	*(0.088)*	*(0.054)*	*(0.054)*	*(0.141)*
Observations	220,631	79,303	28,951	26,161	21,165	58,437	6,614
R-squared	0.116	0.069	0.159	0.029	0.110	0.135	0.028

Notes: This table represents regression coefficients from the estimation of the cultural profile of the PFR. Beside the variables in the table, regression controls for country/time fixed effects. Clustered (country/time) and robust standard errors in parentheses. Significance levels are marked as *** p<0.01, ** p<0.05, * p<0.1.

Source: Own calculation based on ESS (2002-2023)

Table A4. Factors extracted in the PCA and their loadings on the original variables

Variable	Trust	Immigration	Altruism	Conservativism
Important that people are treated equally and have equal opportunities			0.6652	
Important to help people and care for others well-being			0.7011	
Self-placement on left right scale				-0.4038
Gays and lesbians free to live life as they wish				-0.4782
Trust in politicians	0.4238			
Trust in country's parliament	0.4294			
Trust in the legal system	0.3902			
Immigration bad or good for country's economy		0.6777		
Allow many/few immigrants from poorer countries outside Europe		0.7033		
How religious are you?				0.7665
How satisfied with the national government	0.4091			
How satisfied with the way democracy works in country	0.4013			
How satisfied with the present state of economy in country	0.3704			

Notes: This table represents correlations of the original variables with the extracted components (also called loadings) in Principal Components Analysis.

Source: Own calculation based on ESS data (2002-2023)

Table A5. Association between PFR and cultural factors

	all	Western Europe	Northern Europe	Southern Europe	Baltics	Central Europe	Balkans
Trust	-0.076***	-0.078***	-0.107***	-0.052***	-0.075***	-0.074***	-0.066**
	(0.004)	*(0.005)*	*(0.009)*	*(0.008)*	*(0.011)*	*(0.007)*	*(0.024)*
Immigrants	0.085***	0.133***	0.188***	0.087***	0.012	-0.009	-0.031
	(0.007)	*(0.008)*	*(0.017)*	*(0.016)*	*(0.009)*	*(0.007)*	*(0.021)*
Altruism	0.102***	0.096***	0.132***	0.085***	0.085***	0.092***	0.166***
	(0.004)	*(0.007)*	*(0.005)*	*(0.009)*	*(0.014)*	*(0.007)*	*(0.029)*
Conservativism	-0.086***	-0.098***	-0.093***	-0.072***	-0.052***	-0.078***	-0.015
	(0.005)	*(0.008)*	*(0.009)*	*(0.012)*	*(0.011)*	*(0.011)*	*(0.021)*
Female	0.058***	0.058***	0.119***	0.036**	0.029	0.038***	-0.000
	(0.007)	*(0.011)*	*(0.009)*	*(0.014)*	*(0.020)*	*(0.011)*	*(0.047)*
Age	0.010***	0.008***	0.025***	0.002	0.005	0.006***	0.005
	(0.001)	*(0.002)*	*(0.003)*	*(0.003)*	*(0.003)*	*(0.002)*	*(0.008)*
Age2	-0.000***	-0.000***	-0.000***	0.000	-0.000	-0.000**	-0.000
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*
Edu2	-0.067***	-0.092***	-0.117***	-0.046***	0.004	-0.078***	-0.011
	(0.009)	*(0.014)*	*(0.018)*	*(0.012)*	*(0.025)*	*(0.016)*	*(0.062)*
Edu3	-0.204***	-0.204***	-0.253***	-0.154***	-0.140***	-0.332***	0.056
	(0.017)	*(0.026)*	*(0.036)*	*(0.033)*	*(0.033)*	*(0.033)*	*(0.145)*
Hsize	0.033***	0.039***	0.039***	-0.001	0.011	0.038***	0.022
	(0.003)	*(0.006)*	*(0.010)*	*(0.006)*	*(0.010)*	*(0.005)*	*(0.011)*
Nchild	-0.005	0.008	0.009	-0.010	0.027	-0.015	-0.041
	(0.006)	*(0.011)*	*(0.016)*	*(0.016)*	*(0.018)*	*(0.012)*	*(0.045)*
Married	-0.080***	-0.084***	-0.076**	-0.055*	0.016	-0.115***	-0.034
	(0.015)	*(0.024)*	*(0.032)*	*(0.029)*	*(0.070)*	*(0.033)*	*(0.090)*
Student	0.052***	0.053*	0.071	0.042*	0.062	0.087***	-0.076
	(0.014)	*(0.028)*	*(0.042)*	*(0.021)*	*(0.041)*	*(0.025)*	*(0.057)*
Unemployed	0.054***	0.047***	0.087***	-0.035	0.047	0.089***	-0.082
	(0.009)	*(0.016)*	*(0.018)*	*(0.022)*	*(0.033)*	*(0.015)*	*(0.074)*
Retired	0.025**	0.041**	0.023	-0.013	0.042	0.044**	-0.097
	(0.010)	*(0.017)*	*(0.027)*	*(0.017)*	*(0.025)*	*(0.019)*	*(0.056)*
Other inactive	-0.041***	-0.053***	-0.044***	-0.001	-0.041***	-0.026***	-0.020
	(0.004)	*(0.007)*	*(0.007)*	*(0.013)*	*(0.013)*	*(0.008)*	*(0.011)*
2nd decile	0.026**	0.042*	0.015	0.005	0.046	0.026	-0.082
	(0.013)	*(0.023)*	*(0.033)*	*(0.032)*	*(0.031)*	*(0.023)*	*(0.084)*
3rd decile	0.001	-0.000	0.027	0.013	0.082	-0.023	-0.042
	(0.014)	*(0.025)*	*(0.035)*	*(0.032)*	*(0.048)*	*(0.023)*	*(0.098)*
4th decile	-0.029*	-0.052*	-0.001	-0.008	0.097*	-0.049*	-0.046
	(0.015)	*(0.027)*	*(0.034)*	*(0.039)*	*(0.050)*	*(0.026)*	*(0.112)*
5th decile	-0.050***	-0.070**	-0.001	-0.017	0.074	-0.093***	-0.079
	(0.017)	*(0.028)*	*(0.036)*	*(0.047)*	*(0.055)*	*(0.031)*	*(0.121)*

	all	Western Europe	Northern Europe	Southern Europe	Baltics	Central Europe	Balkans
6th decile	-0.077***	-0.116***	-0.044	-0.030	0.071	-0.099***	-0.048
	(0.017)	*(0.027)*	*(0.041)*	*(0.045)*	*(0.060)*	*(0.028)*	*(0.111)*
7th decile	-0.121***	-0.176***	-0.083*	-0.033	0.006	-0.137***	-0.095
	(0.018)	*(0.028)*	*(0.046)*	*(0.050)*	*(0.058)*	*(0.033)*	*(0.109)*
8th decile	-0.191***	-0.264***	-0.134**	-0.059	-0.053	-0.198***	-0.123
	(0.019)	*(0.027)*	*(0.050)*	*(0.058)*	*(0.063)*	*(0.038)*	*(0.142)*
9th decile	-0.259***	-0.349***	-0.241***	-0.091	-0.151**	-0.212***	-0.099
	(0.022)	*(0.036)*	*(0.055)*	*(0.059)*	*(0.065)*	*(0.045)*	*(0.174)*
10th decile	-0.467***	-0.573***	-0.471***	-0.275***	-0.171*	-0.433***	-0.307*
	(0.026)	*(0.037)*	*(0.059)*	*(0.054)*	*(0.094)*	*(0.049)*	*(0.135)*
Constant	3.884***	3.460***	2.000***	4.028***	3.596***	4.073***	3.906***
	(0.036)	*(0.051)*	*(0.090)*	*(0.117)*	*(0.096)*	*(0.063)*	*(0.225)*
Observations	174,765	68,442	25,370	19,635	14,680	42,529	4,109
R-squared	0.161	0.124	0.260	0.070	0.151	0.172	0.103

Notes: This table represents regression coefficients from the estimation of the cultural profile of the PFR. Beside the variables in the table, regression controls for country/time fixed effects. Clustered (country/time) and robust standard errors in parentheses. Significance levels are marked as *** p<0.01, ** p<0.05, * p<0.1.

Source: Own calculation based on ESS data (2002-2023)

Table A6. Association between inequality and PFR (interactions)

	Model 2	Model 3	Model 4	Model 5	Model 6
Gini	0.013**	0.013*	0.013*	-0.007	-0.006
	(0.007)	*(0.007)*	*(0.007)*	*(0.007)*	*(0.007)*
Trust		-0.074***	-0.144***	-0.073***	-0.123***
		(0.003)	*(0.025)*	*(0.003)*	*(0.024)*
Immigrants		0.092***	0.092***	0.093***	0.092***
		(0.007)	*(0.007)*	*(0.007)*	*(0.007)*
Altruism		0.105***	0.211***	0.104***	0.209***
		(0.004)	*(0.031)*	*(0.004)*	*(0.031)*
Conservativism		-0.086***	-0.176***	-0.086***	-0.180***
		(0.004)	*(0.027)*	*(0.004)*	*(0.028)*
Gini # Income				0.004***	0.004***
				(0.000)	*(0.000)*
Gini # Trust			0.002***		0.002**
			(0.001)		*(0.001)*
Gini # Altruism			-0.004***		-0.004***
			(0.001)		*(0.001)*
Gini # Conservativism			0.003***		0.003***
			(0.001)		*(0.001)*
Female	0.097***	0.063***	0.062***	0.063***	0.062***
	(0.006)	*(0.006)*	*(0.006)*	*(0.006)*	*(0.006)*
Age	0.015***	0.011***	0.010***	0.011***	0.011***
	(0.001)	*(0.001)*	*(0.001)*	*(0.001)*	*(0.001)*
Age2	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*
Edu2	-0.047***	-0.066***	-0.065***	-0.069***	-0.068***
	(0.008)	*(0.009)*	*(0.009)*	*(0.009)*	*(0.009)*
Edu3	-0.212***	-0.234***	-0.232***	-0.238***	-0.237***
	(0.017)	*(0.016)*	*(0.016)*	*(0.016)*	*(0.016)*
Hsize	0.036***	0.039***	0.039***	0.040***	0.040***
	(0.003)	*(0.003)*	*(0.003)*	*(0.003)*	*(0.003)*
Nchild	-0.050***	-0.045***	-0.045***	-0.045***	-0.045***
	(0.004)	*(0.004)*	*(0.004)*	*(0.004)*	*(0.004)*
Married	-0.020***	-0.001	-0.000	0.000	0.001
	(0.006)	*(0.006)*	*(0.006)*	*(0.006)*	*(0.006)*
Student	-0.071***	-0.095***	-0.094***	-0.099***	-0.099***
	(0.013)	*(0.014)*	*(0.014)*	*(0.014)*	*(0.014)*
Unemployed	0.080***	0.041***	0.041***	0.045***	0.045***
	(0.014)	*(0.013)*	*(0.013)*	*(0.013)*	*(0.013)*
Retired	0.075***	0.064***	0.063***	0.061***	0.060***
	(0.009)	*(0.008)*	*(0.008)*	*(0.008)*	*(0.008)*
Other inactive	0.034***	0.017**	0.015*	0.016*	0.015*
	(0.008)	*(0.008)*	*(0.008)*	*(0.008)*	*(0.008)*

	Model 2	Model 3	Model 4	Model 5	Model 6
Income	-0.048***	-0.048***	-0.047***	-0.159***	-0.155***
	(0.002)	*(0.002)*	*(0.002)*	*(0.013)*	*(0.013)*
Constant	3.249***	3.365***	3.368***	3.923***	3.912***
	(0.197)	*(0.201)*	*(0.204)*	*(0.208)*	*(0.210)*
Observations	270,093	217,141	217,141	217,141	217,141
R-squared	0.113	0.159	0.159	0.160	0.161

Notes: This table represents regression coefficients from the estimation of the cultural profile of the PFR. Besides the variables in the table, models 1 to 3 control for country and time fixed effects. Clustered (country/time) and robust standard errors in parentheses. Significance levels are marked as *** p<0.01, ** p<0.05, * p<0.1.

Source: Own calculation based on ESS and WIID data (2002-2023)

Table A7. Association between PFR and voting behavior

	Model 1	Model 2	Model 3	Model 4
PFR	0.486***	0.421***	0.407***	0.288***
	(0.039)	*(0.039)*	*(0.038)*	*(0.029)*
Trust		-0.315***	-0.304***	-0.304***
		(0.027)	*(0.026)*	*(0.024)*
Immigrants			-0.076***	-0.128***
			(0.022)	*(0.019)*
Conservativism				0.600***
				(0.033)
Female	0.041	0.047*	0.039	0.024
	(0.027)	*(0.027)*	*(0.028)*	*(0.026)*
Age	0.022***	0.023***	0.020***	0.018***
	(0.004)	*(0.004)*	*(0.005)*	*(0.004)*
Age2	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*
Edu2	-0.061	-0.075	-0.058	-0.257***
	(0.059)	*(0.053)*	*(0.054)*	*(0.046)*
Edu3	0.191**	0.173**	0.223***	-0.215***
	(0.083)	*(0.080)*	*(0.083)*	*(0.069)*
Hsize	-0.026**	-0.017	-0.018	0.055***
	(0.013)	*(0.014)*	*(0.014)*	*(0.013)*
Nchild	0.256***	0.280***	0.308***	0.105*
	(0.065)	*(0.062)*	*(0.063)*	*(0.056)*
Student	0.186**	0.121	0.097	0.063
	(0.073)	*(0.077)*	*(0.076)*	*(0.070)*
Unemployed	0.080**	0.050	0.048	0.071**
	(0.033)	*(0.036)*	*(0.036)*	*(0.032)*
Retired	0.013	0.027	0.018	0.051*
	(0.029)	*(0.033)*	*(0.032)*	*(0.029)*
Other inactive	-0.031*	-0.031	-0.027	-0.047**
	(0.017)	*(0.020)*	*(0.020)*	*(0.019)*
Income	-0.035***	-0.033***	-0.027***	-0.056***
	(0.007)	*(0.008)*	*(0.007)*	*(0.007)*
Constant	3.651***	3.759***	3.777***	3.969***
	(0.708)	*(0.688)*	*(0.695)*	*(0.594)*
Observations	44,394	33,337	33,337	33,337
R-squared	0.096	0.111	0.114	0.228

Notes: This table represents regression coefficients from the estimation of the cultural profile of the PFR. Besides the variables in the table, models 1 to 3 control for country and time fixed effects. Clustered (country/time) and robust standard errors in parentheses. Significance levels are marked as *** p<0.01, ** p<0.05, * p<0.1.

Source: Own calculation based on ESS and CHES data (2002-2023)

Table A8. Association between PFR and voting behavior (interactions)

	Model 5	Model 6	Model 7	Model 8	Model 9
PFR	0.269***	0.269***	0.273***	0.278***	0.155***
	(0.029)	*(0.029)*	*(0.029)*	*(0.028)*	*(0.033)*
Conservativism	-0.304***	-0.177***	-0.166***	-0.168***	-0.224***
	(0.024)	*(0.063)*	*(0.063)*	*(0.061)*	*(0.061)*
Trust	-0.129***	-0.129***	-0.272***	-0.223***	-0.109**
	(0.019)	*(0.019)*	*(0.046)*	*(0.045)*	*(0.044)*
Immigrants	0.599***	0.598***	0.597***	0.257***	0.316***
	(0.033)	*(0.033)*	*(0.033)*	*(0.080)*	*(0.083)*
PFR # Income	0.023***	0.023***	0.019***	0.014***	0.015***
	(0.005)	*(0.005)*	*(0.005)*	*(0.005)*	*(0.005)*
PFR # Conservativism		-0.033**	-0.036**	-0.035**	-0.021
		(0.016)	*(0.016)*	*(0.015)*	*(0.015)*
PFR # Trust			0.037***	0.025**	-0.005
			(0.010)	*(0.010)*	*(0.010)*
PFR # Immigrants				0.087***	0.066***
				(0.022)	*(0.022)*
Female	0.022	0.022	0.022	0.026	0.011
	(0.025)	*(0.025)*	*(0.025)*	*(0.025)*	*(0.025)*
Age	0.019***	0.018***	0.019***	0.019***	0.017***
	(0.004)	*(0.004)*	*(0.004)*	*(0.004)*	*(0.004)*
Age2	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*
Edu2	-0.266***	-0.267***	-0.265***	-0.274***	-0.239***
	(0.046)	*(0.046)*	*(0.046)*	*(0.046)*	*(0.043)*
Edu3	-0.214***	-0.218***	-0.213***	-0.221***	-0.183***
	(0.069)	*(0.069)*	*(0.068)*	*(0.067)*	*(0.066)*
Hsize	0.054***	0.054***	0.054***	0.054***	0.053***
	(0.013)	*(0.013)*	*(0.013)*	*(0.013)*	*(0.013)*
Nchild	0.097*	0.098*	0.100*	0.099*	0.094*
	(0.057)	*(0.057)*	*(0.057)*	*(0.056)*	*(0.056)*
Student	0.074	0.071	0.083	0.076	0.073
	(0.070)	*(0.070)*	*(0.069)*	*(0.069)*	*(0.069)*
Unemployed	0.072**	0.072**	0.071**	0.069**	0.073**
	(0.032)	*(0.032)*	*(0.033)*	*(0.032)*	*(0.032)*
Retired	0.054*	0.054*	0.055*	0.052*	0.047*
	(0.029)	*(0.029)*	*(0.029)*	*(0.029)*	*(0.028)*
Other inactive	-0.044**	-0.044**	-0.043**	-0.042**	-0.040**
	(0.019)	*(0.018)*	*(0.018)*	*(0.018)*	*(0.018)*

	Model 5	Model 6	Model 7	Model 8	Model 9
Income	-0.144***	-0.146***	-0.128***	-0.110***	-0.113***
	(0.020)	*(0.020)*	*(0.018)*	*(0.020)*	*(0.020)*
Constant	4.002***	4.005***	3.979***	3.964***	4.411***
	(0.598)	*(0.600)*	*(0.604)*	*(0.619)*	*(0.633)*
Observations	33,337	33,337	33,337	33,337	33,337
R-squared	0.229	0.229	0.230	0.233	0.244

Notes: This table represents regression coefficients from the estimation of the cultural profile of the PFR. Besides the variables in the table, models 1 to 3 control for country and time fixed effects. Clustered (country/time) and robust standard errors in parentheses. Significance levels are marked as *** p<0.01, ** p<0.05, * p<0.1.

Source: Own calculation based on ESS and CHES data (2002-2023)

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