

Anti-System Politics, Welfare States, and the New Age Divide: A Multi- Level Analysis of Anti- System Voting in Europe

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Jonathan Hopkin * and Andrew McNeil**

Abstract

This paper proposes an explanation of variations in anti-system voting in European democracies. It tests the hypothesis that younger voters are the main constituent of anti-system parties, conditional on the type of welfare regime of the society they live in. We show that when economic resources and welfare policy are skewed toward insiders and older generations, the young are more likely than the old to vote for anti-system parties. Hopkin (2020) argues that younger voters on average have more post-materialist values and therefore tend to support anti-system left parties over the right. However, in some countries large numbers of younger voters vote for the anti-system right. In Southern Europe, we find that younger voters, across all levels of education, are the most likely to support anti-system left parties. In social democratic and continental welfare regimes, younger people with low educational attainment are most likely to vote for the anti-system right.

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1. Introduction

The dramatic ascent of anti-system or populist parties over the past two decades has been the focus of a great deal of research by political scientists and economists. Much of the literature has focused on the radical right, with a particular attention to the relative importance of economic versus cultural factors in explaining rising support for xenophobic and authoritarian parties and movements in Europe and America (Hopkin, 2020; Mudde & Rovira Kaltwasser, 2017; Norris & Inglehart, 2019). Research on economic drivers of anti-system voting has drawn on both individual-level characteristics and aggregate data to examine the importance of voter attitudes towards immigration and democratic institutions, and the impact of economic decline or specific economic shocks on levels of anti-system voting in different regions. A picture has emerged of anti-system voting being driven by a combination of exposure to economic difficulties and voter openness to a populist message, which in turn depends on individual-level characteristics.

This paper aims to add to the discussion of economic causes of anti-system voting by examining the role of welfare institutions in mediating between voters and economic threats. It is well understood that welfare policies can cushion voters from the effects of economic shocks and redistribute income and opportunities in ways which render the vagaries of a market economy more acceptable to citizens, thus contributing to political stability (Esping-Andersen, 1990). It is also clear that political ideologies and political parties vary in their views of the welfare state and the role of government in the economy more broadly (Burgoon & Schakel, 2021). Cuts to welfare provision, notably after the 2008 Global Financial Crisis, have been convincingly linked to anti-system voting in country studies (e.g. Fetzer, 2019), and in cross-national macro-comparative analyses (Hopkin, 2020). Different levels of welfare protection from

economic shocks are a plausible predictor of variations in anti-system voting at the country level, but omitted variable bias remains a problem in cross-country studies.

Our approach here is to use multi-level regression to explore the relationship between welfare institutions, voter characteristics, and anti-system voting. Welfare institutions vary for the most part at the national level and have an important role in determining the consequences for individuals of economic downturns. We propose that differences in welfare institutions, broadly understood, can explain why particular kinds of voters are drawn to anti-system voting in different ways across national contexts. Individual-level evidence tells us that voters with higher levels of education are most likely to hold progressive social-cultural and economic values and to vote for parties of the left (Abou-Chadi & Hix, 2021; Gethin *et al.*, 2021). We also know that voters with less education and authoritarian social values are more likely to vote for the radical right (Norris & Inglehart, 2019). Urban or rural location, and living in a more or less prosperous region are good predictors of voting for mainstream compared to anti-system parties (Rodríguez-Pose, 2018). What is less well understood is how these effects vary according to the level of welfare protection at the country level. Our paper explores precisely this variation.

Our intuition is that the same individual-level characteristics may well predict anti-system voting across a range of national contexts, but the extent of anti-system voting will depend on whether welfare institutions at the country level do a good job of protecting vulnerable voters from economic risks. For example, a middle-aged high school educated voter in the United Kingdom may have a similar underlying propensity to vote for the radical right as a middle-aged high school educated voter in Germany, or a young university graduate the same underlying propensity to vote for the anti-system left in the Netherlands and Spain. But what varies is the nature of the welfare protections and labour market conditions that these similar voters face in the different countries. The German welfare state offers stronger protections against dismissal and better unemployment support than in the UK, which means that the German middle-aged high school graduate will all else equal be more likely to vote

for mainstream political parties than anti-system parties. Similarly, the young Dutch graduate, facing better social protection and greater job opportunities than their Spanish counterpart, may be less likely to support the anti-system left.

It has generally been accepted that older voters seem more sympathetic to authoritarian and xenophobic parties whilst younger voters prefer more socially progressive parties (Norris & Inglehart, 2019). This empirical relationship has been called into question (Schäfer, 2021): when controlling for other characteristics, such as education, it may be that the young are as likely, if not more so, to vote for anti-system parties. We argue that the role of welfare states is missing from this analysis: welfare states which are more highly dualistic tend to protect older voters more than younger voters. We develop a series of theoretical expectations as to how different welfare arrangements are likely to favour different levels of support for anti-system parties in general, and anti-system left or anti-system right parties specifically. This paper will therefore test the hypothesis that younger voters are likely to support anti-system parties rather than 'mainstream' or 'establishment' parties, conditional on the type of welfare regime of the society they live in. We further investigate which kinds of voters in different age cohorts are most likely to vote for which kinds of anti-system parties, focusing on educational attainment.

Although some research on anti-system or populist voting has combined individual-level and district-level analysis (e.g. Adler & Ansell, 2020; Colantone & Stanig, 2018) or individual-level and national analysis (Rooduijn & Burgoon, 2018; Vlandas & Halikiopoulou, 2021), the possibilities of multi-level analysis remained largely unexploited. We use multi-level models to analyse how individual-level voter characteristics are affected by aggregate-level variables associated with the type of welfare regime. When economic resources and welfare policy are skewed toward insiders and older generations, the young are more likely than the old to vote for anti-system parties. This is underpinned by country and regional level regressions. In Southern Europe, we find that younger voters, across all levels of education, are the most likely to support anti-system parties of the left. In social democratic and

continental welfare regimes, outsiders are most likely to vote for the anti-system right, particularly those younger people with low levels of education. Our analysis is based on data from the European Social Survey.

The next section discusses our theoretical expectations in more detail, whilst the subsequent three sections discuss the data, empirical strategy, and results. The final section concludes.

2. Worlds of welfare and the anti-system vote

The link between economic distress and political instability and polarisation is a staple of economic history and international political economy, with scholars identifying the economic roots of fascism and other forms of extremism in the uncertainty and inequality generated by failures of the market system, and in particular in the effects of financial crashes (Bordo & Meissner, 2012; Esteban & Ray, 2008; Frieden & Walter, 2019; Funke *et al.*, 2016; Polanyi, 1944). Political scientists and sociologists often see the welfare state as a function of the political and social tensions created by the market economy, a practical response to the challenge of securing political consent for capitalism (Berman, 2006; Esping-Andersen, 1990). The 2008 crisis has been seen by many as a mirror of the crisis of the 1930s (Eichengreen, 2015), with the austerity measures adopted in the early 2010s frequently portrayed as a lurch back to the liquidationism of the Great Depression era which provoked an entirely predictable political backlash (Alesina *et al.*, 2019; Blyth, 2015; Bó *et al.*, 2019; Fetzer, 2019).

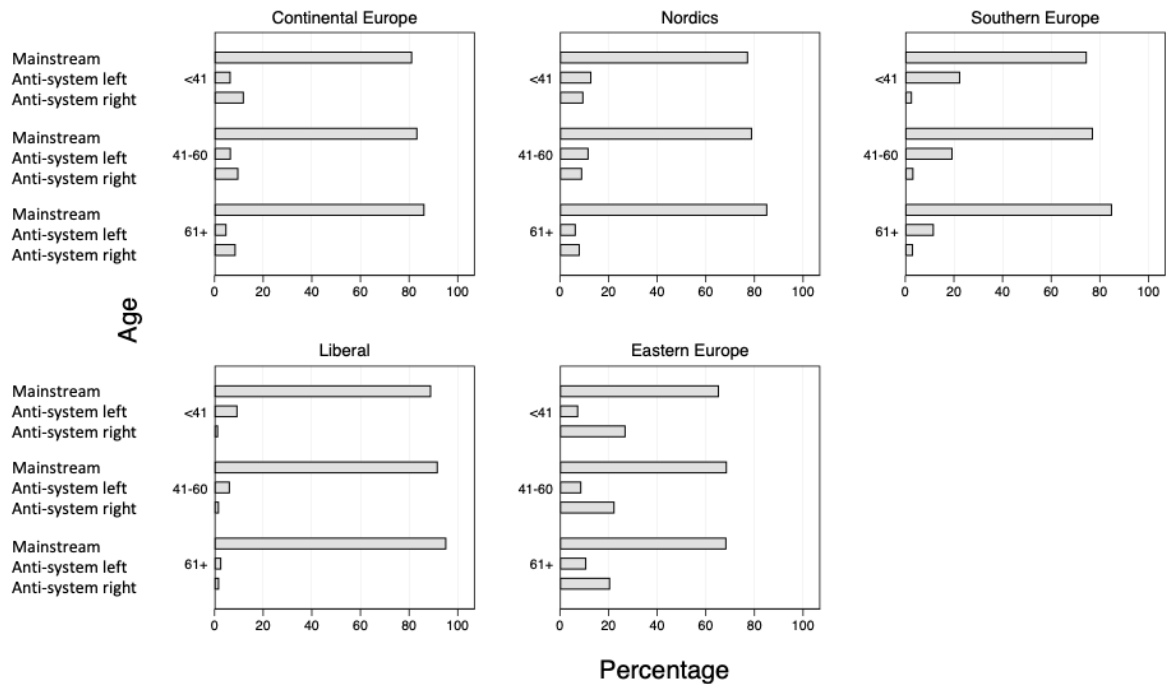
However, the crisis, whilst global, did not have the same effects everywhere. First, the credit crunch following the financial meltdown of autumn 2008 was particularly damaging for countries with consumption-led growth models who were most vulnerable to a 'sudden stop' in capital inflows. This was particularly the case in the Eurozone periphery, where a drying up of capital transfers from the creditor countries of the Eurozone core brought a brutal readjustment of consumption levels which left median household incomes below the pre-crisis peak for several years (longer, in the

cases of Greece and Italy). Second, this abrupt halt to investment and consumption had particularly dramatic effects on households in countries where the welfare state failed to provide a strong backstop against falls in market income. The weakest welfare states, for reasons not yet widely understood in the mainstream political economy literature (Baccaro *et al.*, 2022; Crouch, 2009; Hay, 2011; Iversen & Soskice, 2010), tended to be precisely the same countries that were importing capital on a large scale. The result was a ‘double whammy’ of harsh readjustment with inadequate social protections which, predictably, in most cases provoked strong political backlash, with anti-system forces enjoying dramatic increases in support in the early to mid-2010s in Greece, Spain, and Italy (Hopkin, 2020), whilst consumption-led models in the UK and the US also brought acute political polarisation and instability.

Closer inspection of these patterns of electoral change also reveals that different kinds of anti-system forces seemed to be benefitting in different places, and that the relative strength of anti-system left and anti-system right forces mapped roughly onto well-established typologies of the ‘worlds’ or ‘varieties’ of welfare capitalism (Hopkin, 2020; Hopkin & Blyth, 2019). These patterns are highlighted in **Figure 1** (authors’ calculations). In both the UK and the US, the most ‘liberal’ regimes with weak safety nets and two-party systems, right-wing nationalist forces successfully launched hostile takeovers of the mainstream conservative parties, whilst anti-austerity left groups less successfully penetrated the mainstream centre-left. In the multiparty systems of continental Western Europe and Scandinavia, the radical right enjoyed significant gains, although mainstream forces maintained majority control. In Southern Europe, the radical anti-system left was initially the main beneficiary of popular rejection of incumbent elites, with anti-system right parties enjoying some success in subsequent elections (especially in Italy, and latterly Spain)¹.

¹ Our data concludes prior to the expansion of Vox in Spain.

Figure 1 Anti-system support by age across welfare regimes



Notes: Authors' calculations based on the ESS. Post stratified design weights applied. We do not use population weight, hence why there is a relatively large anti-system left support in the Liberal economies despite no anti-system left party in England, Scotland, or Wales.

Although anti-system parties of all kinds often benefitted from voters' keenness to send protest messages to incumbents, the different variants have their own characteristic social constituencies (Norris & Inglehart, 2019). Radical right parties, with their hostility to immigration and Euroscepticism, tend to recruit most successfully amongst less skilled workers with lower levels of educational attainment, especially males. Anti-system left parties, with socially and culturally progressive messages on issues such as immigration, climate change, and economic redistribution, instead appeal more to younger and especially university educated urban voters. The success of different types of anti-system parties in different welfare regimes can be a marker of the extent to which systems of social protection have been able to cushion the effects of the crisis on these specific sets of voters.

In particular, we hypothesise that the degree of dualization of welfare provision (Emmenegger *et al.*, 2012) is a likely predictor of which kinds of voters are most exposed to economic shocks and therefore which kinds of anti-system parties are most likely to reap electoral rewards. In dualistic welfare systems, provision is skewed towards labour market ‘insiders’ with stable employment histories, a condition increasingly the preserve of older voters. Younger voters are more likely to be labour market ‘outsiders’ facing precarious (if any) employment, with limited social benefits and poor pension prospects. All else equal, if a country with a very dualistic welfare system suffers a significant economic shock, the voters most likely to be motivated to support anti-system forces can be expected to be younger than average, and probably more sympathetic to the socially and culturally open form of protest offered by anti-system left parties. However, this is likely mediated by the extent to which higher educated outsiders predominate, since less educated younger voters may prefer the radical right. This logic would explain why the very highly dualized welfare systems of Southern Europe, when faced with a deep economic shock, saw steep rises in support for the anti-system left, such as Syriza in Greece, Podemos in Spain, and the Five Star Movement in Italy (which for all its ideological ambiguity lacks the focus on immigration typical of the radical right). Older ‘insider’ voters were more likely to stick with the beleaguered mainstream parties.

We observe that although Continental and Northern European countries also saw a rise in anti-system voting, it tended to be more limited and benefited the right-wing variant (Hopkin, 2020). Tentatively we can suggest that welfare reforms in these countries, and increasing dualization, left a smaller but still substantial part of the electorate exposed to the economic shock. The appeal of the nationalist anti-system right, with its emphasis on the ‘threat’ posed by large-scale immigration to relatively comprehensive welfare systems, is more likely to bring electoral gains amongst lower educated and less economically advantaged parts of the population whose access to welfare protection, although comparatively high, has been declining after successive welfare and labour market reforms (Bó *et al.*, 2019). Vlandas and Halkikiopolou (2021) show how individuals who are direct beneficiaries of compensatory and protectionist

policies are less likely to vote for the far right. For example, retired individuals are less likely to vote for the far right in states with high pension replacement rates when compared to their non-retired peers. More generally, young and old precariously employed and lower skilled voters are those most likely to be tempted by a nationalist and welfare chauvinist anti-system appeal (Busemeyer *et al.*, 2021).

Age has been highlighted as a particularly important cleavage. Most prominently Norris and Inglehart (2019) argue that as society moves to more progressive, post-materialistic attitudes, it will be older parts of the electorate who pine for the past. These older generations are ‘strangers in their own land’ (Hochschild, 2016) and can react against mainstream politics by voting for anti-system parties. However, this widely accepted view has now been challenged on empirical grounds, as evidence that older generations tend to vote more for anti-system parties seems not to hold (Schäfer, 2021). Our initial descriptive empirics (**Figure 1**) seem to confirm this view, as it is the young (40-year-olds and younger) who have the highest tendency to vote for anti-system parties across all the welfare regimes. From these descriptive patterns (see **Figure 1**), we also have some support for our hypothesis that age is a more important factor when the young are relatively unprotected by the welfare regime. For example, the anti-system left dominates the right for all age groups in Southern Europe, yet it is the young who have the highest share of supporters for the anti-system left.

In sum, we expect the propensity of voters to support the different types of anti-system parties to be conditional on the nature of welfare protection from economic shocks, which varies mostly at the country level. In the following pages we test the hypothesis that younger voters are more likely than older voters to support anti-system parties rather than ‘mainstream’ or ‘establishment’ parties. This relationship is based on the expectation that the young are usually relatively less well protected by conservative and Southern European welfare regimes, while in liberal market economies, where there is limited protection for all, we would expect the old to be more likely to back the anti-system right. Assuming that younger voters, all equal, will be more highly educated and more postmaterialist in their social and cultural attitudes, we expect to

find that younger voters on average are therefore more likely to support anti-system left parties than those on the right. However, in some countries large numbers of younger voters vote for the far right. Those young anti-system right supporters will tend to be less educated than young anti-system left supporters.

Hypothesis 1) Young voters are more likely to vote for anti-system parties relative to older voters.

Hypothesis 2) The tendency for young voters to be the main group of anti-system voters will be most pronounced when they are relatively unprotected in dualized welfare regimes.

Hypothesis 3) Young anti-system voters on the left will tend to be higher educated than young anti-system right supporters.

3. Data

To test these hypotheses, we use individual-level data from the European Social Survey (ESS), a bi-annual survey. We use data across the nine waves from 2002 to 2018. Our main analysis focuses on individuals from 16 of the 33 countries within the dataset. We eliminate countries with limited data availability (which participate in fewer than four waves), and with a population of fewer than one million people. We only include Western European countries in our pooled analysis, given that the predictors of anti-system support are not necessarily the same across Western and Eastern Europe (Santana *et al.*, 2020). We also find this dissimilarity in our own single country analysis.

Our two dependent variables are anti-system right support and anti-system left support. The ESS asks respondents which party they feel closest to. We feel this is preferable to who one voted for in the last election given the potential time lags. We operationalise this response as a binary variable, anti-system right (left) coded as '1', all other mainstream parties '0'. Results are robust to coding '0' as all other parties supported, i.e., '0' is both mainstream parties and anti-system left (right) parties. We construct anti-system right and anti-system left parties using *The Populist* (Rooduijn *et*

al., 2019). The dataset covers all parties that have won at least 1 seat or 2% of the votes in a parliamentary election. We complement this with manual coding for smaller parties (see the supplementary materials).

Our anti-system right measure includes all those parties that are classified by *The Populist* as 'far-right' or borderline 'far-right'. The anti-system left dependent classification is made up of all those parties that are coded as 'far-left' or borderline 'far-left'. We also code as anti-system left those parties that are classified as 'populist' without being 'far-right' or 'far-left'. Thus, the anti-system left measure includes some 'centrist populist' parties.

Our key independent variable of interest is age and how the effect of age changes across welfare regimes. We classify the welfare regimes as follows: Nordics (Denmark, Finland, Norway, Sweden); Continental Europe (Austria, Belgium, France, Germany, Netherlands, Switzerland); Liberal (Ireland, UK); Southern Europe (Greece, Italy, Portugal, Spain).

We introduce four aggregate level variables: youth unemployment, national GINI coefficient, employment protection legislation (EPL), and share of the labour force on temporary contracts. Macro level data is taken from the OECD database. Youth unemployment is the number of unemployed 15–24-year-olds as a percentage of the youth labour force, that is those young people looking for work but without work. The OECD EPL score is measured on a scale of 0-6 with higher scores reflecting stricter regulation for hiring and dismissal of employees. The GINI coefficient is a standard measure of income inequality, where zero is the most equal and one the most unequal. Share of temporary contracts is calculated as the percentage of all workers whose job has a pre-determined termination date. As described in detail above, we view these as symptomatic of the age-related distributional outcomes associated, directly or indirectly, with the different welfare regimes.

We use a suite of individual-level controls which are frequently cited as predictors of anti-system voting. These are occupation (using Oesch's five categories), education (tertiary, advanced vocational, secondary, no qualifications), a dummy for belonging

to an ethnic minority, religiosity (10-point scale), gender, and country level GDP per capita from the OECD.

We decide against including attitudinal controls, unlike many other works on anti-system voting. We view these as potential mediating mechanisms in the causal process translating the effect of age within each welfare regime to anti-system voting. They are thus ‘bad controls’ (Angrist & Pischke, 2009).

Full descriptive statistics are available in the supplementary materials.

4. Empirical strategy

The data is structured hierarchically with a binary dependent variable. Thus, we use a logistic multi-level random intercept model. Individuals (level 1) are nested in country-years (for example, Spain in 2018) (level 2), which in turn are nested in countries (level 3). For our main analysis, we have 64,384 and 63,604 individuals for the anti-system left and anti-system right regressions respectively. The data is from 101 country-years, and 16 countries. The supplementary material presents an alternative version of this model with two levels and linear probability models instead of logistic regressions. In this case, individuals are nested in country-years. Here, we also include a random slope for models with a cross-level interaction as proposed by Heisig and Schaeffer (2019). The results are substantively similar.

We produce six models for both the anti-system left and anti-system right. Our first version of the model (Model 1 for the anti-system left and Model 7 for the anti-system right) includes our suite of individual-level controls, and country-year-level GDP per capita. We focus on the effect of age. In our second set of models (Models 2 and 8), we nuance this analysis by including a dummy variable for the type of welfare and its interaction with age, to analyse whether this effect of age varies according to the type of welfare regime in which an individual resides.

We then replace the welfare regime dummy with macro level variables: youth unemployment (Models 3 and 9), national Gini coefficient (Models 4 and 10)², EPL (Models 5 and 11), and share of temporary contracts (Models 6 and 12), also including their respective interactions with age. As argued in the theoretical framework, we believe these are symptomatic outcomes of the respective welfare regimes and are informative of the generational distribution of resources within countries. Although they are measuring distinct outcomes of the welfare regimes, given the limited number of countries, our emphasis is more on the overall pattern, rather than placing a high degree of confidence on one coefficient per se.

Following from our multi-level models we further explore individual country-level effects of age on anti-system left and anti-system right voting. This also supports our first stage empirics, given potential concerns around only 16 countries being in ‘Level 3’ of our multi-level model (Bryan & Jenkins, 2016)³. We run individual country binary logistic regressions with the same individual-level controls as in the multi-level model – as well as a dummy for the ESS round. We transform the continuous age variable into the ‘young’ (less than 40 years old), ‘middle-aged’ (41 to 60 years old), and the ‘old’ (over 60 years old). In this analysis, we also add back Eastern European countries as their inclusion does not impact the coefficients for other countries.

Finally, we wish to test for any differences in age groups according to educational status. This allows us to test whether ‘young’ supporters of anti-systems parties differ by educational attainment for the left and right. The main text includes results for the full sample, but we also run this at a regional level (available in the supplementary material). Here we include an interaction between educational attainment and age group. Note, in this analysis, we include only those over the age of 23 to ensure that most individuals will have had an opportunity to finish university.

² The Gini coefficient is based on income defined as household disposable income in a particular year.

³ As described above, we also run an alternative based on two levels, individuals nested in country-years, which should alleviate this concern with 101 groups at level 2.

5. Findings

5.1 Multi-level regressions

From our multi-level Model 1 (**Table 1**) where only our standard controls are included, it is estimated that being one year older is associated with a decrease in the log-odds of supporting an anti-system left party of 0.0114, that is a reduction in the odds of 1%. However, this hides differences between welfare regimes, as illustrated in Model 2. There is no statistically significant effect of age on anti-system support in Continental European countries. This effect becomes significant for Nordic countries and is most pronounced in Southern European and Liberal economies (in this case mainland Ireland and Northern Ireland, as no party is coded as anti-system left in Scotland, England, or Wales). This is the first evidence we find to support our hypothesis that younger people are more likely to support anti-system left parties in welfare regimes where there is less protection for the young.

Next, we introduce youth unemployment as an explanatory variable. In and of itself, an increase in youth unemployment of one percentage point is associated with an increase of the odds of anti-system support for individuals of 4.39% ($p < 0.01$). Most relevant for us, there is also an effect on who votes for the anti-system left. In those countries with higher levels of youth unemployment, there is a greater tendency for younger people to support the anti-system left. This is demonstrated most clearly through **Figure 2**. The effect of age is significant when youth unemployment is greater than 10%, and this effect increases with higher levels of youth unemployment. The magnitude of this effect is relatively large for those countries with high levels of youth unemployment. When youth unemployment is 35%, our model estimates that each year older decreases the predicted probability of voting anti-system left by approximately 0.2 percentage points.

Similarly, when we introduce the GINI coefficient as our macro variable (Model 4), we find that higher levels of inequality are associated with a greater tendency to support the anti-system left. Moreover, the effect of older age is to decrease the likelihood of

supporting the anti-system left. However, this is only statistically significant around a Gini coefficient of 0.26. From **Figure 2**, we can see that at the highest levels of inequality seen in Western Europe, each year older reduces the predicted probability of voting for the anti-system left by approximately 0.4 percentage points.

The other two macro variables we tested, EPL and share of temporary contracts, do not have statistically significant effects within our models.

We now re-run these models for the anti-system right (**Table 2**). Once again, the tendency to vote for the anti-system right increases for younger people. An increase in one year of age is associated with a decrease in the odds of voting anti-system right of 0.9% (Model 7). However, when introducing the interaction between welfare regime and age (Model 8), this effect is only seen for Continental Europe and Southern Europe. There is no effect of age in the Nordic region, and the coefficient is positive for Liberal economies (older people are more likely to support the anti-system right). This finding fits into our hypotheses, whereby in welfare regimes with strong levels of protection for 'insiders' i.e., Continental Europe, anti-system voting is fuelled by the young. Instead, in Liberal economies with less protection for older voters, it is older voters who are more likely to support anti-system forces (specifically the right).

We operationalise these hypotheses in Models 9 through 12, when we introduce our macro variables and interactions with age. Whilst none of our macro variables have an outright statistically significant effect on the tendency to support anti-system right parties, three out of the four are associated with a change in the age profile of who supports these parties. Higher levels of youth unemployment, EPL, and a higher proportion of temporary contracts are associated with a change in the age coefficient. This is demonstrated in **Figure 2**. Age is statistically significant when youth unemployment is greater than 7%, EPL levels are two or higher, and more than 10% of the labour force has temporary contracts.

Table 1 Effects of age on anti-system left support – Binary logistic multi-level regression models of anti-system left support

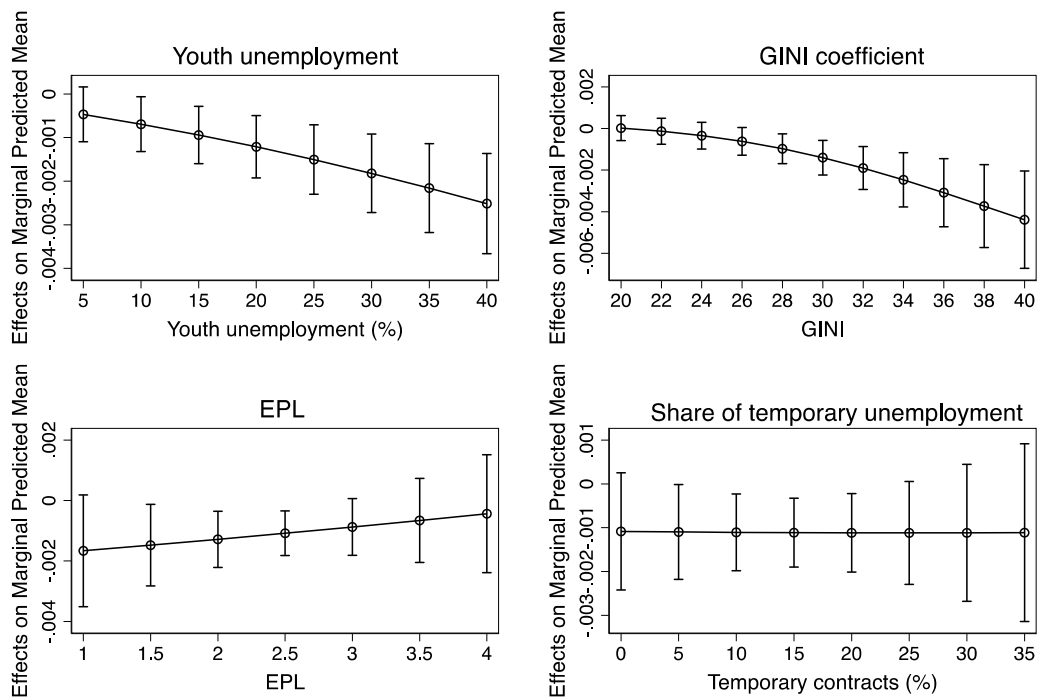
	(1) Base	(2) Welfare # Age	(3) Youth Ump # Age	(4) GINI # Age	(5) EPL # Age	(6) Temp # Age
Age	-0.0114*** (0.00313)	-0.00288 (0.00286)	-0.00333 (0.00422)	0.0285 (0.0182)	-0.0226 (0.0139)	-0.0126* (0.00719)
Welfare Type (Base Cont EU)						
Nordic		1.255** (0.604)				
Southern EU		3.285*** (0.748)				
Liberal		1.216 (1.325)				
Age interactions						
Nordic#Age		-0.00842** (0.00394)				
South#Age		-0.0187*** (0.00282)				
Liberal#Age		-0.0230*** (0.00363)				
Youth Ump			0.0430*** (0.00615)			
Youth#Age			-0.000445*** (0.000144)			
Gini				0.202*** (0.0447)		
Gini#Age				-0.00140** (0.000606)		
EPL					-0.160 (0.399)	
EPL#Age					0.00459 (0.00584)	
Temporary						0.0122 (0.0411)
Temp#Age						8.06e-05 (0.000470)
Controls	Y	Y	Y	Y	Y	Y
Country Var	1.660*** (0.605)	0.923*** (0.209)	1.513*** (0.545)	1.557*** (0.551)	1.618*** (0.625)	1.570*** (0.557)
Country-year Var	0.175*** (0.0670)	0.177*** (0.0674)	0.162** (0.0634)	0.139** (0.0653)	0.177** (0.0689)	0.177** (0.0699)

Individuals	64,384	64,384	64,384	64,384	64,384	64,384
Countries	16	16	16	16	16	16
Country-years	101	101	101	101	101	101

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Coefficients are log-odds.

Controls: Age, gender, religiosity, belonging to ethnic group, occupation, education, GDP per capita in country of residence.

Figure 2 Average marginal effects of age on anti-system left voting conditional upon the youth unemployment %, Gini coefficient, Employment Legislation Protection (EPL) strictness, and share of temporary unemployment within the country of residence



Notes: Bars are 95% confidence intervals. Example interpretation: when there is 40% youth unemployment, each additional year is associated with a decrease in the predicted probability of voting anti-system left of 0.26 percentage points.

Table 2 Effects of age on anti-system right support – Binary logistic multi-level regression models of anti-system right support

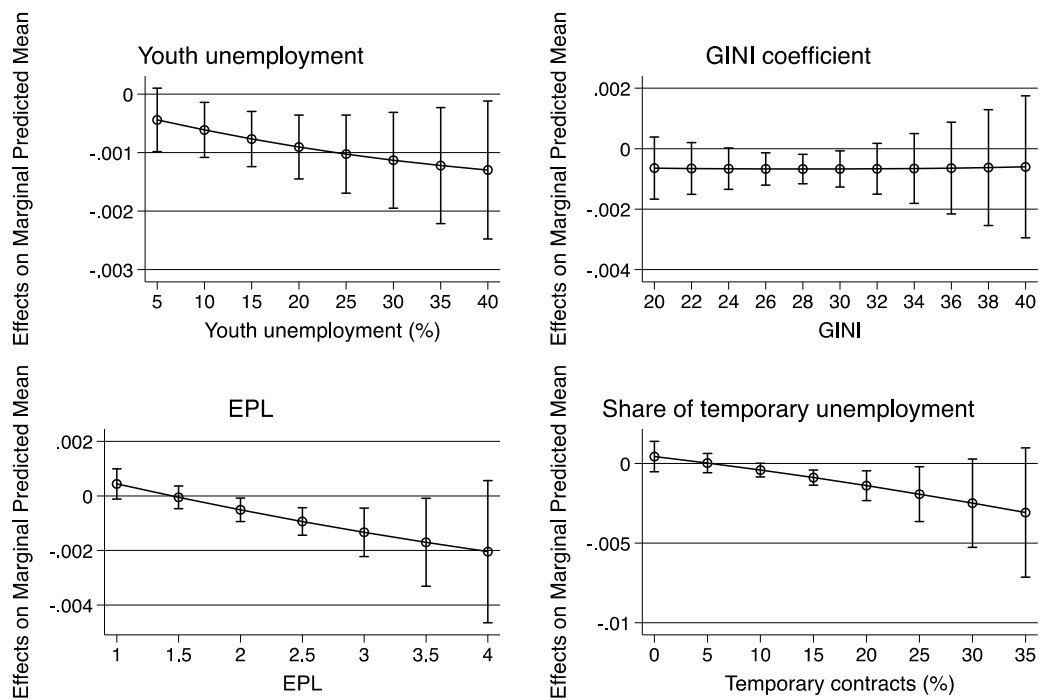
	(7)	(8)	(9)	(10)	(11)	(12)
	Base	Welfare # Age	Youth Ump # Age	GINI # Age	EPL # Age	Temp # Age
Age	-0.00936*** (0.00277)	-0.0126*** (0.00405)	-0.00291 (0.00385)	-0.0165 (0.0265)	0.0176*** (0.00537)	0.00649 (0.00633)
Welfare Type (Base Cont EU)						
Nordic		-0.866 (0.581)				
Southern EU		-0.876 (1.411)				
Liberal		-4.818** (2.360)				
Age interactions						
Nordic#Age		0.00718 (0.00572)				
South#Age		-0.00588 (0.00443)				
Liberal#Age		0.0192*** (0.00412)				
Youth Ump			-0.00175 (0.0268)			
Youth#Age			-0.000481** (0.000208)			
Gini				0.0704 (0.0859)		
Gini#Age				0.000259 (0.000949)		
EPL					0.425 (0.977)	
EPL#Age					-0.0122*** (0.00233)	
Temporary						0.0833 (0.0974)
Temp#Age						-0.00123*** (0.000413)
Controls	Y	Y	Y	Y	Y	Y
Country Var	3.414 (2.482)	2.093* (1.088)	3.352 (2.358)	3.723 (2.651)	3.543 (2.486)	3.568 (2.659)
Country- year Var	0.814* (0.472)	0.836* (0.491)	0.823* (0.477)	0.777 (0.477)	0.817* (0.477)	0.817 (0.502)

Individuals	63,604	63,604	63,604	63,604	63,604	63,604
Countries	16	16	16	16	16	16
Country-years	101	101	101	101	101	101

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Robust standard errors in parentheses. Coefficients are log-odds.

Controls: Age, gender, religiosity, belonging to ethnic group, occupation, education, GDP per capita in country of residence.

Figure 3 Average marginal effects of age on anti-system right voting conditional upon the youth unemployment %, GINI coefficient, Employment Legislation Protection (EPL) strictness, and share of temporary unemployment within the country of residence



Notes: Bars are 95% confidence intervals.

5.2 Individual country-level regressions

We now run the same regression at a country level. We split individuals into three groups: the 'young' (under 40), 'middle-aged' (40-60), and the 'old' (over 60). **Figure 4** illustrates the coefficients in the anti-system left regressions for the 'middle-aged' and 'old', with a 'young' base. First, we note broad patterns between welfare groups. Thus, the multi-level results in Table 1 where age is interacted with welfare type are not driven by a single country but rather general trends across countries within a welfare regime.

There is limited difference in odds ratios between any of the age groups in the Continental European countries. If anything, the 'old' in Belgium and France are less likely to vote for the anti-system left. In the Nordic countries, there is a gradient by age group, with the 'old' the least likely to vote for the anti-system left. As with the multi-level models, in all the Southern European countries and Ireland it is overwhelming the young who are voting for the anti-system left.

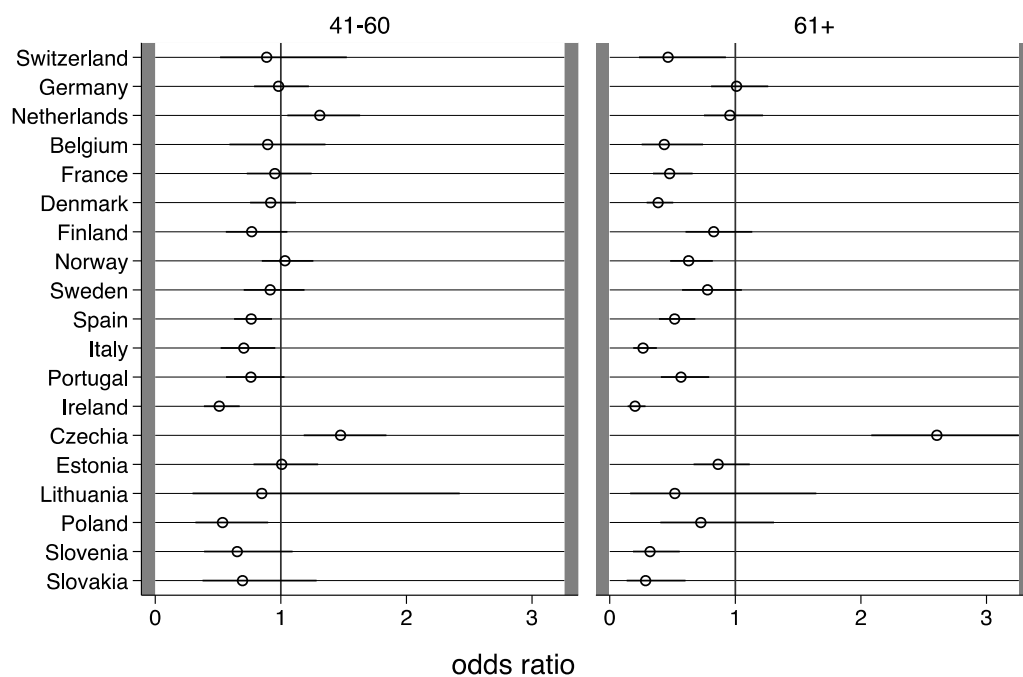
We also introduce Eastern European countries into this analysis. Except for Czechia, there is again an age gradient where the 'young' are the most likely to vote for the anti-system left.

We replicate this analysis for the anti-system right, showing odds ratios in **Figure 5**. Clear patterns emerge, again reinforcing the welfare regime categorisation we introduced above in the multi-level regressions. In Continental Europe the odds of 'young' people supporting the anti-system right are significantly higher than the 'middle-aged' or 'old'. This is also mainly replicated in Southern Europe. In the Nordic countries the 'old' are the least likely to vote for the anti-system right. However, in the UK, there is evidence that it is the older age groups who are more likely to support the anti-system right.

In Eastern Europe, the odds ratios show that the young have a higher tendency to vote for the anti-system right. Whilst not a focus of this paper, we also note from these regressions that the most educated are the least likely to support the anti-system right in all Western European countries. This is in line with numerous studies in the

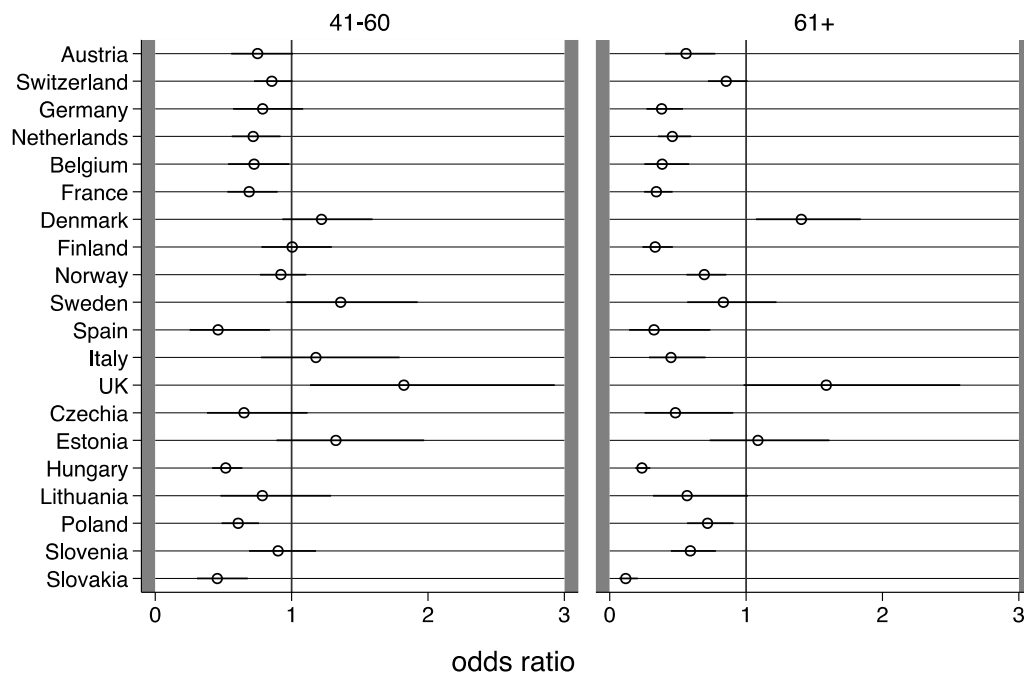
literature. However, there is no evidence of an educational gradient in anti-system right voting in Eastern Europe. The difference in underlying predictors was the main reason for our decision to exclude Eastern European countries from the main multi-level models.

Figure 4 Binary logistic regression, effect of age group on anti-system left voting, by country (Base: 'young')



Note: Bars are 95% confidence intervals. Controls: Age, gender, religiosity, belonging to ethnic group, occupation, education, ESS round. Coefficients are odds ratios.

Figure 5 Binary logistic regression, effect of age group on anti-system right voting,
by country



Note: Bars are 95% confidence intervals. Controls: Age, gender, religiosity, belonging to ethnic group, occupation, education, ESS round. Coefficients are odds ratios.

In summary, the multi-level models in conjunction with the individual country-level regressions show that age matters for anti-system voting, but the context is important. Across Southern Europe, it is predominantly the ‘young’ who support both the anti-system left and anti-system right. In Nordic and Continental European countries there is less of an age gradient, but the ‘old’ are the least likely to vote anti-system. In Liberal economies, it is country specific. In Ireland, Sinn Fein is predominantly a ‘young’ person vote. In the UK, UKIP and BNP receive support mostly from the middle-aged and older groups.

This leads to our more general expectation that those economies with welfare states with less protection for the young, such as Southern Europe, have a higher tendency to vote for anti-system parties. We introduce single macroeconomic variables to

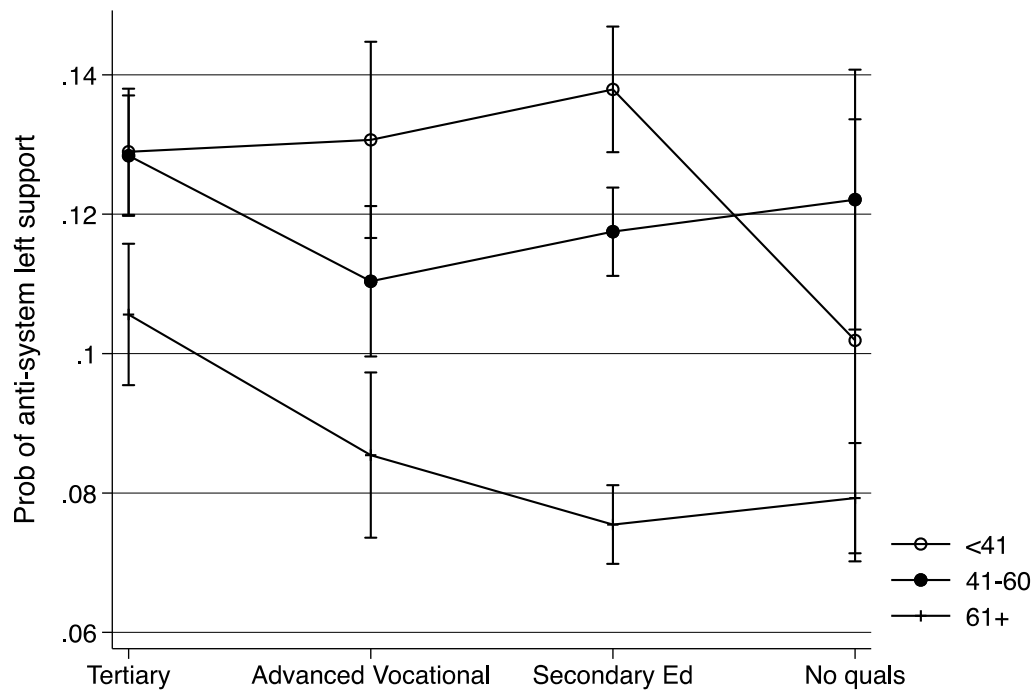
highlight this relationship. We do not treat these as causal mechanisms per se, rather part of an integrated welfare system of which these are some of the core outcomes.

5.3 Education and age interactions

Our final step is to introduce a pooled model where we interact age and education variables for the whole sample of Western European countries. We aim here to alleviate concerns that younger groups are more likely to attain higher levels of education and better jobs, hence driving our age findings. Moreover, we analyse if the effect of education may vary according to the age cohort. Specifically, we test our hypothesis that the ‘young’ supporters of the anti-system right will predominantly be lower educated, whereas the ‘young’ supporters of the left will come from across all levels of educational attainment.

Figure 6 and **Figure 7** show predicted probabilities from these models. The main finding in the analysis of the anti-system left is that education only has a minor impact (when including our suite of controls, including occupation) on anti-system left voting. For those with a ‘mid’ level education, advanced vocational and secondary schooling, it is mainly the young who vote for the anti-system left. Shown in the appendix, this is a similar pattern across regions. However, in Southern Europe young graduates also have a higher tendency to vote for the anti-system left than older graduates. The other exception is Ireland, where there is a steep educational gradient; those with low educational attainment, for all age groups, are more likely to support the anti-system left (predominantly Sinn Féin).

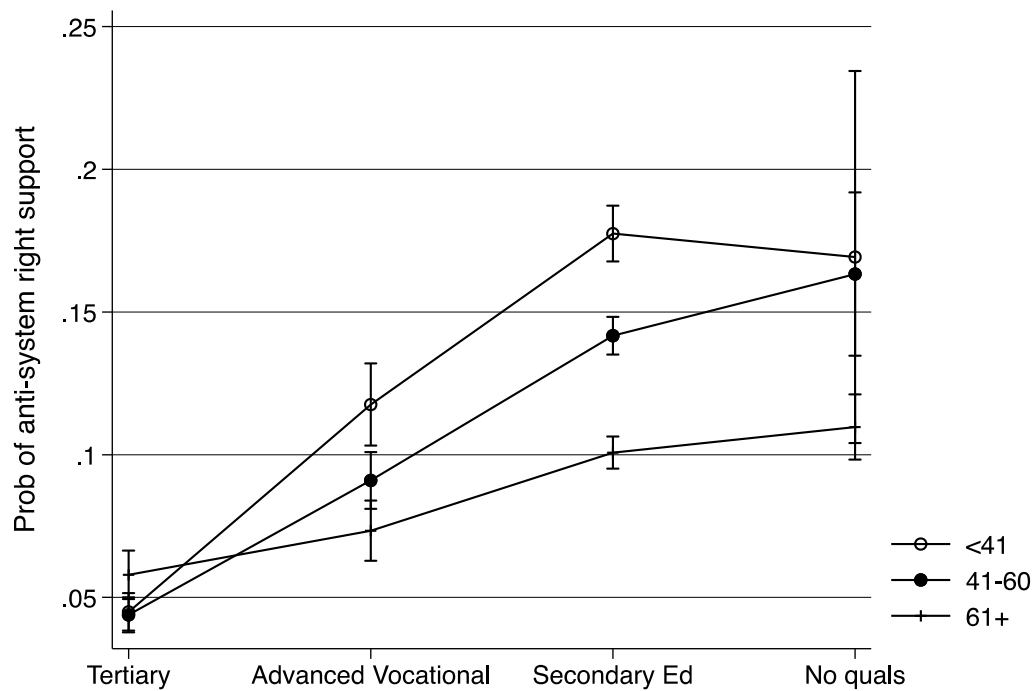
Figure 6 Predicted probability of anti-system left support for Western European countries, by educational attainment and age



Note: Bars are 95% confidence intervals. Controls: Age (categorical), gender, religiosity, belonging to ethnic group, occupation, education, ESS round. Predicted probabilities exclude anti-system right supporters from the analysis.

There is a much clearer educational gradient for anti-system right support. Independent of age, those with a university education are unlikely to vote for the anti-system right. However, for all other levels of educational attainment, the young are the most likely to vote for the anti-system right. When separated by region (see supplementary material), this pattern is seen in the Nordics and Continental Europe. In Southern Europe and the UK, the educational gradient exists in a similar manner, but at any given level of educational attainment, there is less differentiation between age groups.

Figure 7 Predicted probability of anti-system right support for Western European countries, by educational attainment and age



Note: Bars are 95% confidence intervals. Controls: Age (categorical), gender, religiosity, belonging to ethnic group, occupation, education, ESS round. Predicted probabilities exclude anti-system left supporters from the analysis.

6. Discussion and conclusion

A consensual interpretation of the increased tendency to vote for anti-system parties is that previously marginal anti-system parties and politicians capture a group of voters with underlying anger, resentment, and political disappointment. Some of this is undoubtedly a nostalgia for previous times as the younger generations develop a post-materialistic outlook (Inglehart, 1971; Norris & Inglehart, 2019). Yet, it is often the young that occupy the most precarious jobs, are at highest risk of unemployment, and have little protection from welfare systems. Moreover, in the aftermath of the financial crisis of 2008, the burden of economic recession and austerity fell disproportionately on the young. We argue and show empirically that in many cases this resulted in the

young having a higher tendency to vote for anti-system parties, both on the right and the left.

However, the context of the type of welfare regime in which one resides is important. Where younger voters are more likely to be outsiders and exposed to economic precarity, we show that these conditions exacerbate the age gradient. Our empirics support this argument: the young are more likely to support anti-system parties in the dualized welfare regimes of Southern Europe. We also see a similar effect in Continental Europe, where the young are more likely than the old to support the anti-system right. When we introduce more fine-grained indicators of generational inequality, which are directly or indirectly impacted by the welfare regime, we find that our measures generally support this argument again. Higher levels of youth unemployment, EPL, and a higher proportion of temporary contracts are associated with a more negative age coefficient for anti-system right voting. Similarly, higher levels of income inequality and youth unemployment are associated with a greater tendency for young people to support the anti-system left. To add further weight to our empirics, when we break down our results by country, the age patterns are similar across countries within the same regime type.

Our findings contribute to the debate of whether anti-system voting is an economic or cultural phenomenon. Whilst we have not included attitudinal controls in our analysis, they are in fact part of our proposed causal chain. When one finds the cards are stacked against them, due to welfare state policies and institutions, political disappointment and resentment may manifest themselves through, for example, anti-immigration attitudes – but this is not the underlying cause of voting for anti-system parties. In those regimes which are dualized, providing more economic protection for the old, it is the young who, it has been argued, are more likely to have post-materialistic attitudes, but they are more economically exposed. We find that this latter effect dominates. This is perhaps unsurprising for the anti-system left, but we also find this association for anti-system right support, though on the anti-system right those young supporters tend not to be university educated.

One of the remaining questions for us is our empirical finding that younger people are more likely to vote for the anti-system right in Continental Europe, while that relationship is not evident for the Nordic welfare regimes. For the anti-system left, this is reversed: younger people are more likely to vote for the anti-system left in Nordic countries, yet we do not find evidence for this in Continental Europe. In part, we believe that this is a result of our broad categories of anti-system left and anti-system right parties. We argue that this generalisation helps our understanding of anti-system politics, yet we acknowledge that there are underlying differences within these large categorisations. One can think of reasons as to why, for example, Germany's Die Linke, with its historical routes in East Germany, may retain a largely different age voter base to Syriza in Greece. Case studies of this nature have been explored in much greater depth (Hopkin, 2020).

We also contribute to the welfare regime literature. The generational distributional consequences of welfare policies are widely known. Perhaps unsurprisingly, this has started to filter through into generational backlash, with those younger groups venting their disappointment in the political status quo through anti-system parties. In welfare regimes where this generational conflict is not so obvious, anti-system voting is more widely spread across age cohorts.

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Supplementary material

Table 3: Own party classifications in addition to The Populist

Country	Party	Anti-system right or left
Austria	PILZ	Left
Finland	Communist Party	Left
Finland	Change 2011	Right
Germany	Republikaner	Right
Germany	NPD	Right
Ireland	United Left Alliance	Left
Italy	Potere al Popolo	Left
Italy	Casapound Italia	Right
Portugal	POUS	Left
Portugal	PNR	Right
Portugal	PPV/CDC	Right
Spain	ICV	Left
Sweden	Annat Parti	Left
Switzerland	Alternative Left	Left
Switzerland	Swiss Nationalist Party	Right
UK	BNP	Right
UK	Workers Party (NI)	Left

Table 2: Descriptive Statistics based on anti-system left models

	Percent	Mean	S.D.	Min	Max
Party supported					
Anti-system Left support	11.3				
Anti-system Right support	0				
Mainstream	88.7				
Age		50.7	17.8	14	103
Gender					
Male	52.6				
Female	47.4				
Education					
Tertiary	27.2				
Advanced Vocational	13.2				
Secondary Education	49				
No Qualifications	10.6				
Occupation					
High grade service class	21.6				
Low grade service class	24				
Skilled workers	36.1				

Unskilled workers	18.3				
Belongs to minority	4.04				
Religiosity	4.5	3	0	10	
GINI	28.6	3.1	22.5	35.8	
Temporary employment	14.1	5.7	5.6	34	
Youth unemployment	17.1	10.1	5.4	53.2	
EPL	2.31	0.6	1.3	4.4	
GDP per capita	38344.2	12670.7	16110	69560	
Number of Observations	64384				
Number of Countries	16				
Number of country-years	101				

Notes: Here, descriptive statistics are taken from the anti-system left models where we exclude anti-system right voters.

Table 3: Descriptive Statistics based on anti-system right models

	Percent	Mean	S.D.	Min	Max
Party supported					
Anti-system Left support	0				
Anti-system Right support	10.8				
Mainstream	89.2				
Age		50.9	18	14	103
Gender					
Male	53.55				
Female	46.45				
Education					
Tertiary	25.2				
Advanced Vocational	13.1				
Secondary Education	51.3				
No Qualifications	10.4				
Occupation					
High grade service class	20.9				
Low grade service class	23.5				
Skilled workers	37.4				
Unskilled workers	18.2				
Belongs to minority	3.9				
Religiosity		4.6	3	0	10
GINI		28.5	3	22.5	35.8
Temporary employment		13.8	5.6	5.6	34
Youth unemployment		16.4	9.5	5.4	53.2
EPL		2.3	0.6	1.3	4.4

GDP per capita	39209	12763	16110	69560
Number of Observations	63604			
Number of Countries	16			
Number of country-years	101			

Notes: Here, descriptive statistics are taken from the anti-system right models where we exclude anti-system left voters.

Predicted probability of anti-system left support for each welfare regime, by educational attainment and age

Figure 1: Nordics

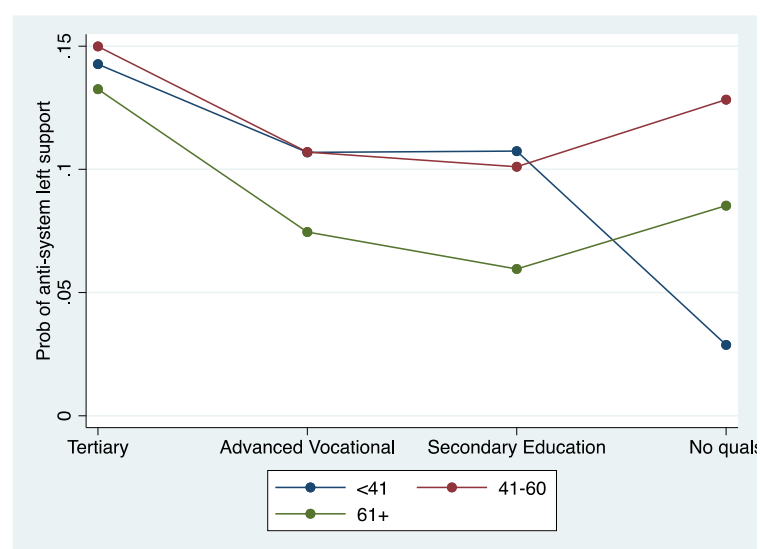


Figure 2: Continental Europe

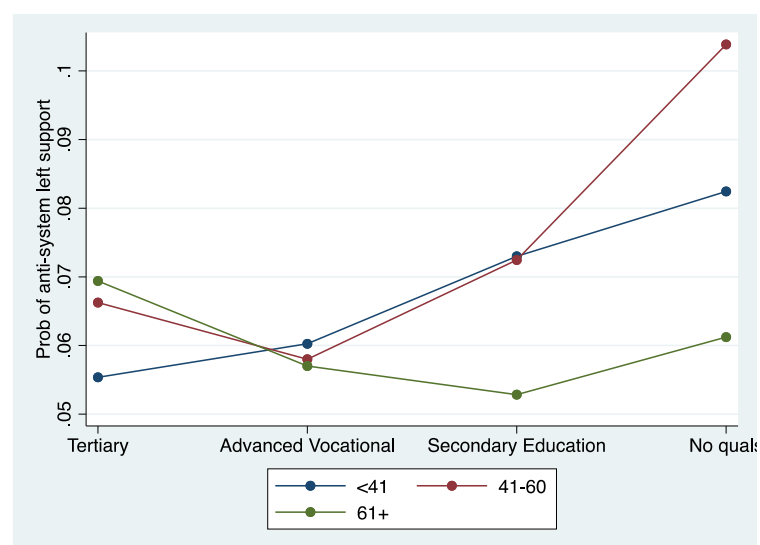


Figure 3: Southern Europe

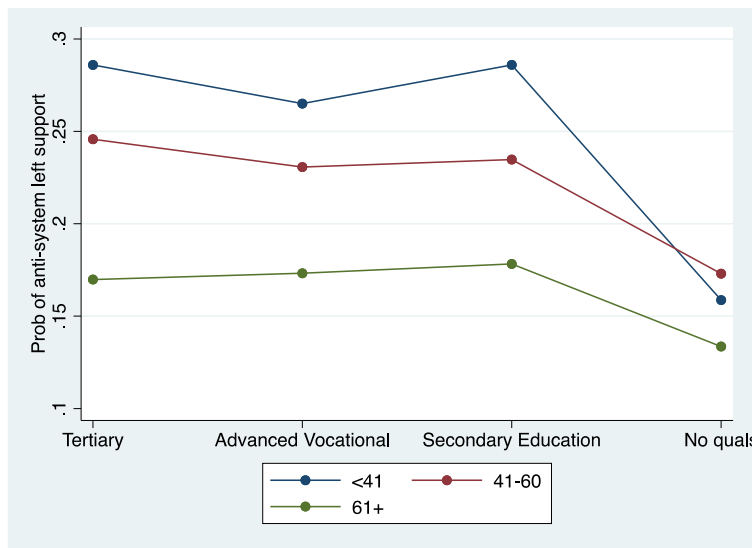


Figure 4: Liberal (Ireland only)

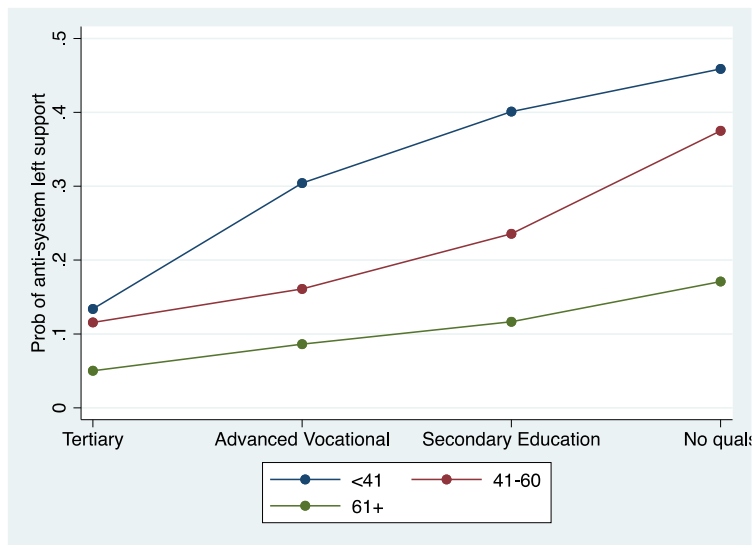
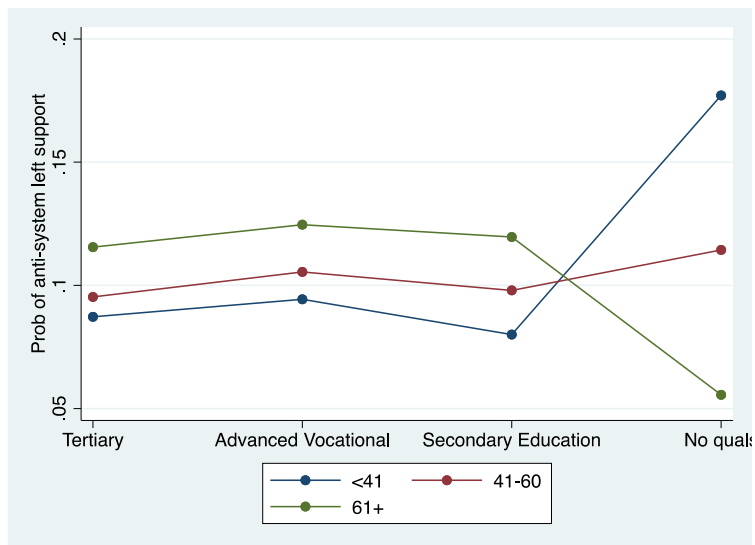


Figure 5: Eastern Europe



Predicted probability of anti-system right support for each welfare regime, by educational attainment and age

Figure 6: Nordics

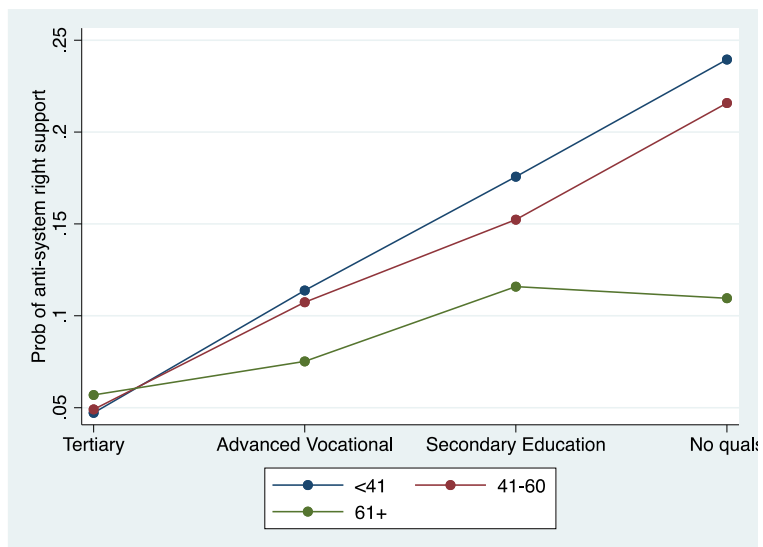


Figure 7: Continental Europe

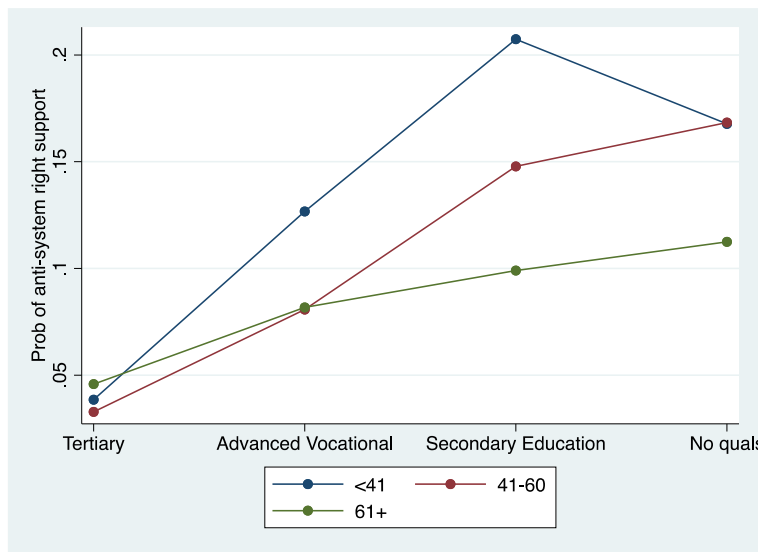


Figure 8: Southern Europe

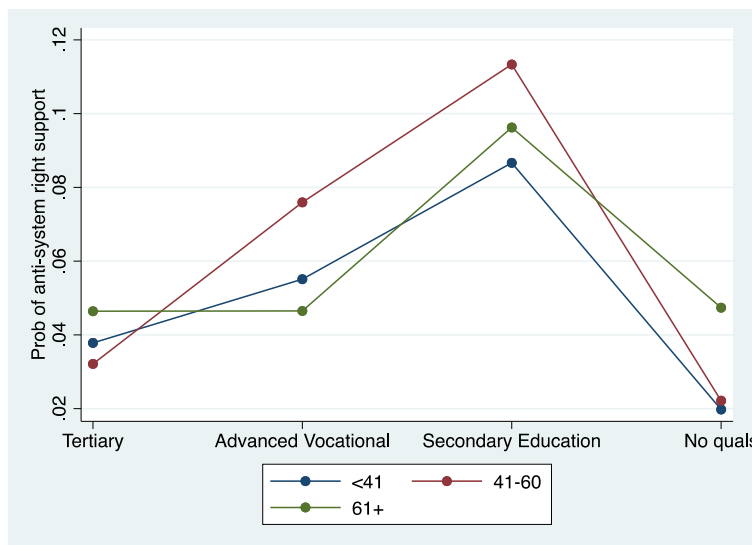


Figure 9: Liberal (UK only)

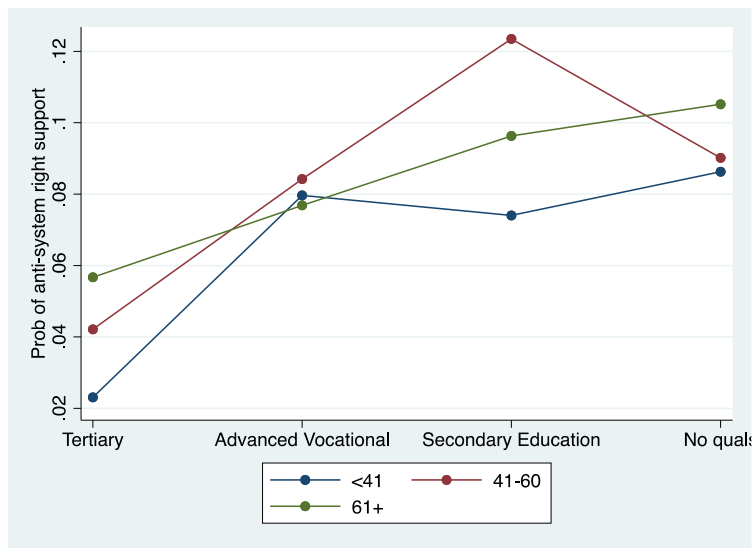


Figure 10: Eastern Europe

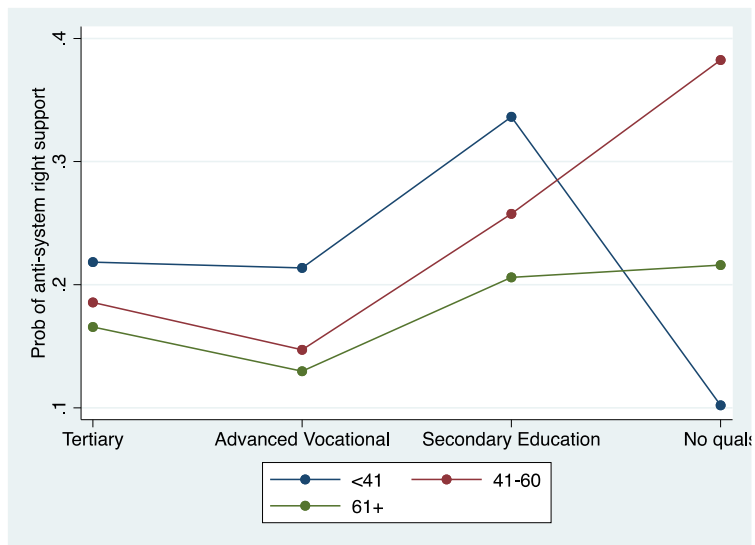


Table 4: 2-level logistic multi-level model, effects of age on anti-system left support

	(1)	(2)	(3)	(4)	(5)	(6)
	Base	Welfare # Age	Youth Ump # Age	GINI # Age	EPL # Age	Temp # Age
Age	-0.0115*** (0.00160)	-0.00290 (0.00196)	-0.00335 (0.00246)	0.0288 (0.0108)	-0.0226*** (0.00721)	-0.0126*** (0.00401)
Welfare Type (Base Cont EU)						
Nordic		1.412** (0.275)				
Southern EU		2.600*** (0.415)				
Liberal		1.194 (0.629)				
Age interactions						
Nordic#Age		-0.00842** (0.00268)				
South#Age		-0.0188*** (0.00317)				
Liberal#Age		-0.0229*** (0.00304)				
Youth Ump			0.0726*** (0.0151)			
Youth#Age			-0.000447*** (0.000109)			
GINI				0.120** (0.0595)		
GINI#Age				-0.00141*** (0.000375)		
EPL					0.832 (0.268)	
EPL#Age					0.00457 (0.00297)	
Temporary						0.0770*** (0.0287)
Temp#Age						0.00007 (0.0002)
Controls	Y	Y	Y	Y	Y	Y
Country-year Var	1.530 (0.287)	1.090 (0.171)	1.341 (0.247)	1.525 (0.280)	1.208 (0.222)	1.370 (0.239)

Individuals	64,384	64,384	64,384	64,384	64,384	64,384
Country-years	101	101	101	101	101	101

Notes: Other controls are occupation, education, gender, belonging to an ethnic minority, religiosity, GDP per capita, year.

Table 5: 2-level logistic multi-level model, effects of age on anti-system right support

	(7)	(8)	(9)	(10)	(11)	(12)
	Base	Welfare # Age	Youth Ump # Age	GINI # Age	EPL # Age	Temp # Age
Age	-0.00937*** (0.00154)	-0.0126*** (0.00181)	-0.00296 (0.00247)	-0.0164 (0.0160)	0.0175*** (0.00397)	0.00647 (0.00416)
Welfare Type (Base Cont EU)						
Nordic		-0.605** (0.251)				
Southern EU		-2.170*** (0.822)				
Liberal		-4.282*** (1.060)				
Age interactions						
Nordic#Age		0.00719** (0.00303)				
South#Age		-0.00562 (0.00387)				
Liberal#Age		0.0191*** (0.00315)				
Youth Ump			-0.0434 (0.0286)			
Youth#Age			-0.000478*** (0.000166)			
GINI				-0.211*** (0.0807)		
GINI#Age				0.000253 (0.000571)		
EPL					0.799 (0.434)	
EPL#Age					-0.0121*** (0.00190)	
Temporary						-0.0151 (0.0404)
Temp#Age						-0.00123*** (0.000293)
Controls	Y	Y	Y	Y	Y	Y

Country-year Var	2.879 (0.749)	2.069 (0.569)	2.788 (0.731)	2.775 (0.686)	2.917 (0.749)	2.861 (0.750)
Individuals	63,604	63,604	63,604	63,604	63,604	63,604
Country-years	101	101	101	101	101	101

Notes: Other controls are occupation, education, gender, belonging to an ethnic minority, religiosity, GDP per capita, year.

Table 6: 2-level linear probability multi-level model, effects of age on anti-system left support, including random slope for cross-level interactions

	(1) Base	(2) Welfare # Age	(3) Youth Ump # Age	(4) GINI # Age	(5) EPL # Age	(6) Temp # Age
Age	-0.000983*** (0.000170)	-0.000018 (0.00014)	0.000422 (0.000338)	0.00481*** (0.00182)	-0.000218 (0.00080)	-0.00043 (0.000475)
Welfare Type (Base Cont EU)						
Nordic		0.107*** (0.0299)				
Southern EU		0.346*** (0.0670)				
Liberal		0.126* (0.0705)				
Age interactions						
Nordic#Age		-0.00142** (0.000323)				
South#Age		-0.00326*** (0.000512)				
Liberal#Age		-0.00187*** (0.000798)				
Youth Ump			0.0113*** (0.00259)			
Youth#Age			-0.00009*** (2.07e-05)			
GINI				0.0205*** (0.00733)		
GINI#Age				-0.00021*** (0.00007)		

EPL					0.0708 (0.0298)	
EPL#Age					-0.000403 (0.000334)	
Temporary						0.00462 (0.00297)
Temp#Age						-0.00005 (0.000031)
Controls	Y	Y	Y	Y	Y	Y
Random Slope	N	Y	Y	Y	Y	Y
Country-year Var	0.0106 (0.00339)	1.25e-06 (3.08e-07)	0.0206 (0.00550)	0.0253 (0.00642)	0.0268 (0.00712)	0.0275 (0.00747)
Individuals	64,384	64,384	64,384	64,384	64,384	64,384
Country-years	101	101	101	101	101	101

Notes: Other controls are occupation, education, gender, belonging to an ethnic minority, religiosity, GDP per capita, year. Random slope: age.

Table 7: 2-level linear probability multi-level model, effects of age on anti-system right support, including random slope for cross-level interactions

	(7)	(8)	(9)	(10)	(11)	(12)
	Base	Welfare # Age	Youth Ump # Age	GINI # Age	EPL # Age	Temp # Age
Age	-0.000914*** (0.000146)	-0.000131*** (0.000165)	-0.00097*** (0.000232)	-0.00262** (0.00122)	-0.0000367 (0.000402)	-0.000533* (0.000321)
Welfare Type (Base Cont EU)						
Nordic		-0.0769*** (0.0255)				
Southern EU		-0.0239 (0.0508)				
Liberal		-0.162*** (0.0231)				
Age interactions						
Nordic#Age		0.000633*** (0.000337)				
South#Age		-0.000557* (0.000321)				
Liberal#Age		0.00123*** (0.000228)				
Youth Ump			0.000546			

Youth#Age			(0.00186) 0.000001 (0.0000118)			
GINI				0.00190 (0.000455)		
GINI#Age				0.0000589 (0.0000417)		
EPL					0.0213 (0.0184)	
EPL#Age					-0.000395** (0.000179)	
Temporary						0.00205 (0.00171)
Temp#Age						-0.000029 (0.000021)
Controls	Y	Y	Y	Y	Y	Y
Random slope	N	Y	Y	Y	Y	Y
Country-year Var	0.00707 (0.00240)	0.00856 (0.00344)	0.0107 (0.00368)	0.0105 (0.00369)	0.0105 (0.00365)	0.0105 (0.00370)
Individuals	63,604	63,604	63,604	63,604	63,604	63,604
Country-years	101	101	101	101	101	101

Other controls are occupation, education, gender, belonging to an ethnic minority, religiosity, GDP per capita, year. Random slope: age.



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