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Philip Schacht-Picozzi*

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Abstract

This study contests the emerging consensus that the educational realignment in voting behavior is centered on non-economic policies. Leveraging comprehensive post-election surveys and party manifesto data, I examine voter responses to previously underexplored dimensions of economic policy–most notably, predistribution versus redistribution. The analysis reveals that parties emphasizing predistributive over redistributive economic policies tend to attract disproportionately greater support from less-educated voters. This pattern aligns with evidence that lower educational attainment is associated with a stronger preference for predistributive policies. The strength of educational divides in voting responses, particularly pronounced for Social Democratic parties, overlaps with the intensity of educational divides in policy preferences. Both divides are more pronounced in the US and Germany and comparatively weaker in southern European countries. Finally, I examine several potential mechanisms underlying the educational divide in economic policy preferences. I identify openness to change and political interest as the most influential factors, while finding little support for a range of alternative explanations.

JEL-Codes: D72, E65, Z13

Keywords: Educational realignment; economic policy; voting behavior

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1 Introduction

We live in politically turbulent times, marked by profound shifts in voter alignments (Hooghe and Marks, 2025). One of the most striking developments is the reversal of partisan support along educational lines (Gethin et al., 2022; Oesch and Rennwald, 2018; Rydgren et al., 2013; Steiner, 2023; Zollinger, 2024). Less formally educated voters, once the core constituency of Social Democratic parties, have increasingly shifted toward the political right, while highly educated voters have moved in the opposite direction (Bekhtiar, 2025; Benedetto et al., 2020; Best, 2011). The existing literature mostly attributes the educational realignment to a growing divide on sociocultural issues rather than economic policy (Adams, 2012; Danieli et al., 2022; Guenther, 2024; Kuziemko and Washington, 2018; Norris and Inglehart, 2019; Oesch and Rennwald, 2018).[1] However, recent work suggests that economic policy may yet offer a more powerful explanation for the observed educational realignment if it is classified in nontraditional terms, e.g., beyond the conventional dichotomy of more versus less redistribution. This insight motivates the central research question of this study:

To what extent did economic policy contribute to the educational realignment?

To answer that question, I conduct a rigorous assessment of alternative economic policy classifications. While existing evidence from Abou-Chadi and Wagner (2019) and Kuziemko et al. (2023) focuses exclusively on a single categorization of economic policy,[2] my analysis compares eight distinct classifications across elections in over 20 countries since World War II. Particular attention is given to Social Democratic parties, which are frequently examined in the literature

[1] This shift in policy salience is evident, for example, in the growing prominence of migration as a political issue that extends beyond purely economic considerations. One of the first scholars who highlighted the importance of non-economic policies was Kitschelt (1994), as social/cultural issues became increasingly debated from the 1990s onwards. Alternative definitions of the second political dimension were proposed by Hooghe et al. (2002); Norris and Inglehart (2019) and De Vries (2018). Hooghe and Marks (2025) demonstrate that the GAL–TAN (Green, Alternative, Libertarian vs. Traditional, Authoritarian, Nationalist) divide is now as salient in political competition as the class cleavage was in the 1950s.

[2] Both use unconventional economic policy classifications to explain educational realignment. Abou-Chadi and Wagner (2019) classifies policies as consumptive versus investment-related, while Kuziemko et al. (2023) classifies economic policy as predistributive versus redistributive.

due to their pivotal role in educational realignment and their comparability over time. The primary finding is that the predistribution–redistribution dimension consistently emerges as the most robust predictor of educational alignment. A second major contribution of this study is its broad cross-national scope, which offers several analytical advantages. Given that educational realignment is a widespread phenomenon across advanced democracies, any compelling explanation should demonstrate cross-national validity. At the same time, the specific manifestations of educational realignment vary across democratic systems, offering valuable variation for empirical analysis.[3] Moreover, differences in national growth models imply that identical economic policies may yield divergent outcomes and be interpreted differently by voters (Baccaro and Pontusson, 2023). This point is reinforced by the fact that economic policy preferences themselves vary significantly across countries (Falk et al., 2018). Taken together, these factors highlight the context-dependent nature of the relationship between economic policy and political alignment, which underscores the value of a cross-country comparative approach (Rathgeb, 2024). A third main contribution lies in the direct linkage between voters' economic policy preferences and party positions, using manifesto data. This approach facilitates an individual-level analysis of the mechanisms through which lower-educated voters gravitate toward specific economic policy orientations, extending beyond conventional accounts that focus, e.g., narrowly on the extent of preferred redistribution.

The theoretical foundation for this type of analysis is rooted in rational models of voting behavior, in which voters choose the party whose policy supply most closely aligns with their policy preferences (Downs, 1957). The corresponding hypothesis is that educational realignment results from changes in either policy demand (i.e., shifts in preferences by educational background), policy supply (i.e., shifts in parties' policy platforms), or a combination of both. A second theoretical foundation for this study comes from previous literature on classifications

[3]For example, in multi-party systems, the realignment is often shaped by the rise of "new" left- and right-wing parties, such as Green and radical-right parties (Mudde, 2007, 2016; Schäfer and Steiner, 2025). This theoretically allows traditional left parties to maintain a focus on predistributive policies, as spin-off parties can absorb other ideological demands.

of economic policy. For example, Kuziemko et al. (2023) build on a distinction proposed by Hacker (2011) between predistributive and redistributive economic policies to explain educational realignment in the United States. Predistributive policies influence economic outcomes by directly intervening in market mechanisms, for instance, through trade barriers or price-setting institutions. Redistributive policies intervene after market outcomes have been determined, reallocating economic returns in a way that typically entails fewer distortions to market processes. Table 1 provides examples of both policy types.[4]

Table 1: Economic Policy Classification

Predistributive	**Redistributive**
Price and wage controls	Progressive taxes
Industrial policy	Welfare state
Government job guarantee	Easing of business regulations
Trade restrictions to protect domestic jobs	Free trade

The empirical results in this paper are based on evidence from two main data sources. First, I examine voters' responsiveness to parties' supply of predistributive versus redistributive economic policies using the World Political Cleavages and Inequality Database (Gethin et al., 2021). I follow the empirical strategy of Abou-Chadi and Wagner (2019), but extend their approach by Specification Curve Analyses (Simonsohn et al., 2020) to mitigate estimation bias arising from arbitrary regression specifications and to systematically compare alternative economic policy classifications. The findings show that the shift of Social Democratic parties toward redistributive policies, which began in the 1970s, was associated with a more educated electorate.[5] Hence, I find that economic policy has indeed played a significant role in shaping the educational

[4]Easing of business regulations and free trade as redistributive policies may seem counterintuitive, as they do not directly redistribute resources in a structured manner. However, the policy classifications reflect broader ideological frameworks: the redistributive ideology generally favors minimal market intervention (with free trade as one manifestation), coupled with redistribution occurring after market outcomes are realized.

[5]This shift is reflected both in party manifestos (see Figure 1) and in the political orientation of leading politicians —for instance Blair and Schröder (1999).

realignment. This finding remains robust even when controlling for, or comparing its effect size to, the influence of the second dimension of politics (i.e., cultural or social policy). However, the result holds only when support for labor unions is not considered a predistributive policy, which I argue is conceptually justified. In addition, I find that economic policy only accounts for educational realignment, not for the overall decline in electoral support for Social Democratic parties.

Second, I use individual-level survey data on political preferences from more than 30 countries, drawn from the International Social Survey Programme (ISSP-Research-Group, 2023*a*,*b*) to assess education-based differences in economic policy preferences. I build on the framework of Kuziemko et al. (2023), extending their analysis cross-nationally and exploring potential drivers of this divide in policy preferences. My findings reveal that, in Western countries, support for predistributive policies is consistently higher among less-educated voters, whereas redistributive preferences show weaker educational divides.[6] Furthermore, education-specific preferences appear to be driven less by differences in political trust, educational field or status concerns and more by variation in political knowledge, interest and openness to change—typically lower among the less educated.

Finally, I examine cross-national variation in the educational alignment of both vote choices and policy preferences, identifying a strong correlation overlap between the two. For instance, educational alignment in party voting shows the strongest association with the pre- vs. redistributiveness of economic policy supply in the US and Germany. Likewise, these countries show the strongest educational divide in economic policy preferences along this dimension. The opposite pattern emerges in southern European countries, where associations between educational alignment in both votes and preferences for the pre- vs. redistributiveness of economic policy is considerably weaker.

[6]This is consistent with findings from Kuziemko et al. (2023) and Fastenrath and Marx (2024) as both studies also find that the support for redistributive policies is much less divided along educational lines.

The remainder of this paper is structured as follows. Section 2 provides a review of the relevant literature, situating this study within the broader scholarly context. Section 3 presents the data, empirical strategy and key findings from the analysis of whether Social Democratic Parties' economic policy positions have influenced their electorate. Section 4 then shifts to the question of how preferences for predistribution—redistribution vary by educational background. Section 5 explores heterogeneity of the findings, Section 6 discusses reasons for education-specific economic policy preferences and Section 7 concludes.

2 Related Literature and Contribution

This study contributes to several strands of the political economy and political science literature. First, it engages with the rapidly growing body of work on political polarization and populism (Guriev and Papaioannou, 2022). A central precondition for the rise of populist—particularly right-wing—movements has been the erosion of traditional party affiliations. In this context, my analysis advances our understanding of the weakening alignment between less-educated voters and mainstream left parties (Gethin et al., 2022).[7] My findings suggest that individuals less open to sociocultural change have been marginalized by an economic policy consensus centered on redistribution. As a result, they have become especially receptive to populist parties that promise a return to a perceived better past.

In this regard, the two studies most closely related are by Kuziemko et al. (2023) and Abou-Chadi and Wagner (2019). Both adopt a narrower focus: Kuziemko et al. (2023) also employs the predistribution-redistribution classification of economic policy and links it to the waning support for the Democratic party among the less educated. My cross-national perspective reveals that the U.S. case, studied by Kuziemko et al. (2023), may not be generalizable across countries. In addition, by directly linking parties' emphasis on predistributive versus redistributive economic

[7]For a literature review on this, see, for example, Bandau (2023) and, for instance, Bremer (2020) and Horn et al. (2025) who investigate Social Democratic parties' economic policy supply in this regard.

policy to voter preferences, I am able to more precisely assess whether mismatches between voter demands and parties' policy supply contribute to patterns of educational realignment.[8] Abou-Chadi and Wagner (2019) focus exclusively on the investment–consumption divide developed by Beramendi et al. (2015), finding that less-educated voters tend to favor consumption-oriented policies. However, their results are conditional on the strength of labor unions in each country-year, limiting their broader applicability. My approach to compare eight alternative economic policy classifications helps me identify the dimension with the greatest explanatory power for educational realignment of vote choices, instead of focusing on an inferior classification.

Second, this study adds to the literature on the role of parties' policy supply in driving voter realignment by education (Angelucci and Vittori, 2023). Earlier research shows that convergence between mainstream parties on economic issues has paved the way for electoral competition being more centered around cultural concerns and non-programmatic factors, weakening class-based voting (Evans and Tilley, 2012*a*,*b*; Spies and Franzmann, 2011).[9] Importantly, this shift reflects not a change in voters' policy preferences but a rise in the salience of non-economic issues (Danieli et al., 2022). Radical right populist parties (RRPP) have benefited by being perceived as owning issues like migration (Gagatek, 2024). Therefore, while the working class has been demobilized from supporting Social Democrats, it appears to remain open to remobilization through targeted economic policy appeals (Bremer and Rennwald, 2023). However, prior studies, such as Rennwald and Evans (2014), often fail to show that economic policy can bring

[8] Although Kuziemko et al. (2023) show that economic policy, in general, may account for up to half of the decline in support for the Democratic Party among less-educated voters in the U.S.(see their Figure 7b), their findings provide no direct evidence that this shift was specifically driven by a move from predistributive to redistributive policies.

[9] This argument, prevalent in the political science literature, holds that valence (i.e., voting based on perceived competence or integrity rather than policy) and identity-based voting (i.e. voting for politicians who reflect their own social identity) gains prominence when policy differences between mainstream parties converge, reducing the explanatory power of traditional rational choice models (Buisseret and Van Weelden, 2022; Kawai and Sunada, 2025). As policy differences vanish, less-educated voters have come to feel underrepresented by mainstream political elites who increasingly come from highly educated backgrounds, a trend often described as "diploma democracy", (Guenther, 2024; Newton and van Deth, 2021; Wager et al., 2022). In response, some of these voters have developed a growing sense of anti-elitism and now view populist parties as their primary political representatives, regardless of specific policy platforms (Goodhart, 2017; Guriev and Papaioannou, 2022).

these voters back to the Social Democrats. My findings suggest that this is due to their reliance on an inappropriate classification of economic policy.

Third, this study also contributes to a growing body of research examining the relationship between fiscal policy and populism, a field marked by two contrasting perspectives. One strand of the literature argues that increased redistribution towards those disadvantaged by economic change is necessary to mitigate populist sentiments (Baccini and Sattler, 2023; Colantone and Stanig, 2019; Stantcheva, 2022). In contrast, other studies question whether such redistributive measures alone are sufficient. These critiques rest on two main arguments: First, empirical findings suggest that predistribution, rather than redistribution, has been more consequential for overall income distribution and that the level of redistribution required to compensate the economic losers of sudden or structural economic change may sometimes be politically infeasible (Blanchet et al., 2022; Bozio et al., 2020; Mogstad et al., 2025). A second argument centers on voters' distinct preference for predistributive policies that cannot be easily substituted or offset by traditional redistributive measures (García-Viñuela et al., 2024). Those distinct economic policy preferences of less-educated individuals have, so far, been examined primarily within the narrower context of trade policy.[10] My findings suggest that the educational divide in preferences for predistributive over redistributive economic policy extends well beyond the domain of trade policy.

[10]Empirical and theoretical evidence grounded in the seminal model by Stolper and Samuelson (1941) suggests that lower-educated workers in Western economies have often been disadvantaged by intensified international trade. Globalization's benefits, such as expanded opportunities in knowledge-intensive sectors, have disproportionately favored the highly educated, while its costs have fallen more heavily on lower-educated workers, contributing to economic anxiety and resentment (Inglehart and Norris, 2016). In response, these groups have shown greater support for stronger economic interventions, particularly predistributive trade regulations over compensatory redistribution (Autor et al., 2020; García-Viñuela et al., 2024; Giordani and Mariani, 2022). Notably, even when redistribution offers significant compensatory potential, it does not necessarily increase support for trade liberalization among the lower educated (García-Viñuela et al., 2024; Mayda and Rodrik, 2005).

3 Predistribution—Redistribution Policy Supply and Votes by Educational Background

3.1 Data and Methodology

To examine whether differences in economic policies are reflected in voting behavior, I mainly draw on data from the World Political Cleavages and Inequality Database (Gethin et al., 2021). This dataset combines information from plenty of post-election surveys with party manifesto data from the Manifesto Database (Lehmann et al., 2024) covering the time from 1948 until 2020. While inferring party positions from manifesto data comes with some limitations—e.g., regarding the credibility and salience of campaign pledges—it remains a widely accepted method for approximating party positions in political and economic research (Colantone and Stanig, 2019, 2018). To supplement this analysis, I incorporate macroeconomic indicators (GDP growth and unemployment rate) from the OECD Economic Outlook No. 116 (OECD, 2024), as well as information from the ParlGov database (Bräuninger et al., 2022) on whether a party was part of the government at the time of each election. I focus on Social Democratic parties, in line with the educational realignment literature, as many of these parties can be consistently tracked over the entire time frame and their declining support among the working class is a central feature of the educational realignment. Under the preferred definition of Social Democratic parties,[11] the sample includes 38 Social Democratic parties from 20 Western countries.[12] On average, each Social Democratic party is observed in 13 elections.

[11] The preferred definition restricts the category of social democrats to "Old Left" parties. To assess the robustness of the findings, I also test broader definitions.

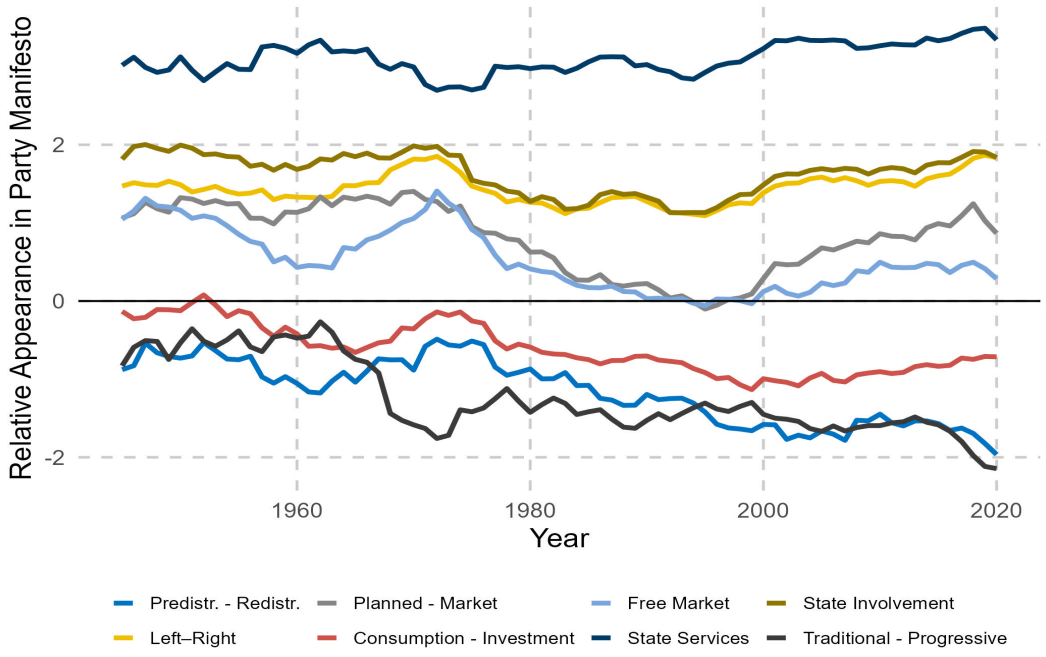
[12] The countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Italy, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, USA and UK.

Based on the manifesto data, I construct an index that measures the degree of parties' economic policies in the spirit of Lowe et al. (2011). For the pre- vs. redistribution axis, it is defined as:

$$Policy = Log\left(\frac{PredistributivePolicies + 0.5}{RedistributivePolicies + 0.5}\right) \tag{1}$$

The specific Manifesto codes used to construct the policy dimensions are listed in Appendix Table A.1. Figure 1 displays the evolution of the eight alternative classifications of economic policy over time, averaged across all Social Democratic parties in the sample. Notably, most indices reveal distinct temporal patterns, suggesting that theoretically, all of them may provide explanatory power for the observed educational realignment.

Figure 1: All Social Democrats Economic Policies



Note: The indices are constructed in the spirit of Lowe et al. (2011), taking the logarithm of the ratio of one over the other economic policy concept in the manifestos of the Social Democratic party (+ 0.5 on each side to avoid zeros). Policies are grouped following the information in table 1. For better visibility, the variables are calculated as moving averages of 6 successive Manifestos.

The empirical strategy of this chapter builds on the approach of Abou-Chadi and Wagner (2019). Equation 2 examines whether the degree to which party p's economic policy is predistributive versus redistributive is associated with its relative electoral support among less-educated voters in a given election t.[13] Here, the focus is not on a party's absolute vote share but rather on the proportion of its electorate drawn from the bottom 50% of the education distribution ($= LowEduc_{p,c,t}$). $= LowEduc_{p,c,t}$ is constructed from individual post-election surveys per election t. It summarizes for each party p in each election t the educational background of its electorate.

$$LowEduc_{p,c,t} = \alpha + \beta\, Policy_{p,c,t} + \gamma_1 LowEduc_{p,c,t-1} + \gamma_2 X_{p,c,t} + \gamma_3 X_{c,t} + \lambda_p + \lambda_t + \varepsilon_{p,c,t} \quad (2)$$

$LowEduc_{p,c,t-1}$ denotes a lagged dependent variable referring to the last election ($t-1$), while $Policy_{p,c,t}$ denotes the policy index constructed as defined in Equation 1. To capture relative party positioning, the index is normalized within each election subsample. λ_p and λ_t represent party and election fixed effects, respectively. $X_{p,c,t}$ and $X_{c,t}$ are vectors of party-level and election-specific (country-year) control variables.[14]

To balance the trade-off between a potential omitted variable bias and a Nickell bias, I estimate Equation 2 using pooled OLS, both with and without fixed effects. While the specification without fixed effects may overstate the true effect size by ignoring unobserved heterogeneity, fixed effect estimations account for such heterogeneity but may suffer from downward bias in

[13] Throughout this paper, education refers strictly to formal education, typically measured by years of schooling or highest degree attained. It is important to acknowledge that individuals with limited formal education may nonetheless possess substantial expertise, for instance, professional, vocational, or self-acquired. In Section 6, I examine aspects of formal education that are most relevant for understanding political realignment, while emphasizing that this analysis should not be interpreted as a value judgment about individuals' worth or capabilities.

[14] Party-level controls include the relative income and age of a party's electorate, its position on non-economic (e.g., cultural/social) issues, government participation at the time of the election (captured by separate indicators for leading the government and being part of it) and its vote share (as larger parties tend to make more credible campaign promises (Adams et al., 2006)). Election-level controls account for the presence of radical right- and left-wing parties, macroeconomic conditions (unemployment and GDP growth), union strength (proxied by union membership density) and the effective number of parliamentary parties (Laakso and Taagepera, 1979). I also include an interaction between unionization and the policy variable, following the identification strategy proposed by Abou-Chadi and Wagner (2019).

short panels with lagged dependent variables (Nickell, 1981). The true effect likely lies between the two estimates (Angrist and Pischke, 2009).

3.2 Results for Predistribution—Redistribution

Table 2 shows that a greater emphasis on predistributive relative to redistributive economic policy is associated with a less educated electorate for Social Democratic parties. Specifically, a one standard deviation increase on the predistribution—redistribution axis, measured relative to other parties on the ballot, corresponds to a 0.7 to 2.2 percentage-point increase in the share of voters from the bottom 50% of the education distribution. Notably, the magnitude of the coefficient increases as party-level controls are added, accounting for the party's overall vote share, its electorate, its positions on social and cultural issues and its participation in government. Additionally, adding election-level controls, which account for macroeconomic conditions and other contextual factors at the time of the election, further amplifies the coefficient.

Table 2: Predistribution—Redistribution Policy Supply on Share of Less Educated Voters

	POLS			FE		
	(1) No Controls	(2) Party Level Controls	(3) All Controls	(4) No Controls	(5) Party Level Controls	(6) All Controls
Lagged Dependent Variable	0.74***	0.62***	0.45***	0.14	0.21	0.07
	(0.09)	(0.12)	(0.16)	(0.12)	(0.15)	(0.10)
Pre-/Redistribution	0.69*	1.48***	2.20*	1.45**	1.57***	1.63
	(0.38)	(0.55)	(1.24)	(0.53)	(0.52)	(1.20)
Low Income Voters		0.28***	0.48***		0.31***	0.53***
		(0.06)	(0.09)		(0.10)	(0.10)
Young Voters		0.02	-0.00		-0.06	-0.15
		(0.05)	(0.06)		(0.08)	(0.11)
Old Voters		0.03	0.04		0.11	-0.08
		(0.07)	(0.08)		(0.11)	(0.09)
Leading Running Gov		-0.54	-0.42		-1.16	-1.91
		(1.05)	(1.43)		(1.20)	(1.57)
Part of Running Gov		2.73**	1.69		2.47**	3.02*
		(1.18)	(1.37)		(1.20)	(1.59)
% Voted for Party		0.09**	0.28***		0.09	0.24***
		(0.04)	(0.10)		(0.07)	(0.08)
Party's Cultural Policies		-0.63	-0.27		-0.26	0.35
		(0.45)	(0.55)		(0.47)	(0.41)
Far Left Party Present			2.67**			-1.94
			(1.30)			(2.13)
Unemployment Rate			0.13			0.36*
			(0.17)			(0.21)
Unionization			5.00**			-10.60
			(2.06)			(6.35)
GDP Growth			-11.85			-18.65
			(17.44)			(15.41)
Parties in Parliament			1.33**			1.29**
			(0.64)			(0.63)
Unionization x P-/Redistr.			-2.08			-1.82
			(2.02)			(2.03)
Constant	12.74***	0.61	-12.79**	44.19***	24.06***	18.99*
	(4.58)	(5.01)	(5.07)	(6.21)	(8.52)	(10.09)
Observations	306	277	192	306	277	192
Adj. R^2	0.54	0.67	0.69	0.17	0.38	0.53
Party and Year FE				X	X	X

Note: Parties in Parliament is the effective number of parliamentary parties as defined by Laakso and Taagepera (1979). All countries, parties, and years are pooled in these estimations. Standard errors are reported in parentheses; they are robust in the pooled OLS models and clustered at the party level in the fixed effects specifications. *p<0.10, **p<0.05, ***p<0.01.

To assess the robustness of the results and mitigate concerns about selective reporting, I conduct Specification Curve Analyses following the approach of Simonsohn et al. (2020). This method

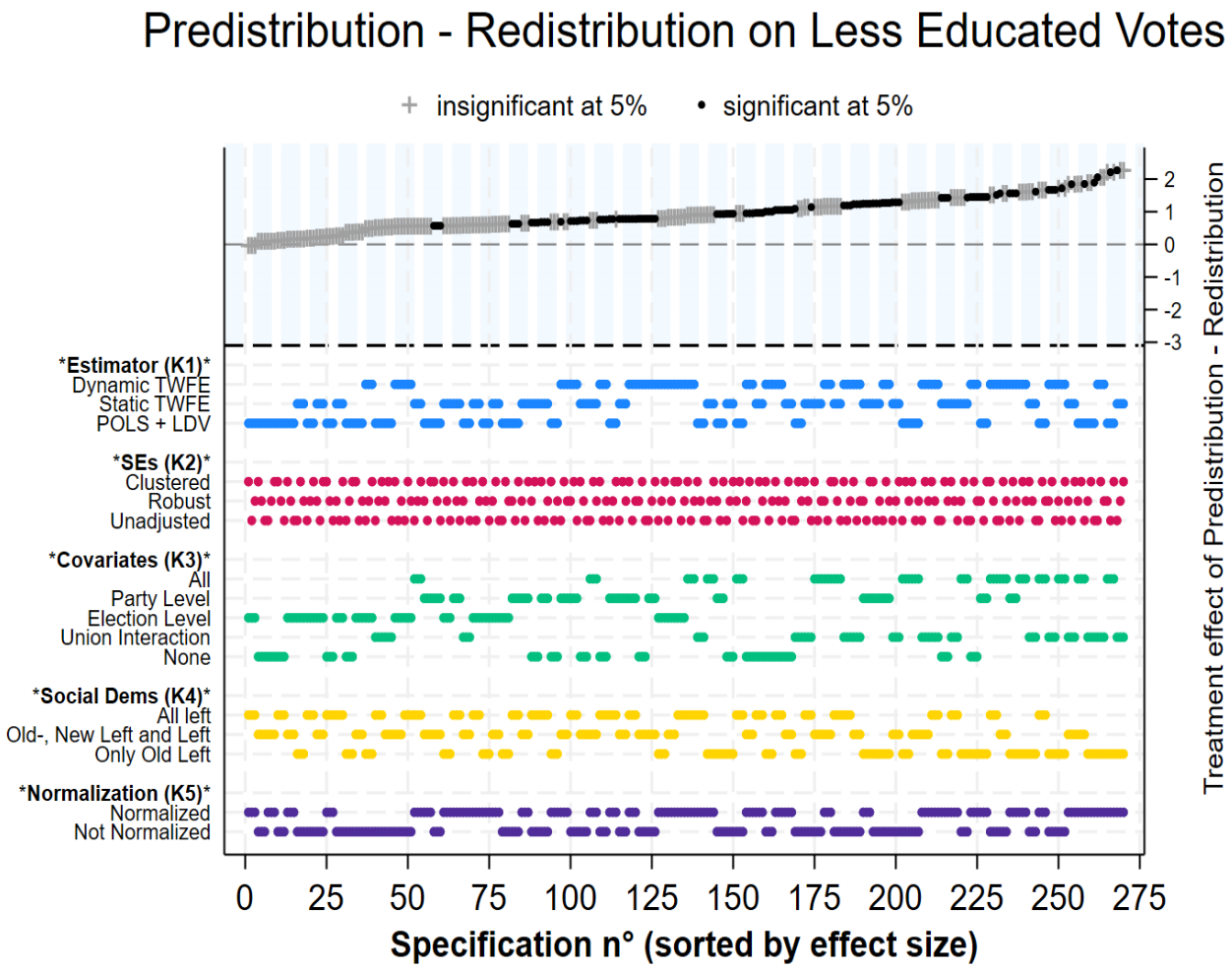
systematically examines a wide range of specifications to detect consistent patterns that are not artifacts of researchers' degrees of freedom. The analysis varies across five key dimensions: the choice of estimator (K1), the computation of standard errors (K2), the inclusion of covariates (K3), the definition of Social Democratic parties (K4) and whether the policy variable is normalized within elections (K5). I consider three estimators: (i) fixed effects, (ii) fixed effects with a lagged dependent variable and (iii) pooled OLS with a lagged dependent variable. Standard errors are either clustered at the party level, robust or unadjusted. Covariates include party-level characteristics, election-level controls, a union interaction term or all jointly. The classification of Social Democratic parties varies from narrow (e.g., only traditional "Old Left" parties) to broad (e.g., all left-leaning parties), based on the manifesto data vote group definitions.[15] Finally, to account for the relative positioning of parties, the policy variable is optionally normalized within each election. In estimations with year fixed-effects, identification is limited to variation occurring within elections.

Figure 2 depicts the results. The dots in the upper part of each figure show the size and significance (at a 5% level) of the coefficient of interest, ordered for effect size. The lower part shows which combination of estimator, covariate and subset was used. If the effect were driven solely by a selective specification, the colored dots would be clustered at one end of the x-axis. The effect of pre- versus redistribution on educational alignment appears robust: all coefficients point in the same direction and most are statistically significant. However, the estimated effects are smaller in specifications without fixed effects (K1), with fewer control variables (K3) and when employing a broader definition of Social Democratic parties (K4). The latter suggests

[15]The most conventional definition of Social Democratic parties in the Manifesto Project database is the "Old Left" category, which includes traditional Social Democratic parties such as the Democratic Party (U.S.), the Labour Party (U.K.), the Social Democratic parties of Germany and Austria and the Socialist Party in France. A broader definition additionally includes both "Left" and "New Left" parties. Some of these emerged in response to the "Old Left's" perceived shift towards new economic policy paradigms, which largely resembled a shift from pre-distributive to redistributive policies. Examples include Die Linke in Germany and the Democratic Socialists '70 in the Netherlands. The broadest category also encompasses Green and Communist parties, effectively including all left-wing parties.

that the association between predistributive economic policies and support among less-educated voters is primarily of importance for traditional, mainstream left parties.

Figure 2



Note: The upper panel displays coefficient estimates for the effect of a shift in economic policy from redistributive to predistributive on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

The decline in support from less-educated voters for Social Democrats following their shift in economic policy could either have been offset by increased support from more educated voters

or resulted in a net loss of electoral support. Table A.4 shows the results of the same regression as Table 2 but with overall vote share as the dependent variable, rather than votes from less-educated voters. The findings indicate no significant aggregate effect on total support for Social Democratic parties in response to shifts in the pre-/redistributive orientation of their economic policies. Losses among less-educated voters associated with more redistributive policy positions appear to be offset by gains among more educated voters.

The predistribution—redistribution index used in Table 2 does not include labor union policies, which are classified as predistributive by Kuziemko et al. (2023).[16] Although including labor union policies renders the effect statistically insignificant (see Table A.3), I argue that excluding those policies is justified. As demonstrated in the next Section 4, there is no significant educational divide in voters' preferences regarding support for labor unions. At first glance, this may seem surprising, given the traditional view of unions as advocates of less-educated workers. This image, however, is increasingly outdated. In the 1950s and 1960s, around one in three or four industry workers with limited formal education belonged to a union in many Western countries (Schmitt and Warner, 2015). Unions were central to working-class political power and enjoyed broad support among the lower-educated population. Since the late 20th century, however, unionization has declined sharply, in particular among less-educated workers (Gallego, 2014). In the United States, for example, more educated workers are now more likely to be unionized than their less-educated counterparts—a complete reversal from 25 years ago (Schmitt and Warner, 2015). This shift reflects broader structural changes, including the decline of manufacturing and the rise of service and public-sector employment, where higher education is more common. Today, the highest rates of unionization are in professions that require a relatively high education, such as teachers, doctors and civil servants. This pattern is

[16]The policy index with labour union policies closely reflects the concept proposed by Kuziemko et al. (2023), identifying the same turning point in 1976 (see Figure A.1). Before 1976, the Democratic Party emphasized predistributive policies slightly more than redistributive ones; after 1976, the focus shifted towards redistributive economic policies.

reflected by the ISSP data spanning 1986-2016. Figure A.2 shows that the probability of union membership rises with educational attainment.

3.3 Alternative Economic Policy Dimensions

I compare the explanatory power of the pre- versus redistribution axis to that of seven alternative economic policy indices. Thes indices from the existing literature are: (1) left versus right economic positioning (as defined by Bakker and Hobolt (2013)), (2) the planned versus market economy dimension, defined by Lehmann et al. (2024) (3) consumption versus investment-oriented policies (Abou-Chadi and Wagner, 2019), (4) the degree of state involvement in the economy (Benoit and Laver, 2007), (5) the scope of state-provided services (Lowe et al., 2011), (6) regulated versus free market policies. Additionally, I test a self-constructed index labeled (7) "Progressive Economic Policy," which refers to a set of more recent economic ideologies, such as degrowth and the protection of minority groups, that stand in contrast to the traditional emphasis on economic growth. The first six indices have been employed in the existing literature to classify economic policy along various dimensions. To the best of my knowledge, except for the consumption-versus-investment distinction, none of the indices were systematically tested for their explanatory power for the educational realignment.

The figures in Appendix Section A.1.1 present the Specification Curve Analyses for the seven alternative economic policy dimensions. The magnitude and statistical significance of the estimated effects indicate that the pre- versus redistributive policy axis is consistently the most robust predictor of the educational realignment. Results for the alternative economic policy classifications are considerably less conclusive, with regression estimates yielding inconsistent directions, sometimes positive, sometimes negative, for the main coefficient of interest. Moreover, a substantially larger share of these results is statistically insignificant compared to those based on the pre- versus redistribution framework. Notably, the pre- versus redistributive policy axis also outperforms the commonly used libertarian–authoritarian axis of social policies in

explaining variation in support among less-educated voters (see Figure A.12). Taken together, the evidence suggests that Social Democratic parties' shift in economic policy—from predistributive to redistributive measures (see Figure A.1)—has been accompanied by a decline in support from less-educated voters.

4 Preferences for Predistribution—Redistribution by Educational Background

This section examines whether the voting decisions of the previous Section are reflected in varying demands for pre- vs. redistributive economic policies across educational backgrounds. The analysis compares educational alignment across distinct policies and employs pooled regression models to assess the robustness of this alignment across various specifications.

4.1 Data and Methodology

To investigate economic policy preferences by educational background, I use data from the International Social Survey Programme, a harmonized collection of national surveys (ISSP-Research-Group, 2023*a*,*b*). My sample spans up to 31 countries between 1985 and 2016, with sample sizes ranging from 677 to 3,840 respondents per country-year. A key advantage of the ISSP is its inclusion of questions on individuals' support for a range of economic policies. Classifying these policy items as pre- or redistributive necessarily involves some degree of judgment. Table A.2 provides a transparent comparison of the ISSP items used in this study with those employed by Kuziemko et al. (2023). Several questions, such as those on a government job guarantee, labor unions and taxes on high incomes, are largely comparable across sources. However, the ISSP does not include some items featured in Kuziemko et al. (2023), namely trade policy, the minimum wage, perceived tax burden, universal tax cuts and welfare spending. Instead, the ISSP offers items on price and wage controls, support for declining industries and

industrial policy (e.g., helping new industries grow), which I classify as predistributive. On the redistributive side, the ISSP includes questions regarding the government's responsibility for various forms of welfare provision, such as health care, elderly care and unemployment insurance; as well as attitudes toward business regulation. While the latter does not directly address welfare distribution, it is included in the redistributive category given that this ideology advocates minimal state intervention in market processes, emphasizing redistribution after market dynamics have played out.

I consider the fact that the predistributive and redistributive items differ somewhat from those in Kuziemko et al. (2023) another strength of the ISSP, as it allows me to test the broader applicability of the concept. Moreover, the ISSP questions tend to be more neutrally phrased than in Kuziemko et al. (2023), often referring to general principles rather than invoking the status quo in a given country, which may reduce context-specific biases in responses.

To analyze whether there is an educational alignment for pre- vs. redistributive economic policies, I build on Kuziemko et al. (2023) and estimate the following regression:

$$Policy_{c,t,i} = \alpha + \beta\, EDUC_{c,t,i} + \gamma_1 Age_{c,t,i} + \gamma_2 X_{c,t,i} + \lambda_t + \lambda_c + e_{c,t,i} \tag{3}$$

where $Policy_{c,t,i}$ is the self-expressed degree to which individual i favors a particular (p-)redistributive policy. The variable is standardized to have a mean of zero, a standard deviation of one before each estimation and is transformed to be increasing in the pro-predistribution or pro-redistribution direction. $EDUC_{c,t,i}$ represents the years of schooling of respondent i and $Age_{c,t,i}$ are controls for five-year age bins. Note that the ISSP is a repeated cross-section, in which each individual i is observed only once in a combination of c and t. In a first step, I estimate Equation 3 separately per country, year and policy, without any additional controls. Thereby, I can identify general patterns in education-specific policy preferences across time and space.

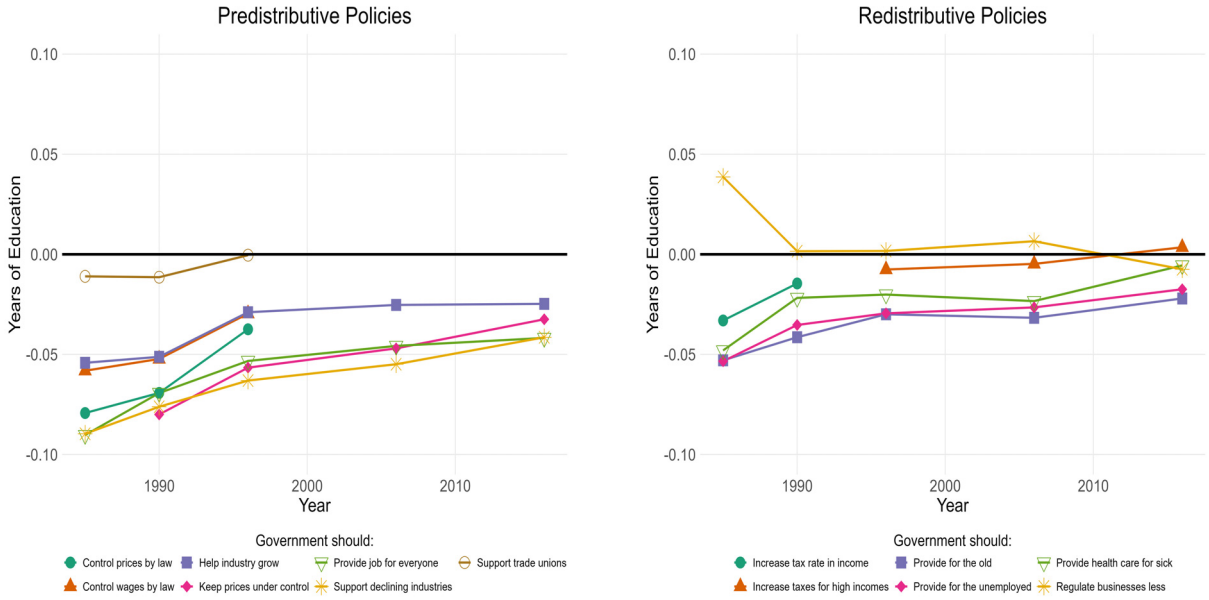
In the second step, I pool all countries and years together. This allows me to flexibly test the robustness of the educational alignment. In the pooled estimation, survey weights are adjusted for the population size of the respective countries and the variable $Policy_{c,t,i}$ is replaced by an aggregated measure $AggPol_{c,t,i}$, which is the mean of individual i's preferences for all standardized policy preferences per category, pre- or redistributive. I include country (λ_c) and year fixed effects (λ_t) and control for a range of potential individual-level confounders (captured in the vector $X_{c,t,i}$), which are sex, household income, marital status, church attendance, number of kids and adults in the household and union membership. Among these, income is likely the most important, as higher educational attainment is typically associated with higher income, which in turn carries distinct distributional preferences. In the ISSP, household income is reported in local nominal currency units. To enable meaningful comparisons across countries and survey years, I normalize household income within each country-year subset. I further exploit an alternative education variable. Degree indicates the highest degree obtained, which enables me to understand which parts of the education distribution drive the alignment the most.

4.2 Results

Figure 3 presents the association between an additional year of education and support for a range of economic policies, with coefficients averaged across countries, weighted by population size. The results show that both pre- and redistributive policies are consistently more strongly supported by individuals with lower levels of education (negative coefficient on the y-axis), while the educational divide is generally more pronounced for predistributive policies. Within this category, support for backward-looking, industry-preserving policies exhibits a clearer educational gradient than support for active industrial policy, where the state fosters the development of new industries. In contrast, preferences for strengthening union power do not vary systematically by education level. Excluding this item from the predistributive policy category, therefore, increases the observed educational divide in preferences between pre- and redistributive poli-

cies. Among the redistributive items, support for welfare provisions deviates from the expected pattern, showing either a weak or reversed educational gradient. I elaborate on these findings in the discussion (Section 6).

Figure 3: Policy Preferences - Averaged Across All Countries



Note: The figure presents the estimated coefficients from regressions of support for various economic policies on education (years of schooling), as specified in Equation 3. Policies are standardized to have a mean of zero and a standard deviation of one. Estimates are averaged across countries, weighted by population size.

The figures in Section A.1.2 show the same results for a selective set of countries.[17] Interestingly, exceptions of countries in which there is an educational divide in labor union support are exactly those with a high union density and collective bargaining coverage (Bhuller et al., 2022). Overall, the educational alignment is more pronounced in Western, developed countries, while it appears considerably weaker, or even absent, in cases such as Russia and Japan.

Consistent with the earlier findings, the panel regression results indicate that support for both predistributive and redistributive policies is stronger among individuals with lower educational

[17] Results for all other countries are available on request.

attainment (Table 3).[18] Notably, the educational gradient is three to four times steeper for predistributive policies. The estimated effects are somewhat smaller than those reported in Kuziemko et al. (2023). Table A.6 presents the result of regressing education on the difference in support for predistributive relative to redistributive economic policies. This is equivalent to replacing the $AggPol_{c,t,i}$ term by the difference between $AggPol_{c,t,i}$ for predistribution over $AggPol_{c,t,i}$ for redistribution. An additional year of schooling is associated with a decrease of approximately 0.02 to 0.03 standard deviations in relative support for predistributive over redistributive policies. In contrast, Kuziemko et al. (2023) reports an effect more than twice as large. The discrepancy has two main reasons. First, as I discuss in Section 5, the United States has an unusually pronounced educational cleavage along the pre- versus redistributive policy dimension as compared to the other countries in my sample. Second, I employ distinct survey items to measure preferences for pre-distributive and redistributive economic policies. For example, when comparing support for particular redistributive measures, such as welfare and tax policies, the estimated coefficients are more similar in magnitude. In addition, the panel analysis reveals that individuals with higher incomes exhibit weaker preferences for both pre- and redistribution.[19] Regressing policy preferences on the highest degree obtained reveals a fairly consistent decline in support for predistributive policies with increasing education, with the most pronounced drop occurring at the point of attaining a university degree.

[18] Consistent with previous results, no significant educational divide is evident regarding support for labor union policies (see Table A.5).

[19] This makes intuitive sense, as support for any distributional policy typically runs counter to the material interests of high-income individuals.

Table 3: Aggregated Economic Policy Preferences

(a): Predistribution

	(1)	(2)	(3)	(4)
Education	-0.048***	-0.037***	-0.029***	
	(0.004)	(0.004)	(0.003)	
Household Income			-0.117***	
			(0.013)	
Lowest formal qualification				0.032
				(0.023)
Above lowest qualification				-0.058**
				(0.022)
Higher secondary completed				-0.184***
				(0.03)
Above higher secondary level				-0.257***
				(0.032)
University degree completed				-0.41***
				(0.039)
Age Bin Controls	X	X	X	X
FE: Year		X	X	X
FE: Country		X	X	X
Individual Controls			X	
Observations	120640	120640	27701	120121
R^2	0.064	0.19	0.226	0.196
Adjusted R^2	0.064	0.19	0.224	0.195

(b): Redistribution

	(1)	(2)	(3)	(4)
Education	-0.015***	-0.011***	-0.005**	
	(0.003)	(0.002)	(0.002)	
Household Income			-0.058***	
			(0.007)	
Lowest formal qualification				0.035*
				(0.018)
Above lowest qualification				-0.016
				(0.014)
Higher secondary completed				-0.054***
				(0.013)
Above higher secondary level				-0.074***
				(0.017)
University degree completed				-0.119***
				(0.018)
Age Bin Controls	X	X	X	X
FE: Year		X	X	X
FE: Country		X	X	X
Individual Controls			X	
Observations	120909	120909	27763	120387
R^2	0.016	0.098	0.125	0.099
Adjusted R^2	0.015	0.097	0.123	0.099

Note: *p<0.1; **p<0.05; ***p<0.01. The dependent variable is the individual-level average support for all predistributive (panel a) or redistributive policies (panel b), which were standardized to have a mean of zero and a standard deviation of one. Likewise, household income is standardized within each country/year subset. FE represents Fixed Effects. Standard Errors clustered at the country level. Weights are computed as in Kuziemko et al. (2023), but adjusted for population size in each country/year.

4.2.1 Robustness

Standardization of the education variable shows that education is a quantitatively very important determinant for preferences for predistributive policy. As all variables are standardized, a move of one standard deviation in education has an equally large effect on preferences for predistribution than a comparable move in income (see Table A.7). However, for the redistribution preferences, income is a more important determinant of policy support (see Tables A.8). The findings are robust to dropping the weights from the regression (see Table A.9 and A.10). Likewise, the effects are robust to estimating all regression models on the same, smallest sample (cf. Tables A.11 and A.12).

5 Cross Country and Time Heterogeneity

To examine cross-country heterogeneity, I conduct a country-by-country comparison of the results presented in Section 3 and Section 4. For the electoral response to predistribution—redistribution policies, I estimate interactions between country indicators and the predistribution—redistribution index, as in:

$$LowEduc_{p,t} = \alpha + \sum_{c} \beta_c \left(Country_c \times Policy_{p,t}\right) + \gamma_1 LowEduc_{p,t-1} + \gamma_2 X_{p,t} + \varepsilon_{p,t} \quad (4)$$

For the policy preferences, I estimate interactions between country dummies and education. This is equivalent to the following variation of Equation 3:

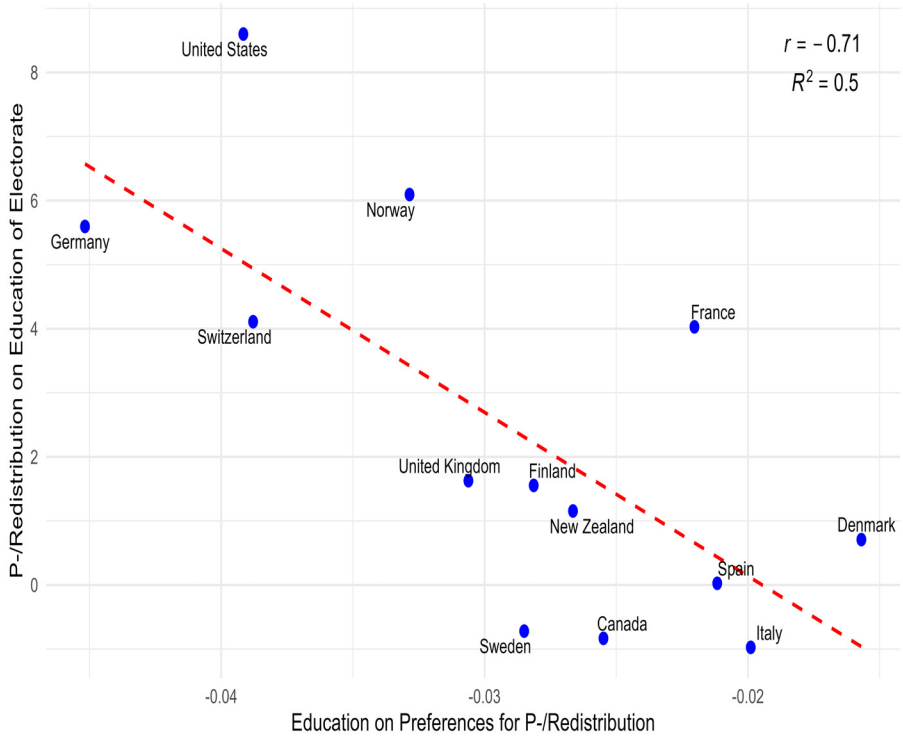
$$AggPol_{c,t,i} = \alpha + \sum_{c} \beta_c \left(Country_c \times EDUC_{c,t,i}\right) + \gamma\, Age_{c,t,i} + \lambda_t + e_{c,t,i} \quad (5)$$

Where $AggPol_{c,t,i}$ is the difference of individual i's preference for all aggregated predistributive over all aggregated redistributive policies. β_c is the country-specific coefficient of interest.

Figure 4 compares the country-specific results of β_c from Equation 4 and 5 for all countries present in both samples (ISSP and WPID). The results show a strong overlap between country-specific preferences and vote effects: countries with a pronounced educational divide in predistributive versus redistributive preferences (sorted on the x-axis) also tend to exhibit stronger responsiveness of the less-educated vote share to shifts toward predistributive policy (sorted on the y-axis). For example, the US and Germany exhibit strong educational divides in preferences and a strong responsiveness of the less educated vote share for Social Democratic parties. On the other side, Southern European countries, such as Italy and Spain, display a comparatively weaker educational divide along the predistributive axis and mostly insignificant responsiveness of less educated voters to parties' positioning on the pre-/redistribution axis. Moreover, educational alignment around predistributive preferences is largely a phenomenon of

developed Western democracies, with much weaker patterns observed in developing countries (cf. Figure A.3). The United States stands out for the particularly strong electoral response to pre- over redistributive economic policy.

Figure 4: Preferences and Vote Choices by Country



Note: The x-axis displays the country-specific coefficient of education on preference for pre- over redistributive economic policy. The y-axis presents the country-specific effect of the pre- vs. redistributive orientation of economic policy on support among less-educated voters.

The heterogeneity over time is less conclusive. While the preference divide has generally narrowed from the 1980s to 2016 (see Figure 3), there is no clear trend in the electoral responses over time. This can be seen in Figure A.4, which shows the estimation of Equation 5 with decade instead of country dummies and without time fixed effects λ_t. The strongest correlation between educational alignment and the supply of pre-/redistributive economic policy occurred in the 1990s, followed by the 2010s and the 1950s.

6 Potential Reasons for Educational Alignment

6.1 Hypotheses from the Existing Literature

Several insights emerge from the existing literature on how education shapes political preferences. Broadly, the effect of education appears to operate less through a direct causal mechanism—such as increased factual knowledge straightforwardly translating into support for specific parties—and more through indirect channels, some of which I examine in the next chapter.[20] One such channel is the role of education as a marker of social closure and network formation, reinforcing identity-based political alignments (De Jong and Kamphorst, 2025). Voters increasingly perceive education as an identity, aligning themselves with candidates who reflect that identity (Simon and Turnbull-Dugarte, 2025; Bornschier et al., 2024; Zollinger, 2024). Although this mechanism is challenging to test within my research design, a range of other mechanisms can be explored. One of these is the content of education itself. Recent work by Hooghe et al. (2025) shows that studying cultural-communicative subjects predicts GAL (Green, Alternative, Libertarian) orientations, while economic-technical training is associated with TAN (Traditional, Authoritarian, Nationalist) preferences.[21] Hooghe et al. (2025) developed an index (CECT) to position one's education on the cultural-communicative vs. economic-technical axis. I incorporate average CECT scores by occupation, based on ISCO-88 codes, into the analysis to test whether the type of education also contributes to the educational alignment in economic policy preferences.[22]

[20] Education transmits cultural and economic values, shapes political cue-taking and thereby influences political attitudes, as illustrated by its role in Brexit support (Simon, 2022).

[21] In other words, it is the "human-centeredness" of one's education that appears predictive. Hooghe et al. (2025) show that beyond self-selection into fields aligned with preexisting ideological leanings, education and associated career paths have measurable causal effects on policy preferences of comparable magnitude.

[22] More specifically, I match each individual's occupation to the CECT score corresponding to the average level of education required for that occupation. For example, a nurse would be assigned a higher CECT score than a craftsman, due to the greater emphasis on interpersonal and care-oriented skills in nursing education compared to the more technical focus of a craftsman's apprenticeship.

Beyond the general relationship between education and political preferences, several potential explanations exist for why individuals with lower levels of formal education may tend to prefer predistributive over redistributive economic policies. While conventional economic theory often favors redistributive policies on efficiency grounds, arguing that they are less distortive, recent work has explored potential reasons for diverging preferences. These reasons go beyond a general preference for more or less redistribution, as that preference would be expected to influence support for both pre-distributive and redistributive instruments alike. Kuziemko et al. (2023) argue that non-wage benefits of employment, such as social status, and varying levels of trust in political institutions, may shape support for pre- over redistributive policies. Individuals with lower educational attainment, whose social status may have been adversely affected by globalization, could be particularly inclined to support predistributive economic policies, e.g., to protect domestic industries. Therefore, I control for the self-perceived social class item of the ISSP. The rationale for trust as an important variable is that redistributive policies require a more capable and trustworthy public administration to be implemented effectively. In contrast, predistributive measures may rely less heavily on institutional capacity (Macdonald, 2024).[23] To proxy for political trust, I include responses to two ISSP survey items: "Members of parliament try to keep promises" and "Most government administrators (civil servants) can be trusted to do what is best for the country". Concerning status sensitivity, Attewell (2022) finds that individuals with lower education levels are more likely to question the deservingness of welfare recipients, helping to explain their relatively lower support for redistribution. Although less-educated voters express generally higher support for the welfare state (Garritzmann et al., 2018), they often oppose transfers to groups perceived as "undeserving." In contrast, highly educated individuals, despite having less material interest in redistribution due to higher incomes and education as a form of insurance, tend to exhibit stronger social solidarity (Cavaillé and

[23]For example, a progressive tax-and-transfer system is a more complex policy instrument than a minimum wage and depends on the effective functioning of a comprehensive public administration. Individuals with low trust in government may question the state's capacity or willingness to implement meaningful redistribution. As a result, they may favor the relative certainty of predistributive measures—opting, in effect, for "a bird in the hand rather than two in the bush.". This skepticism may in fact be justified, as suggested by the model developed by Giordani and Mariani (2022).

Trump, 2015).[24] This pattern aligns with radical right voters who tend to oppose generalized forms of redistribution (e.g., citizens' benefits) while supporting more targeted benefits such as generous pensions. Correspondingly, many populist radical right parties have shifted from advocating welfare retrenchment to endorsing a dualist, "welfare chauvinist" model—reserving redistribution for the "deserving" native population (Bruni et al., 2025; Chueri, 2022; Busemeyer et al., 2022; Röth et al., 2018).

Two further potential explanations merit consideration. First, differences in political knowledge and exposure to policy-related information may shape how individuals with lower levels of formal education engage with complex policy issues (Hainmueller and Hiscox, 2006). As a result, they may be more likely to support predistributive policy instruments that are more visible and easier to relate to in everyday life.[25] To examine this, I include self-reported measures of political interest and understanding. Second, education may be positively associated with openness to change. Individuals with less education have often borne the brunt of globalization's adverse effects, potentially resulting in a kind of "change fatigue" (Mau, 2024). Lastly, to more rigorously address the potentially confounding role of income, I allow for country- and year-specific income trends by including interaction terms between income, country and year, which also absorb country and time fixed effects. Finally, to assess where in the income distribution the educational alignment is strongest, I estimate income-specific education coefficients by assigning individuals to income quintiles.

6.2 Results

To empirically evaluate theoretical explanations for why individuals with lower educational attainment are more likely to support predistributive economic policies, I re-estimate regression

[24] This divergence may reflect deeper dynamics of social comparison. Lower education is associated with lower perceived social status (Kuppens et al., 2015), which can lead to intensified horizontal competition and diminished empathy toward other disadvantaged groups (Kuziemko et al., 2014).

[25] Irrespective of the actual effect on the distribution, political demands for predistributive policies may often be more salient. For example, raising the minimum wage is more tangible than a change in marginal tax rates.

3, incorporating additional control variables and interaction terms. The results are reported in Table 4, where all variables have been standardized (mean = 0, SD = 1) to enhance the comparability of estimated effects. Overall, the inclusion of additional explanatory variables does not substantially explain the educational alignment in economic policy preferences: the coefficient on education is reduced by less than one-third at most (columns 1-5).

Among the set of explanatory variables, the field of education is, if anything, only weakly correlated with economic policy preferences. This finding is consistent with the interpretation that the CECT scores used by Hooghe et al. (2025) may be more relevant for shaping attitudes toward social policies, such as migration, or for influencing general distributive preferences, but not those for a specific policy instrument. Contrary to the hypothesis that distrust in the political system drives support for predistribution among the less educated, I find no evidence in favor of this explanation. If anything, trust in parliamentarians (MPs Trustworthy) and civil servants (Civ. Serv. Trustworthy) is positively associated with predistributive preferences. I find mild support for the hypothesis that political understanding and interest may help explain the distinctive predistributive preferences of the less educated. While greater political interest and understanding are associated with lower support for predistributive policies, the magnitude of these effects is considerably smaller than that of education. There is also no evidence that status concerns, proxied by respondents' self-perceived position in society, are related to pre-/redistributive preferences, in contrast to the expectations derived from Gidron and Hall (2017).

However, the country-specific analysis in Section 4.2 offers some support for Attewell (2022) theory: in Western countries, less-educated individuals are more supportive of welfare benefits directed toward the "deserving" (e.g., the elderly) and more skeptical of benefits for the "undeserving" (e.g., the unemployed). The findings of that Section also lend support to the hypothesis that lower openness to change, potentially reflecting "change fatigue" (Mau, 2024), underpins the observed educational alignment. Specifically, this alignment is the most pronounced for the backward-oriented predistributive policy of protecting old industries, whereas forward-looking

industrial policies, aimed at creating new industries, show now stronger educational alignment than redistributive tools (cf. Figure 3). Finally, while identity-based mechanisms and non-wage employment benefits have been suggested in the literature, they are not directly tested in this analysis. Identity may still play a reinforcing role, as in Dolls et al. (2025), particularly where predistributive preferences are tied to a desire to restore the perceived stability of the "good old days". In contrast, non-wage job benefits are less likely to explain educational divides, as such benefits could be present in both traditional and emerging sectors of employment. Lastly, Column 6 reveals that the negative association between education and predistributive preferences is even stronger among high-income individuals, mirroring the findings by Gethin et al. (2022).

Table 4: Aggregated Predistribution—Redistribution Preferences, all Variables Standardized

	(1)	(2)	(3)	(4)	(5)	(6)
Education	-0.096***	-0.082***	-0.084***	-0.07***	-0.067***	-0.043***
	(0.011)	(0.009)	(0.008)	(0.008)	(0.007)	(0.012)
CECT score		0.015***	-0.006	-0.005	-0.004	-0.004
		(0.005)	(0.006)	(0.006)	(0.006)	(0.006)
MPs Trustworthy		0.02***	0.022***	0.02**	0.02**	0.021**
		(0.005)	(0.007)	(0.008)	(0.008)	(0.008)
Civ. Serv. Trustworthy		0.013**	-0.001	0	0	-0.001
		(0.005)	(0.008)	(0.008)	(0.009)	(0.008)
Interest in Politics		-0.04***	-0.035***	-0.034***	-0.032***	-0.037***
		(0.008)	(0.009)	(0.01)	(0.01)	(0.01)
Understanding of Politics		-0.022***	-0.015*	-0.012	-0.013	-0.016*
		(0.006)	(0.008)	(0.009)	(0.009)	(0.008)
Perceived Class				0.006	0.01	
				(0.007)	(0.006)	
Household Income				-0.051***	-0.003	
				(0.01)	(0.018)	
Education x 2nd Income QU						-0.017
						(0.015)
Education x 3rd Income QU						-0.027
						(0.017)
Education x 4th Income QU						-0.058***
						(0.018)
Education x 5th Income QU						-0.07***
						(0.021)
Age Bin Controls	X	X	X	X	X	X
FE: Year	X	X	X	X	X	X
FE: Country	X	X	X	X	X	X
Year x Income Bin					X	
Country x Income Bin					X	
Individual Controls			X	X	X	X
Observations	120577	69992	23186	19632	19632	20400
R^2	0.136	0.161	0.184	0.193	0.209	0.187
Adjusted R^2	0.136	0.161	0.181	0.19	0.194	0.184

Note: All countries, parties, and years are pooled in these estimations. All the variables whose coefficients are displayed in this table have been standardised, with a mean of 0 and a standard deviation of 1. Standard errors are reported in parentheses; they are robust in the pooled OLS models and clustered at the party level in the fixed effects specifications. *p<0.10, **p<0.05, ***p<0.01.

7 Conclusion

This study examines whether the economic policies advocated by Social Democratic parties can explain their declining support among less-educated voters. Among various economic pol-

icy classifications, the predistribution–redistribution axis appears most effective in explaining variation in vote shares among less-educated voters. Social Democratic parties emphasizing predistribution over redistribution perform better among less-educated voters. Other policy classifications offer more limited explanatory power. For example, whereas the consumption–investment framework used by Abou-Chadi and Wagner (2019) has also proven a suitable predictor, its explanatory power is constrained by being dependent on accounting for union influence at the time of an election. Analyzing the broader consequences of the Social Democratic parties' shift away from predistributive economic policies, I argue that this shift was not electorally harmful for Social Democratic parties overall, as gains among higher-educated voters offset losses among the less educated. However, this analysis captures only partial equilibrium effects. From a general equilibrium perspective, the retreat of Social Democrats from predistributive policies likely contributed to a representational gap for the policy preferences of less educated voters, which may have fueled the rise of populist right parties (Abramowitz and Saunders, 2008). As Kuziemko et al. (2023) observe, Donald Trump's rejection of free trade orthodoxy in favor of protectionism exemplifies how right-wing populists have capitalized on this gap.

The electoral results align with the demand-side findings, where education consistently emerges as a strong and stable negative predictor of support for predistributive economic policies across countries and over time. Both preference patterns and voting behavior display similar cross-national variation. For example, the statistical relationships are especially pronounced in the US and Germany, but significantly weaker in southern European countries, such as Italy and Spain. Lastly, the paper concludes by examining potential drivers of the observed educational alignment in economic policy preferences. The analysis finds no evidence that political trust, field of education or status concerns account for the patterns. Instead, differences in political knowledge, interest and, most notably, openness to change appear to offer more compelling explanations for the distinct policy preferences associated with educational background. This

may also help explain why progressive industrial policies, such as Joe Biden's Inflation Reduction Act (IRA), have struggled to regain the support of former Social Democratic voters.

References

Abou-Chadi, T. and Wagner, M. (2019), 'The electoral appeal of party strategies in postindustrial societies: when can the mainstream left succeed?', *The Journal of Politics* **81**(4), 1405–1419. 2, 4, 6, 7, 11, 17, 32

Abramowitz, A. I. and Saunders, K. L. (2008), 'Is polarization a myth?', *The Journal of politics* **70**(2), 542–555. 32

Adams, J. (2012), 'Causes and electoral consequences of party policy shifts in multiparty elections: Theoretical results and empirical evidence', *Annual Review of Political Science* **15**(1), 401–419. 2

Adams, J., Clark, M., Ezrow, L. and Glasgow, G. (2006), 'Are niche parties fundamentally different from mainstream parties? the causes and the electoral consequences of western european parties' policy shifts, 1976–1998', *American Journal of Political Science* **50**(3), 513–529. 11

Angelucci, D. and Vittori, D. (2023), 'Look where you're going: the cultural and economic explanations of class voting decline', *West european politics* **46**(1), 122–147. 7

Angrist, J. D. and Pischke, J.-S. (2009), *Mostly harmless econometrics: An empiricist's companion*, Princeton university press. 12

Attewell, D. (2022), 'Redistribution attitudes and vote choice across the educational divide', *European Journal of Political Research* **61**(4), 1080–1101. 27, 29

Autor, D., Dorn, D., Hanson, G. and Majlesi, K. (2020), 'Importing political polarization? the electoral consequences of rising trade exposure', *American Economic Review* **110**(10), 3139–3183. 8

Baccaro, L. and Pontusson, J. (2023), The politics of growth models, *in* 'Varieties of Capitalism', Edward Elgar Publishing, pp. 76–93. 3

Baccini, L. and Sattler, T. (2023), 'Austerity, economic vulnerability, and populism', *American Journal of Political Science* . 8

Bakker, R. and Hobolt, S. (2013), 'Measuring party positions', *Political choice matters: Explaining the strength of class and religious cleavages in cross-national perspective* pp. 27–45. 17

Bandau, F. (2023), 'What explains the electoral crisis of social democracy? a systematic review of the literature', *Government and Opposition* **58**(1), 183–205. 6

Bekhtiar, K. (2025), 'The decline of manufacturing employment and the rise of the far-right in austria', *Journal of Public Economics* p. 105315. 2

Benedetto, G., Hix, S. and Mastrorocco, N. (2020), 'The rise and fall of social democracy, 1918–2017', *American Political Science Review* **114**(3), 928–939. 2

Benoit, K. and Laver, M. (2007), 'Estimating party policy positions: Comparing expert surveys and hand-coded content analysis', *Electoral Studies* **26**(1), 90–107. 17

Beramendi, P., Häusermann, S., Kitschelt, H. and Kriesi, H. (2015), *The politics of advanced capitalism*, Cambridge University Press. 7

Best, R. E. (2011), 'The declining electoral relevance of traditional cleavage groups', *European Political Science Review* **3**(2), 279–300. 2

Bhuller, M., Moene, K. O., Mogstad, M. and Vestad, O. L. (2022), 'Facts and fantasies about wage setting and collective bargaining', *Journal of Economic Perspectives* **36**(4), 29–52. 21

Blair, T. and Schröder, G. (1999), 'Europe: The third way/die neue mitte', *London: Labour Party and SPD* . 4

Blanchet, T., Chancel, L. and Gethin, A. (2022), 'Why is europe more equal than the united states?', *American Economic Journal: Applied Economics* **14**(4), 480–518. 8

Bornschier, S., Haffert, L., Häusermann, S., Steenbergen, M. and Zollinger, D. (2024), *Cleavage Formation in the 21st century: How social identities shape voting behavior in contexts of electoral realignment*, Cambridge University Press. 26

Bozio, A., Garbinti, B., Goupille-Lebret, J., Guillot, M. and Piketty, T. (2020), 'Predistribution vs. redistribution: Evidence from france and the us'. 8

Bremer, B. (2020), 'The political economy of the spd reconsidered: Evidence from the great recession', *German Politics* **29**(3), 153–175. 6

Bremer, B. and Rennwald, L. (2023), 'Who still likes social democracy? the support base of social democratic parties reconsidered', *Party Politics* **29**(4), 741–754. 7

Bruni, R., Gioffré, A. and Marino, M. (2025), 'In-group bias in preferences for redistribution: a survey experiment in italy', *Economica* . 28

Bräuninger, T., Debus, M., Kaiser, A., König, T., Proksch, S.-O., Saalfeld, T. and Döring, H. (2022), 'Parlgov: Political database on parties, elections and governments'. Accessed: 2025-04-25.
URL: *https://doi.org/10.7910/DVN/UKILBE* 9

Buisseret, P. and Van Weelden, R. (2022), 'Polarization, valence, and policy competition', *American Economic Review: Insights* **4**(3), 341–352. 7

Busemeyer, M. R., Rathgeb, P. and Sahm, A. H. (2022), 'Authoritarian values and the welfare state: the social policy preferences of radical right voters', *West European Politics* **45**(1), 77–101. 28

Cavaillé, C. and Trump, K.-S. (2015), 'The two facets of social policy preferences', *The Journal of Politics* **77**(1), 146–160. 27

Chueri, J. (2022), 'An emerging populist welfare paradigm? how populist radical right-wing parties are reshaping the welfare state', *Scandinavian Political Studies* **45**(4), 383–409. 28

Colantone, I. and Stanig, P. (2018), 'The trade origins of economic nationalism: Import competition and voting behavior in western europe', *American Journal of Political Science* **62**(4), 936–953. 9

Colantone, I. and Stanig, P. (2019), 'The surge of economic nationalism in western europe', *Journal of Economic Perspectives* **33**(4), 128–51.
URL: *https://www.aeaweb.org/articles?id=10.1257/jep.33.4.128* 8, 9

Danieli, O., Gidron, N., Kikuchi, S. and Levy, R. (2022), 'Decomposing the rise of the populist radical right', *Available at SSRN 4255937* . 2, 7

De Jong, J. and Kamphorst, J. (2025), 'Separated by degrees: social closure by education levels strengthens contemporary political divides', *Comparative political studies* **58**(7), 1533–1568. 26

De Vries, C. E. (2018), 'The cosmopolitan-parochial divide: changing patterns of party and electoral competition in the netherlands and beyond', *Journal of European Public Policy* **25**(11), 1541–1565. 2

Dolls, M., Schüle, P. and Windsteiger, L. (2025), 'Which factors affect public support for economic policies? evidence from a survey experiment about rent control in germany', *Economica* **92**(367), 920–958. 30

Downs, A. (1957), 'An economic theory of political action in a democracy', *Journal of political economy* **65**(2), 135–150. 3

Evans, G. and Tilley, J. (2012*a*), 'The depoliticization of inequality and redistribution: Explaining the decline of class voting', *The Journal of Politics* **74**(4), 963–976. 7

Evans, G. and Tilley, J. (2012*b*), 'How parties shape class politics: Explaining the decline of the class basis of party support', *British journal of political science* **42**(1), 137–161. 7

Falk, A., Becker, A., Dohmen, T., Enke, B., Huffman, D. and Sunde, U. (2018), 'Global evidence on economic preferences*', *The Quarterly Journal of Economics* **133**(4), 1645–1692. **URL:** *https://doi.org/10.1093/qje/qjy013* 3

Fastenrath, F. and Marx, P. (2024), 'The role of preference formation and perception in unequal representation. combined evidence from elite interviews and focus groups in germany', *Comparative Political Studies* p. 00104140241237470. 5

Gagatek, W. (2024), 'Explaining the rise of the radical right in europe', *European View* **23**(2), 265–265. 7

Gallego, A. (2014), *Trade Unions in the Highly Educated Membership Era*, Cambridge University Press, p. 114–143. 16

García-Viñuela, E., Motz, N. and Riera, P. (2024), 'Voting for trade protectionist parties: Evidence from nine waves of the european social survey', *European Union Politics* p. 14651165241237611. 8

Garritzmann, J. L., Busemeyer, M. R. and Neimanns, E. (2018), 'Public demand for social investment: new supporting coalitions for welfare state reform in western europe?', *Journal of European Public Policy* **25**, 844–861. 27

Gethin, A., Martínez-Toledano, C. and Piketty, T. (2022), 'Brahmin left versus merchant right: Changing political cleavages in 21 western democracies, 1948–2020', *The Quarterly Journal of Economics* **137**(1), 1–48. 2, 6, 30

Gethin, A., Martínez-Toledano, C. and Piketty, T. (2021), 'World political cleavages and inequality database', `http://wpid.world`. 4, 9

Gidron, N. and Hall, P. A. (2017), 'The politics of social status: Economic and cultural roots of the populist right', *The British journal of sociology* **68**, S57–S84. 29

Giordani, P. E. and Mariani, F. (2022), 'Unintended consequences: Can the rise of the educated class explain the revival of protectionism?', *Journal of Economic Theory* **200**, 105385. 8, 27

Goodhart, D. (2017), *The road to somewhere: The populist revolt and the future of politics*, Oxford University Press. 7

Guenther, L. (2024), 'Political representation gaps and populism', *Available at SSRN 4230288* . 2, 7

Guriev, S. and Papaioannou, E. (2022), 'The political economy of populism', *Journal of Economic Literature* **60**(3), 753–832. 6, 7

Hacker, J. (2011), 'The institutional foundations of middle-class democracy', *Policy Network* **6**(5), 33–37. 4

Hainmueller, J. and Hiscox, M. J. (2006), 'Learning to love globalization: Education and individual attitudes toward international trade', *International Organization* **60**(2), 469–498. 28

Hooghe, L. and Marks, G. (2025), 'How does the education cleavage stack up against the classic cleavages of the past?', *West European Politics* pp. 1–33. 2

Hooghe, L., Marks, G. and Kamphorst, J. (2025), 'Field of education and political behavior: predicting gal/tan voting', *American political science review* **119**(2), 794–811. 26, 29

Hooghe, L., Marks, G. and Wilson, C. J. (2002), 'Does left/right structure party positions on european integration?', *Comparative political studies* **35**(8), 965–989. 2

Horn, A., Klüser, K. J. and Haselmayer, M. (2025), 'Social progress at the expense of economic equality? new data on left parties' equality preferences', *European Journal of Political Research* . 6

Inglehart, R. F. and Norris, P. (2016), 'Trump, brexit, and the rise of populism: Economic have-nots and cultural backlash', *HKS Working paper no. RWP16-026* . 8

ISSP-Research-Group (2023*a*), 'International social survey programme: Role of government i-v - issp 1985-1990-1996-2006-2016', GESIS, Köln. ZA4747 Datenfile Version 2.1.0, https://doi.org/10.4232/1.14113. 5, 18

ISSP-Research-Group (2023*b*), 'International social survey programme: Role of government i-v add on - issp 1985-1990-1996-2006-2016', GESIS, Köln. ZA4748 Datenfile Version 3.0.0, https://doi.org/10.4232/1.14109. 5, 18

Kawai, K. and Sunada, T. (2025), 'Estimating candidate valence', *Econometrica* **93**(2), 463–501. 7

Kitschelt, H. (1994), *The transformation of European social democracy*, cambridge university press. 2

Kuppens, T., Easterbrook, M. J., Spears, R. and Manstead, A. S. (2015), 'Life at both ends of the ladder: Education-based identification and its association with well-being and social attitudes', *Personality and Social Psychology Bulletin* **41**(9), 1260–1275. 28

Kuziemko, I., Buell, R. W., Reich, T. and Norton, M. I. (2014), '"last-place aversion": Evidence and redistributive implications', *The Quarterly Journal of Economics* **129**(1), 105–149. 28

Kuziemko, I., Marx, N. L. and Naidu, S. (2023), "compensate the losers?" economic policy and partisan realignment in the us, Technical report, National Bureau of Economic Research. 2, 4, 5, 6, 7, 16, 18, 19, 22, 23, 27, 32, 66

Kuziemko, I. and Washington, E. (2018), 'Why did the democrats lose the south? bringing new data to an old debate', *American Economic Review* **108**(10), 2830–2867. 2

Laakso, M. and Taagepera, R. (1979), '"effective" number of parties: a measure with application to west europe', *Comparative political studies* **12**(1), 3–27. 11, 13, 67, 68

Lehmann, P., Franzmann, S., Al-Gaddooa, D., Burst, T., Ivanusch, C., Lewandowski, J., Regel, S., Riethmüller, F. and Zehnter, L. (2024), 'Manifesto corpus'. Database.
URL: *https://manifesto-project.wzb.eu/* 9, 17

Lowe, W., Benoit, K., Mikhaylov, S. and Laver, M. (2011), 'Scaling policy preferences from coded political texts', *Legislative studies quarterly* **36**(1), 123–155. 10, 17, 44

Macdonald, D. (2024), 'Political trust and american public support for free trade', *Political Behavior* **46**(2), 1037–1055. 27

Mau, S. (2024), *Ungleich vereint: Warum der Osten anders bleibt*, Suhrkamp Berlin. 28, 29

Mayda, A. M. and Rodrik, D. (2005), 'Why are some people (and countries) more protectionist than others?', *European Economic Review* **49**(6), 1393–1430. 8

Mogstad, M., Salvanes, K. G. and Torsvik, G. (2025), Income equality in the nordic countries: Myths, facts, and lessons, Technical report, National Bureau of Economic Research. 8

Mudde, C. (2007), *Populist radical right democracy*, Cambridge University Press, p. 138–157. 3

Mudde, C. (2016), *The populist radical right: A reader*, Taylor & Francis. 3

Newton, K. and van Deth, J. W. (2021), *Foundations of Comparative Politics: Democracies of the Modern World*, Cambridge Textbooks in Comparative Politics, 4 edn, Cambridge University Press. 7

Nickell, S. (1981), 'Biases in dynamic models with fixed effects', *Econometrica: Journal of the econometric society* pp. 1417–1426. 12

Norris, P. and Inglehart, R. (2019), *Cultural backlash: Trump, Brexit, and authoritarian populism*, Cambridge University Press. 2

OECD (2024), 'OECD Economic Outlook No. 116'. Accessed: 2025-04-25.
URL: *https://www.oecd.org/economic-outlook/* 9

Oesch, D. and Rennwald, L. (2018), 'Electoral competition in europe's new tripolar political space: Class voting for the left, centre-right and radical right', *European journal of political research* **57**(4), 783–807. 2

Rathgeb, P. (2024), *How the radical right has changed capitalism and welfare in Europe and the USA*, Oxford University Press. 3

Rennwald, L. and Evans, G. (2014), 'When supply creates demand: Social democratic party strategies and the evolution of class voting', *West European Politics* **37**(5), 1108–1135. 7

Röth, L., Afonso, A. and Spies, D. C. (2018), 'The impact of populist radical right parties on socio-economic policies', *European Political Science Review* **10**(3), 325–350. 28

Rydgren, J. et al. (2013), *Class politics and the radical right*, Vol. 16, Routledge London. 2

Schäfer, A. and Steiner, N. D. (2025), 'How education, generation and gender jointly structure green and radical right voting', *West European Politics* pp. 1–28. 3

Schmitt, J. and Warner, K. (2015), 'The changing face of labor, 1983-2008', *EPRN* . 16

Simon, E. (2022), 'Explaining the educational divide in electoral behaviour: testing direct and indirect effects from british elections and referendums 2016–2019', *Journal of Elections, Public Opinion and Parties* **32**(4), 980–1000. 26

Simon, E. and Turnbull-Dugarte, S. J. (2025), 'Education as identity? a meta-analysis of education-based in-group preferences in candidate choice experiments', *The Journal of Politics* **87**(2), 807–811. 26

Simonsohn, U., Simmons, J. P. and Nelson, L. D. (2020), 'Specification curve analysis', *Nature Human Behaviour* **4**(11), 1208–1214. 4, 13

Spies, D. and Franzmann, S. T. (2011), 'A two-dimensional approach to the political opportunity structure of extreme right parties in western europe', *West European Politics* **34**(5), 1044–1069. 7

Stantcheva, S. (2022), Understanding of trade, Working Paper 30040, National Bureau of Economic Research.
URL: *http://www.nber.org/papers/w30040* 8

Steiner, N. D. (2023), 'Generational change in party support in germany: The decline of the volksparteien, the rise of the greens, and the transformation of the education divide', *Electoral Studies* **86**, 102706. 2

Stolper, W. F. and Samuelson, P. A. (1941), 'Protection and real wages', *The Review of Economic Studies* **9**(1), 58–73. 8

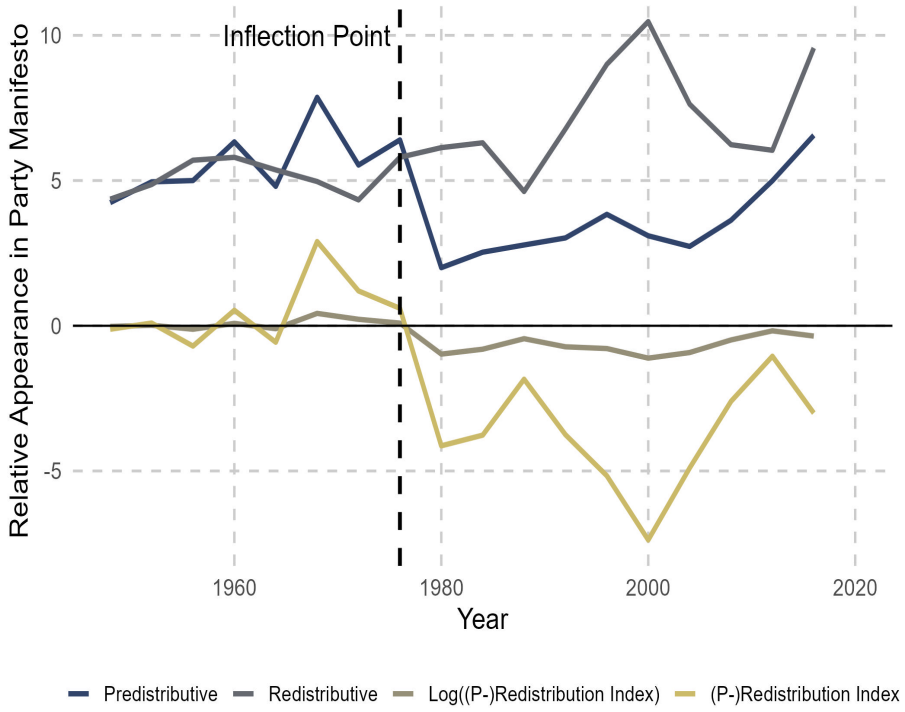
Wager, A., Bale, T., Cowley, P. and Menon, A. (2022), 'The death of may's law: Intra-and inter-party value differences in britain's labour and conservative parties', *Political Studies* **70**(4), 939–961. 7

Zollinger, D. (2024), 'Cleavage identities in voters' own words: Harnessing open-ended survey responses', *American Journal of Political Science* **68**(1), 139–159. 2, 26

A Appendix

A.1 Figures

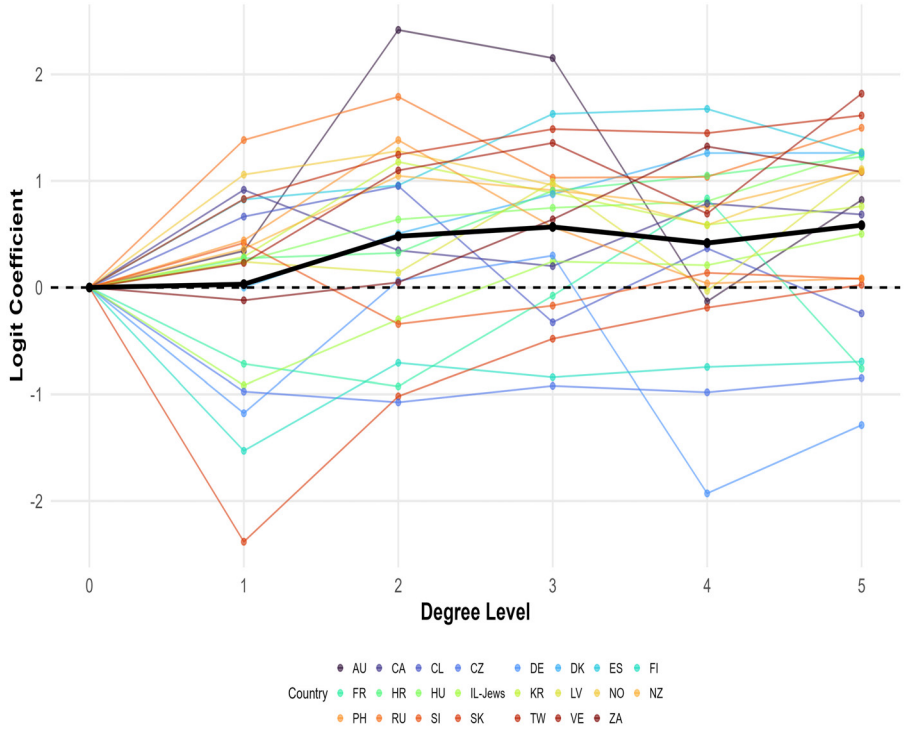
Figure A.1: US Democrats (P-)Redistribution Policies



Note: The index is constructed in the spirit of Lowe et al. (2011), taking the logarithm of the ratio of (p-)redistributive policies in the Manifestos of the Democratic Party (+ 0.5 on each side to avoid zeros). Policies are grouped following the information in table 1. For better visibility, the variables are calculated as moving averages of 3 successive Manifestos.

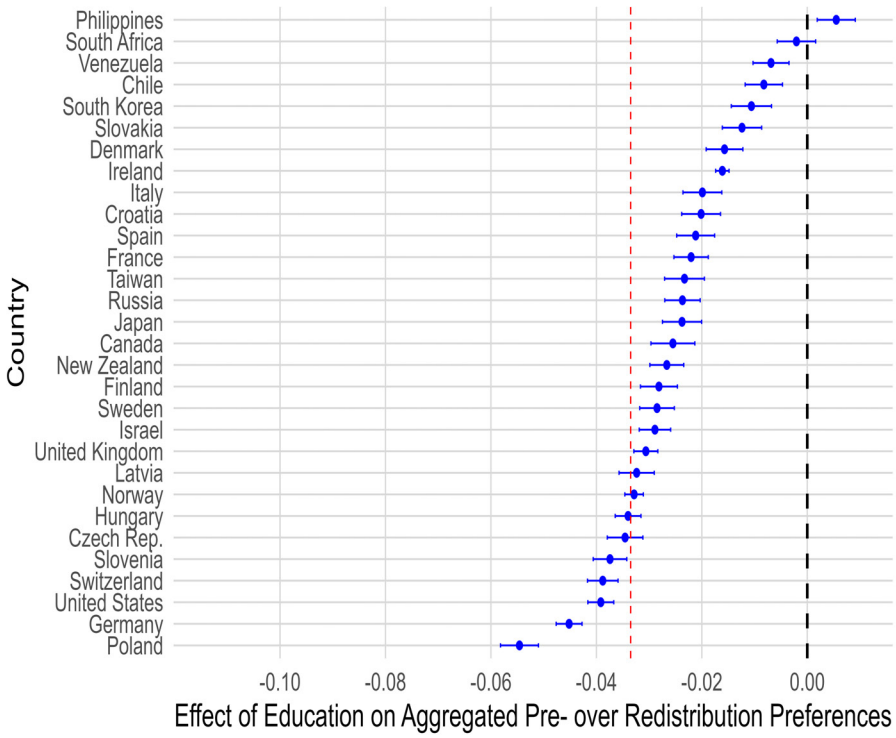
Figure A.2: Impact of Highest Degree Obtained on Union Membership

Black line = average across countries



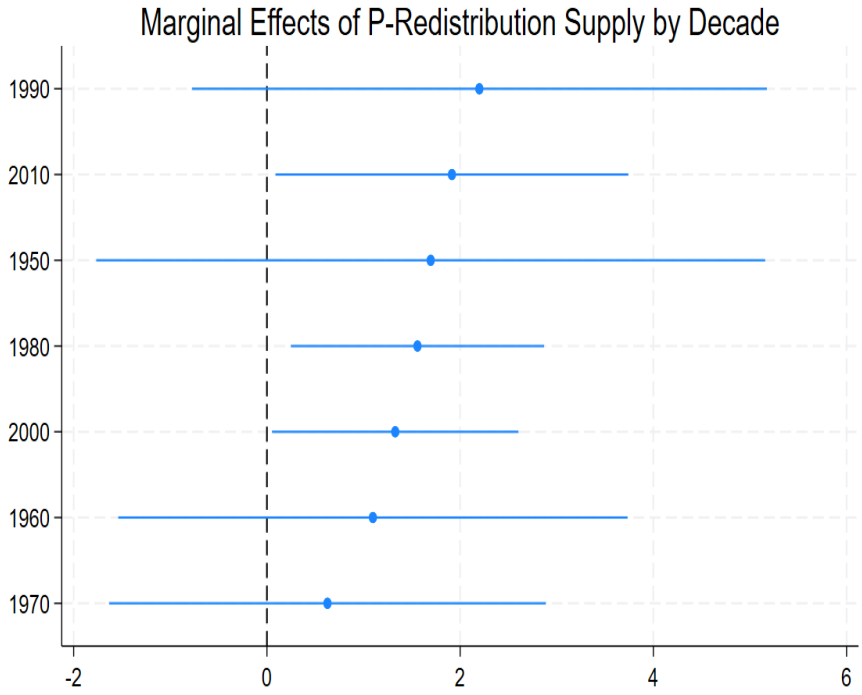
Note: This figure shows, for each country, the estimated logit coefficients of the highest educational degree obtained by individual i on the probability of him or her being a union member, with the bold black line indicating the overall average across countries. Countries in the bottom 10% and top 10% by their mean coefficient (averaged across degree levels) have been omitted prior to plotting.

Figure A.3: Policy Preferences by Country



Note: The Figure represents the country-specific effect of education on preferences for pre- over redistributive economic policy. Confidence intervals represent a 95% level.

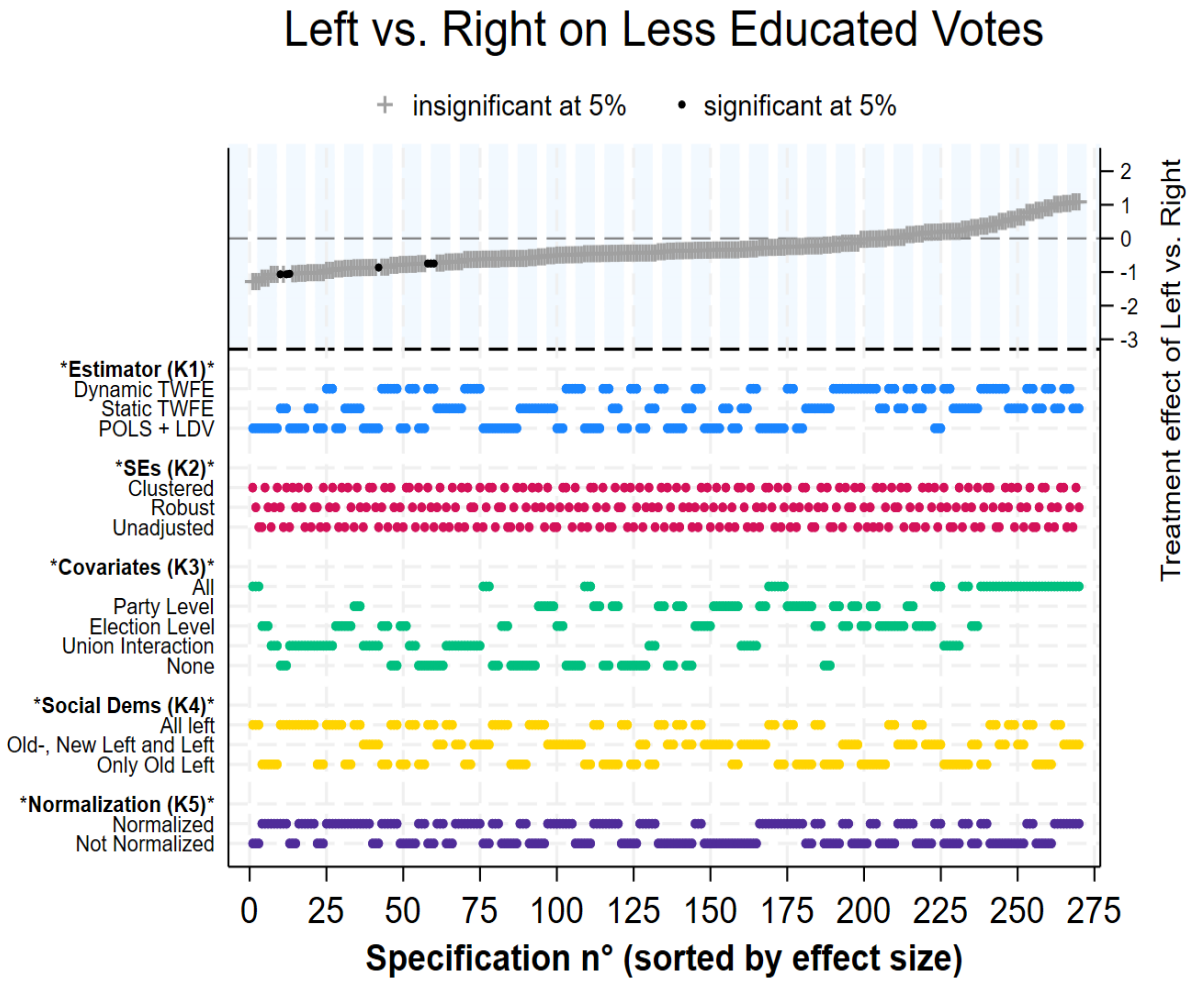
Figure A.4: Time Heterogeneity



Note: The Figure shows the decade-specific effect of Social Democrats' supply of pre- vs. redistribution policies on the votes received by the less educated electorate. Confidence bands represent a 95% interval.

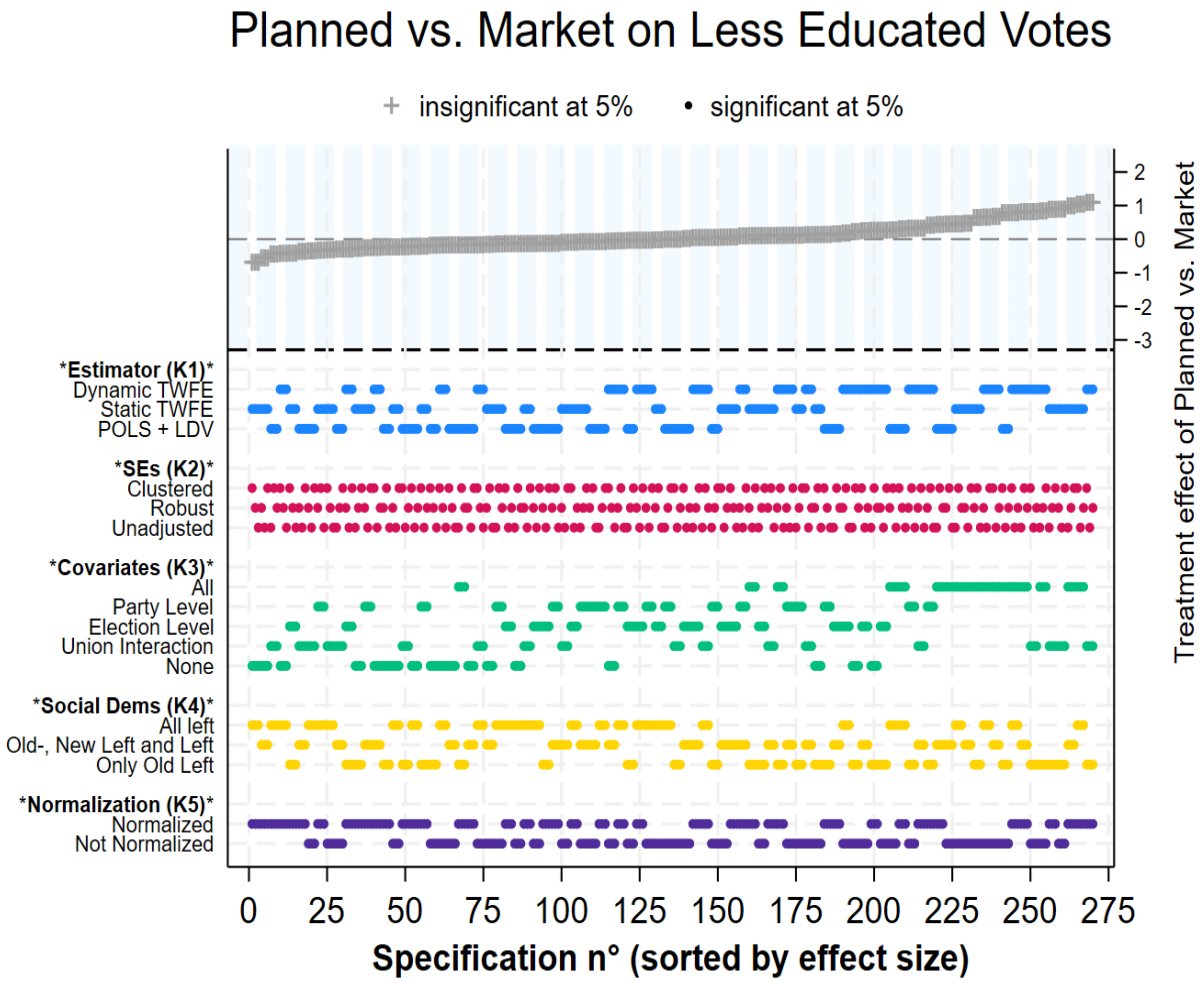
A.1.1 Robustness Supply

Figure A.5



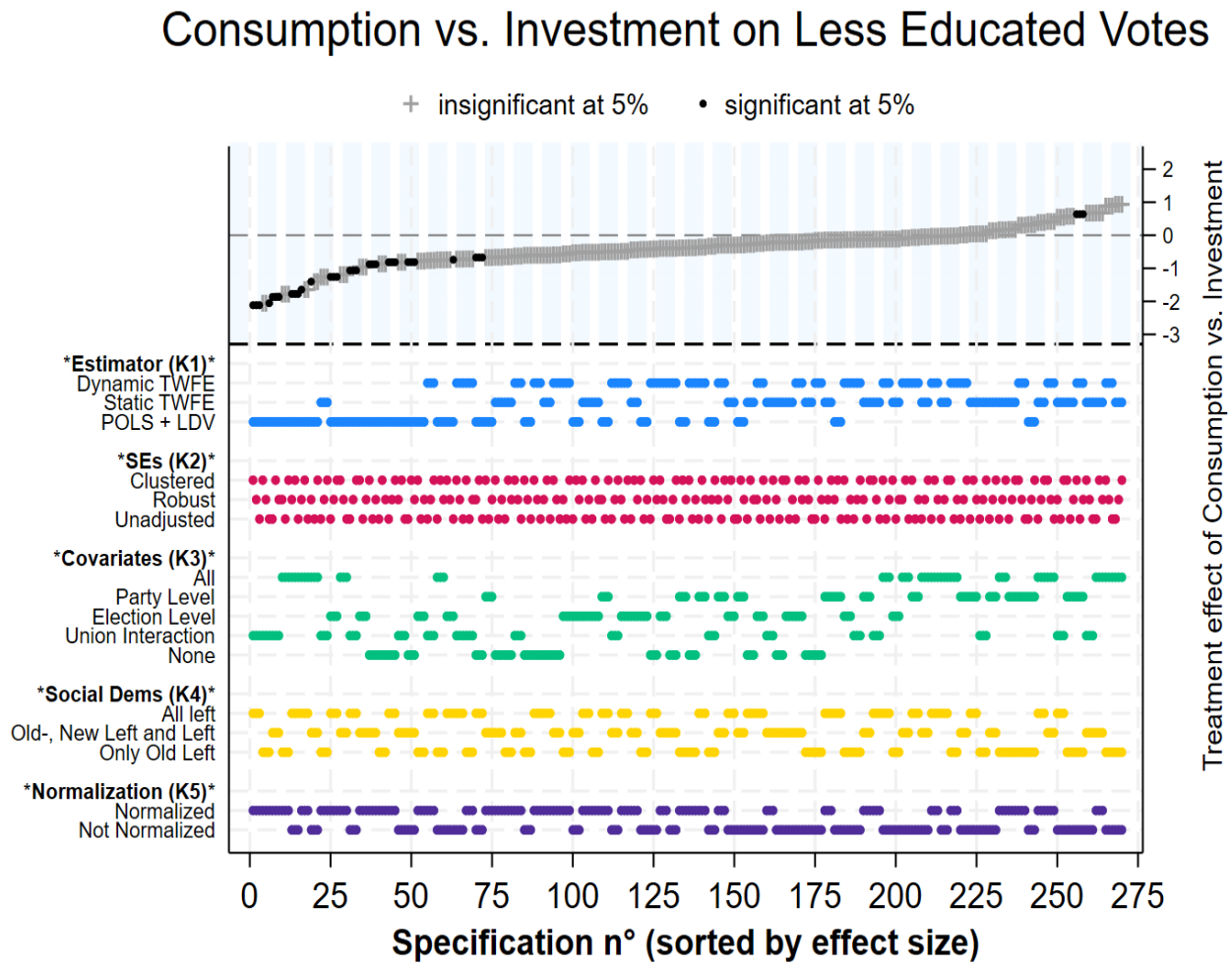
Note: The upper panel displays coefficient estimates for the effect of a shift in economic policy from right to left on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

Figure A.6



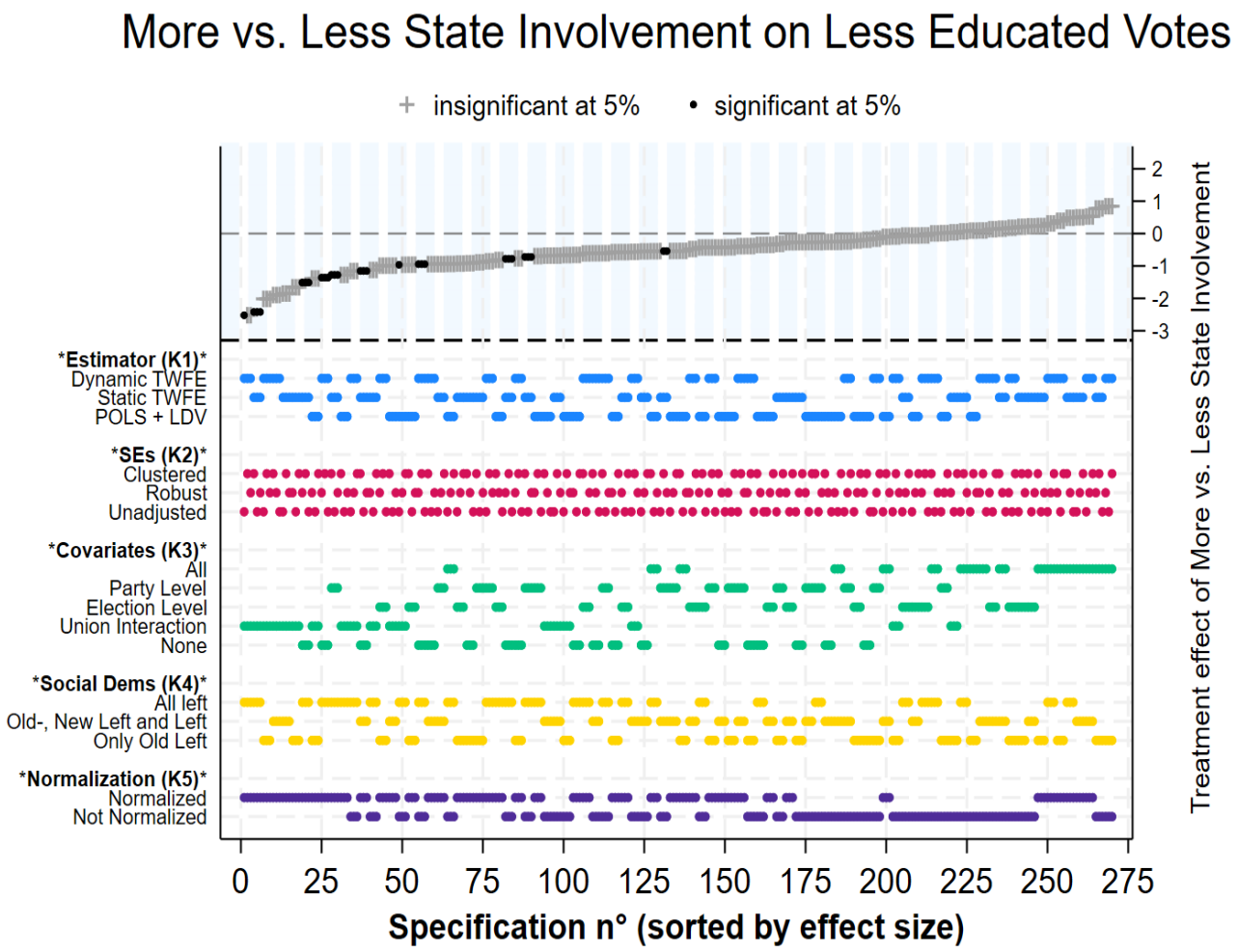
Note: The upper panel displays coefficient estimates for the effect of a shift in economic policy from market-oriented to planned on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding model specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

Figure A.7



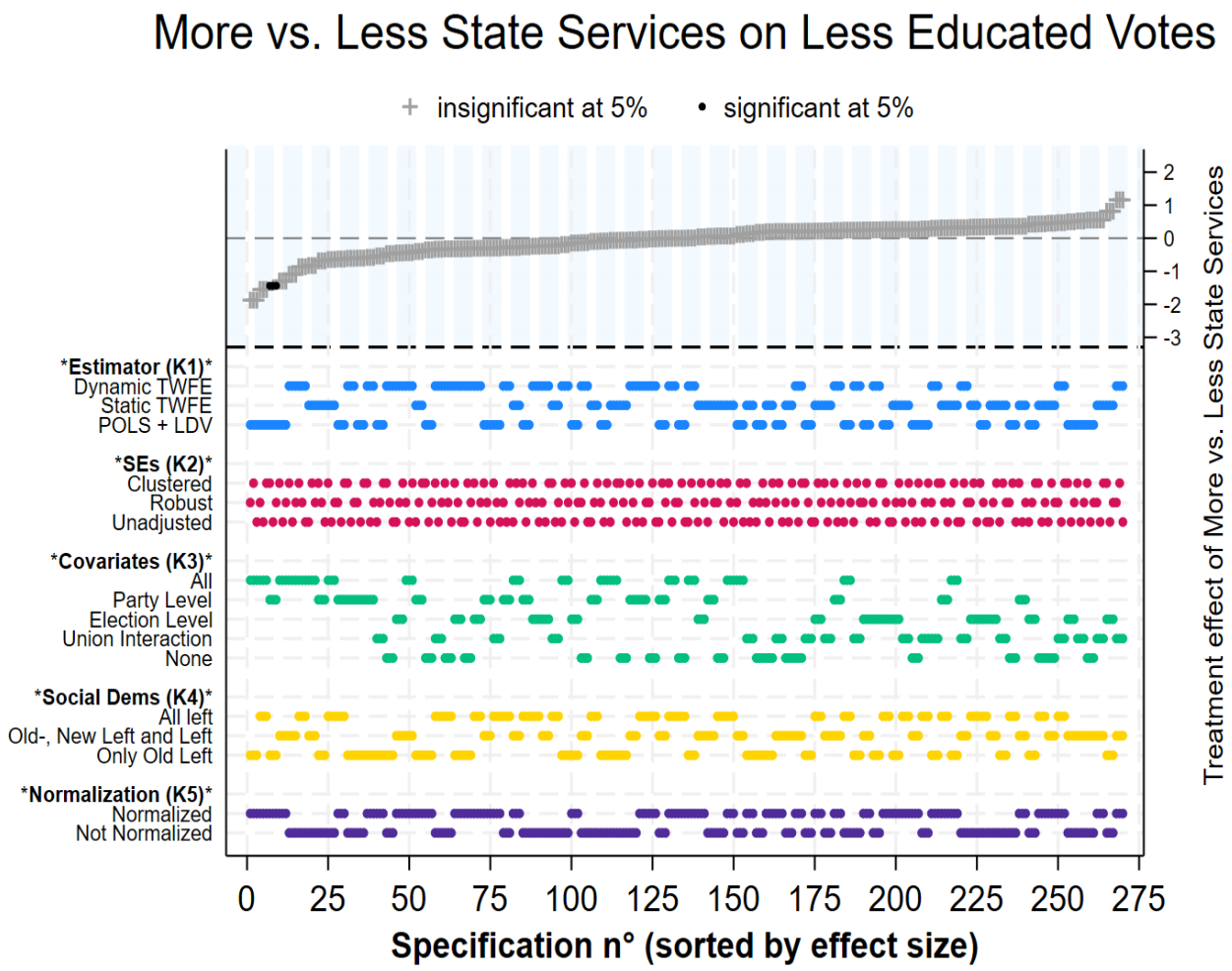
Note: The upper panel displays coefficient estimates for the effect of a shift in economic policy from investment to consumption on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding model specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

Figure A.8



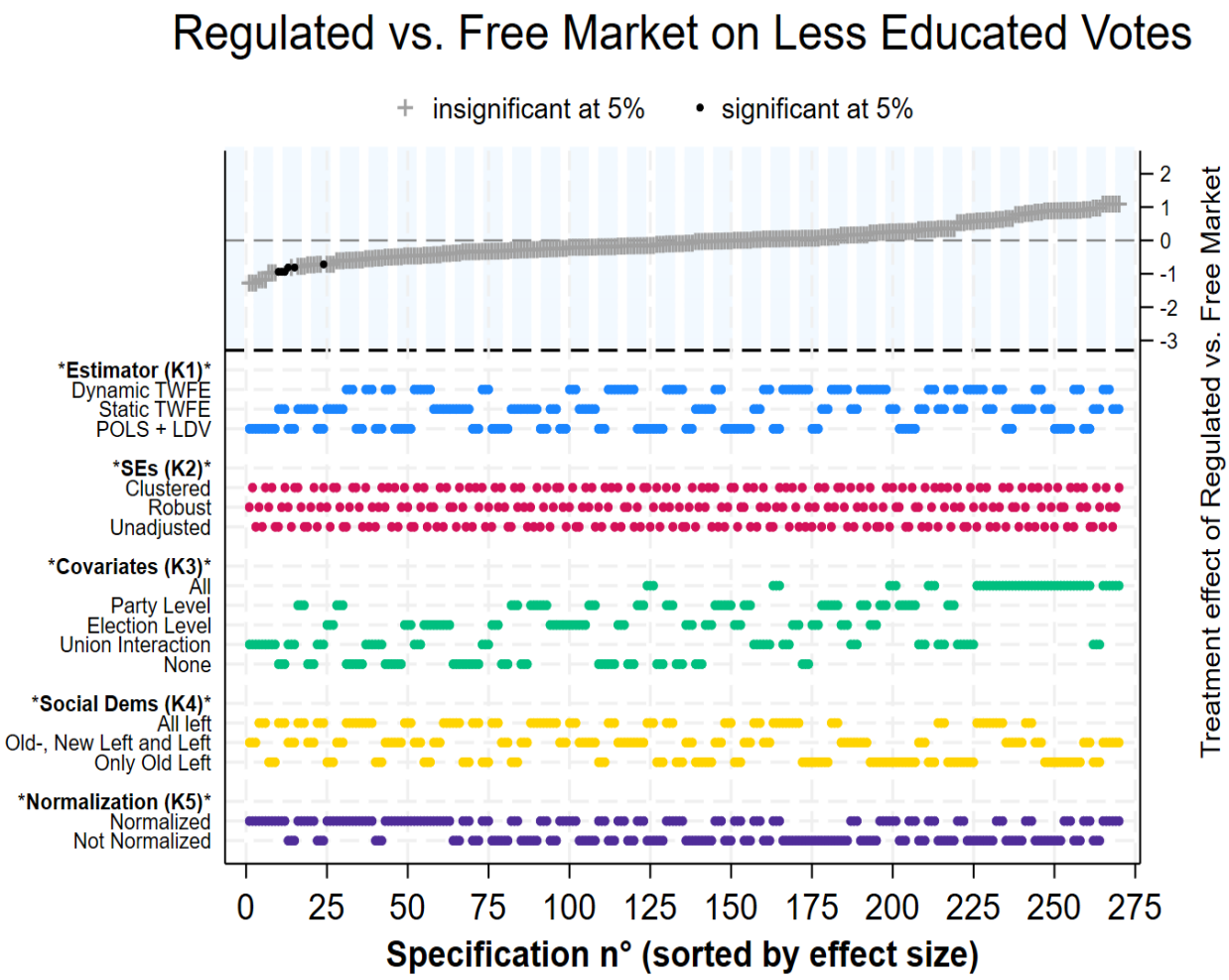
Note: The upper panel displays coefficient estimates for the effect of an increase in proposed state involvement in the economy on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding model specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

Figure A.9



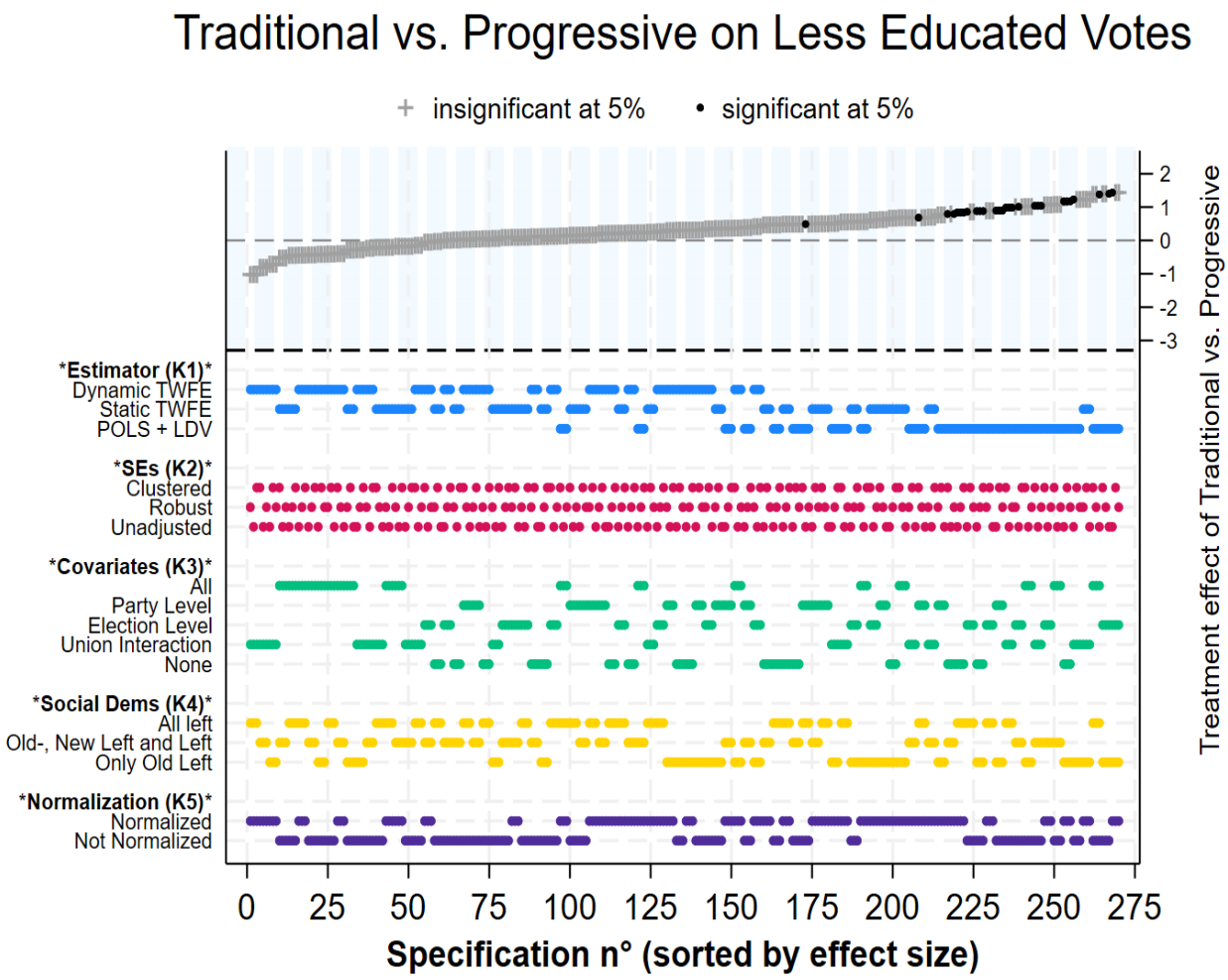
Note: The upper panel displays coefficient estimates for the effect of an increase in proposed state services provided on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding model specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

Figure A.10



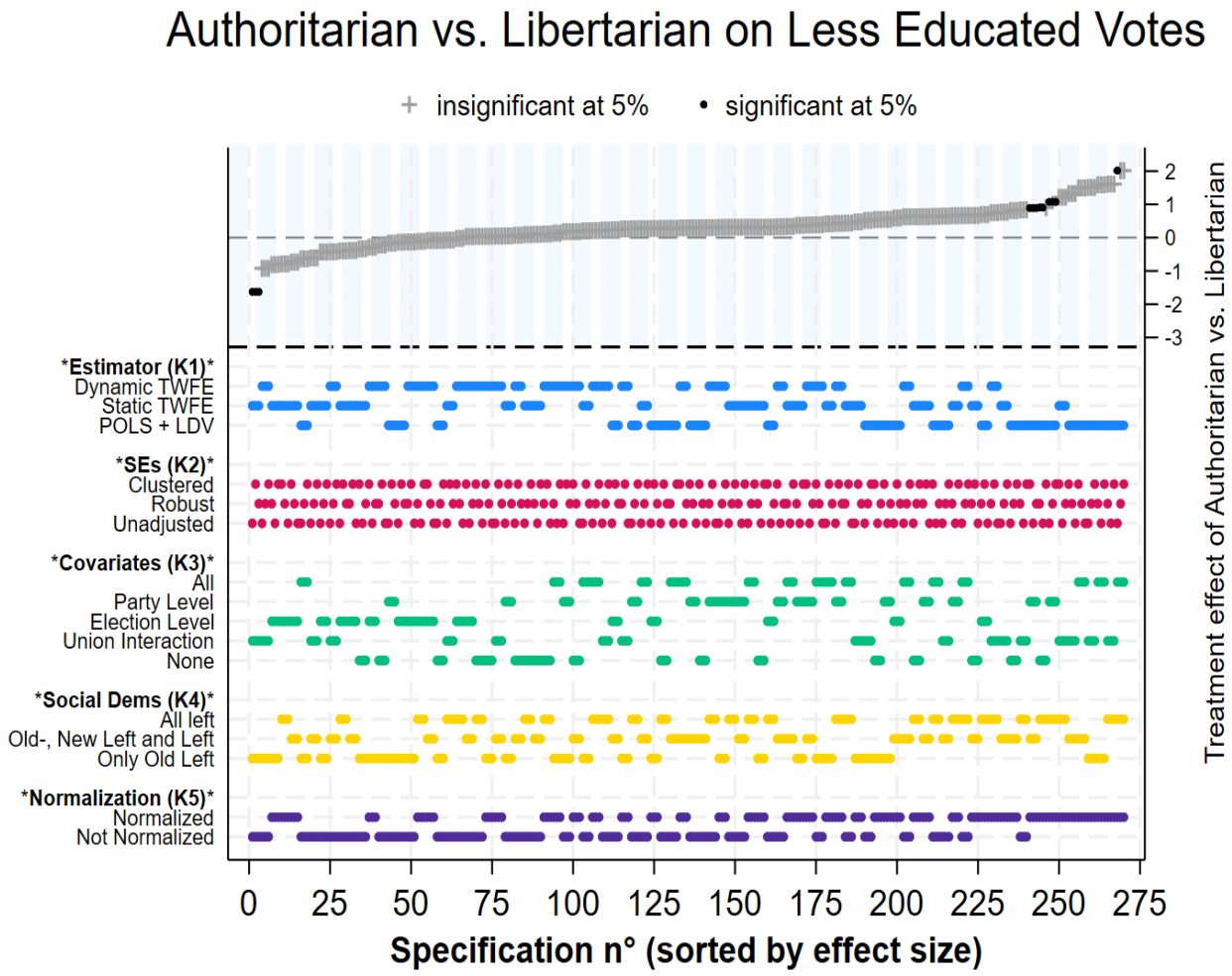
Note: The upper panel displays coefficient estimates for the effect of a shift in economic policy from free- to regulated markets on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding model specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

Figure A.11



Note: The upper panel displays coefficient estimates for the effect of a shift in economic policy from progressive to traditional economic policy on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding model specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

Figure A.12



Note: The upper panel displays coefficient estimates for the effect of a shift in social policy from libertarian to authoritarian on the share of a party's electorate drawn from the bottom 50% of the education distribution. Solid dots indicate estimates statistically significant at the 5% level, crosses denote statistically insignificant estimates. The lower panel summarizes the corresponding model specifications, indicating the estimation method (blue), standard error adjustment (red), covariate set (green), definition of Social Democratic parties (yellow) and whether the independent variable was normalized within elections (purple). All estimates are based on pooled data across countries and years.

A.1.2 Country Results

Figure A.13: Australia

Figure A.14: Germany

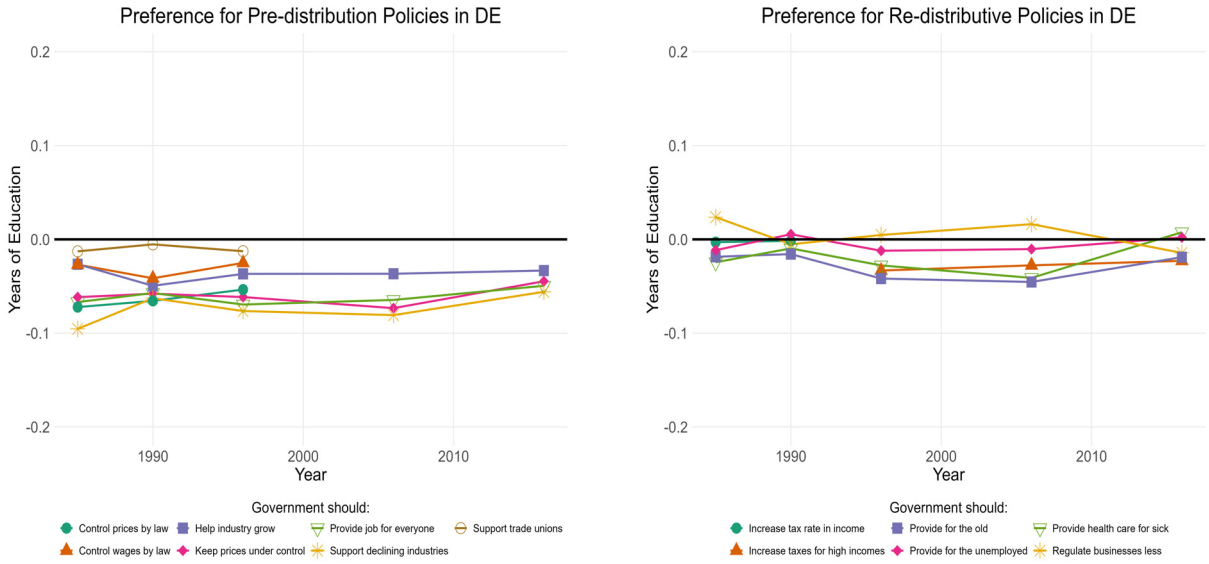


Figure A.15: USA

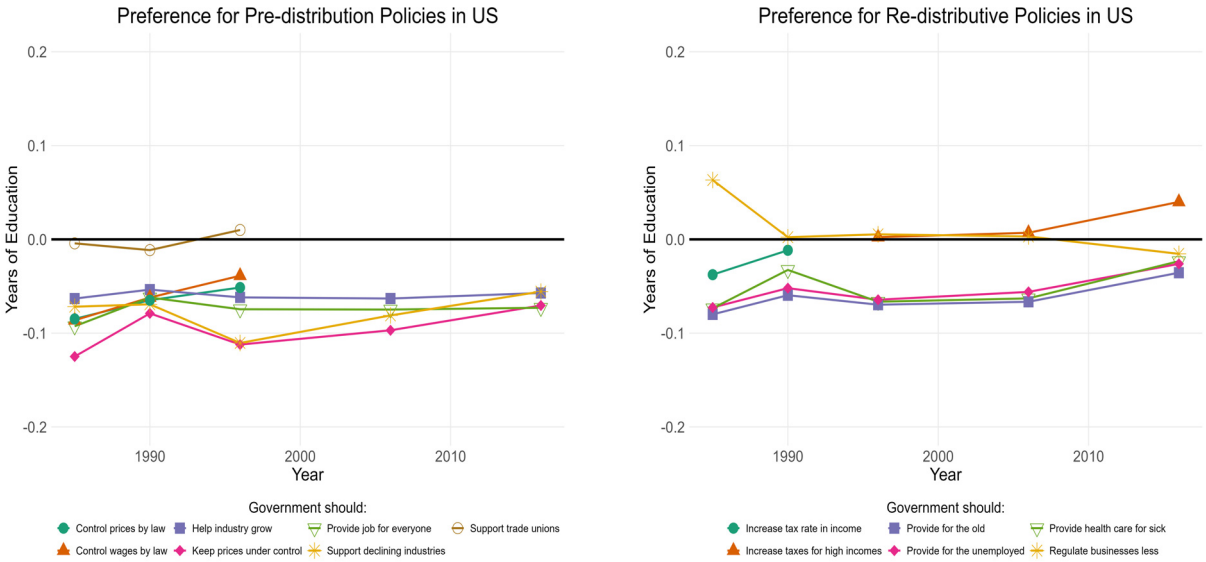


Figure A.16: United Kingdom

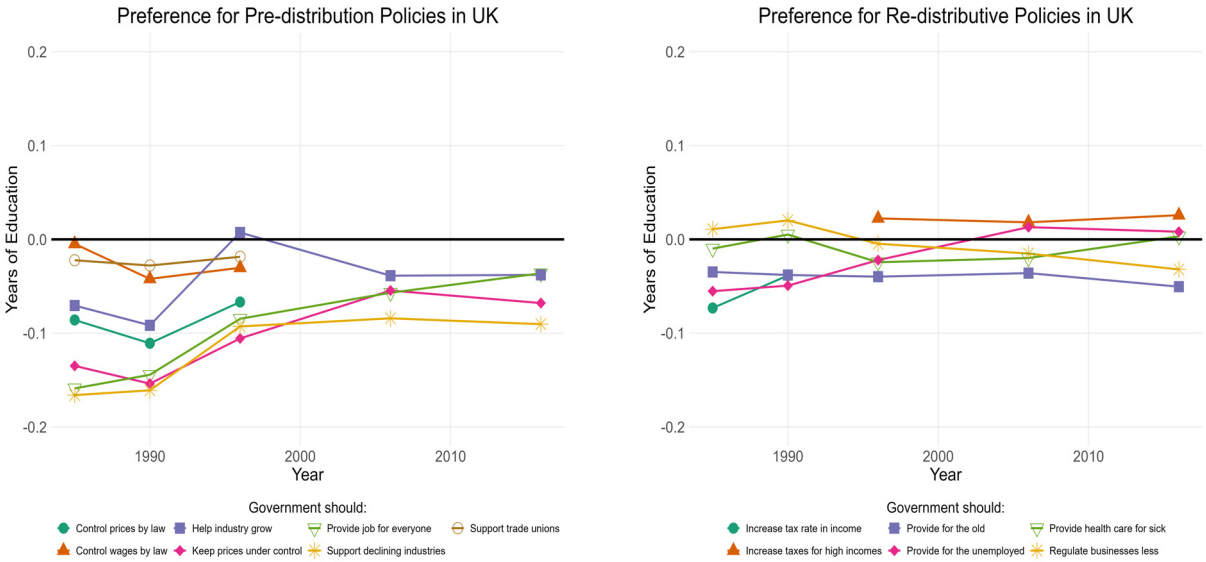


Figure A.17: Italy

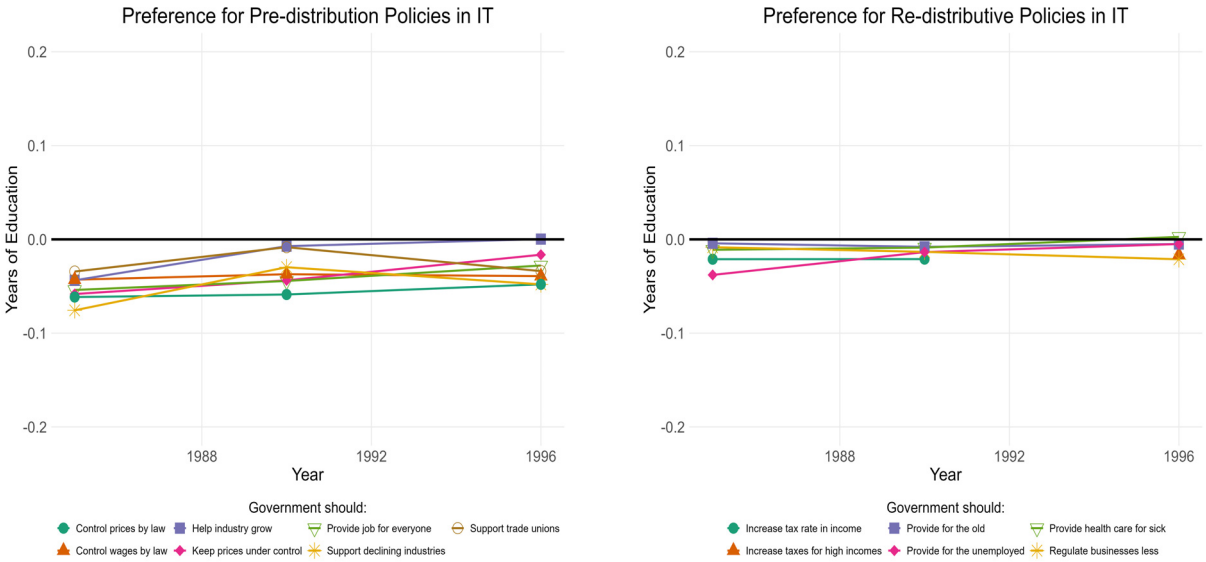


Figure A.18: Norway

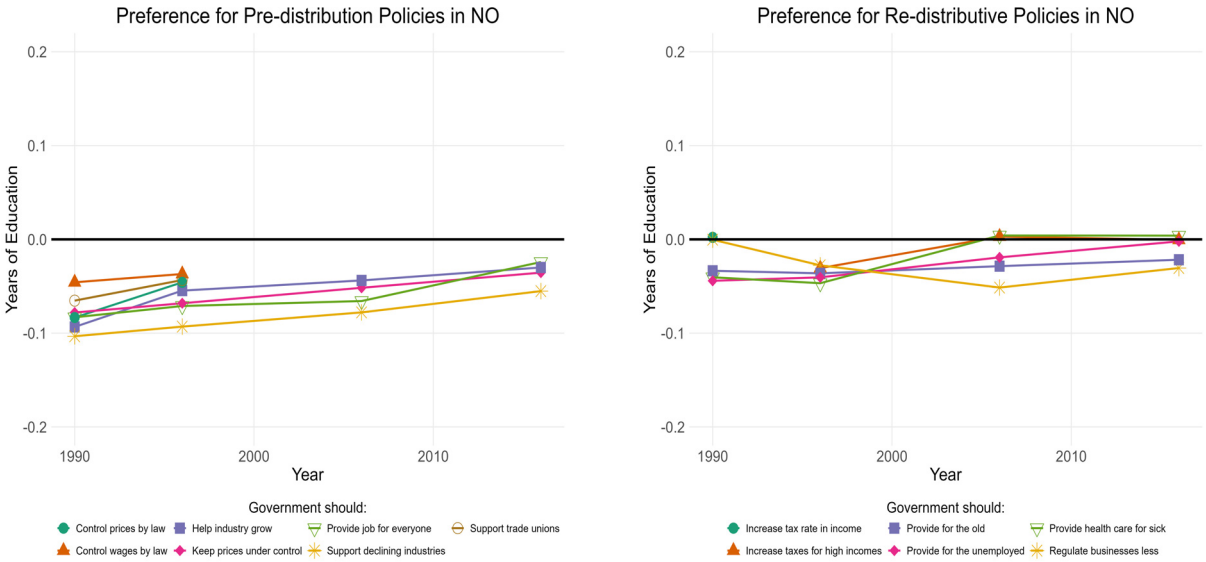


Figure A.19: France

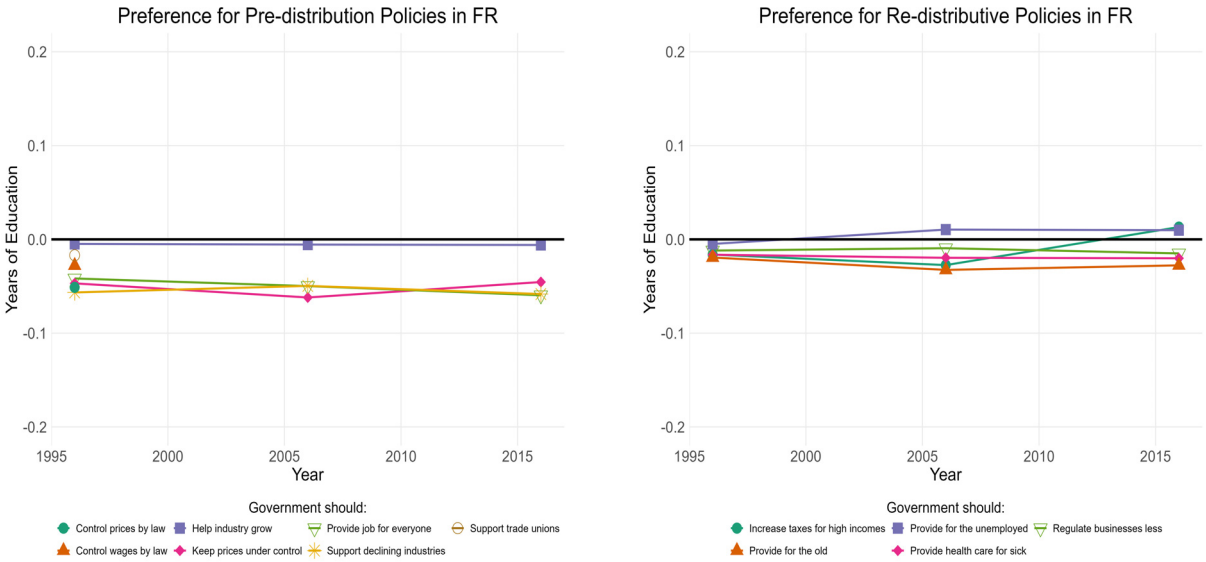


Figure A.20: Russia

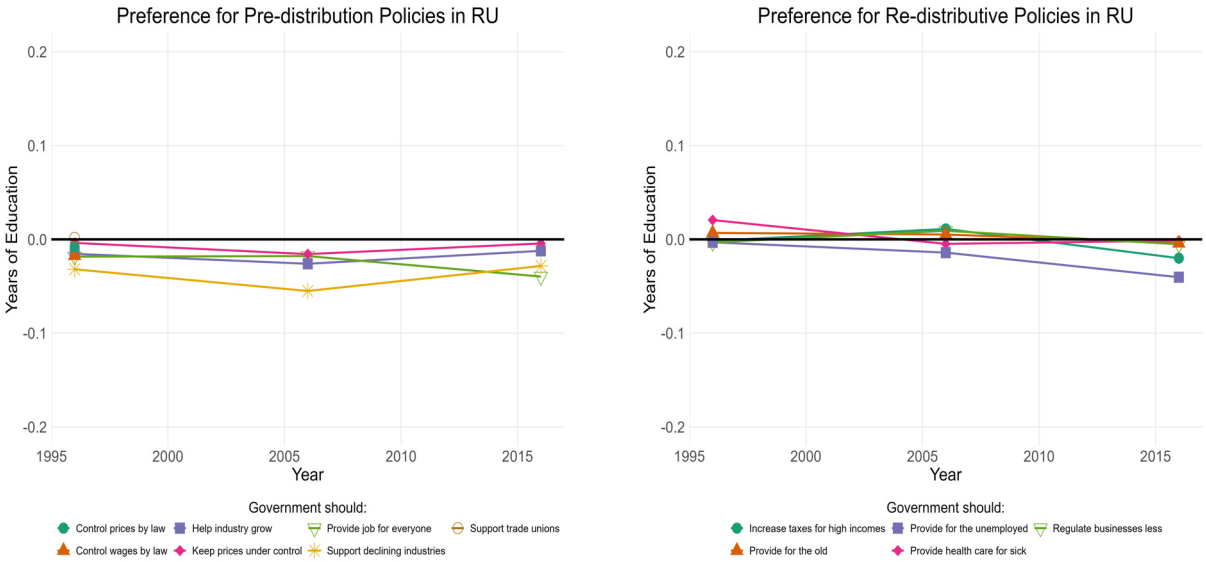


Figure A.21: Sweden

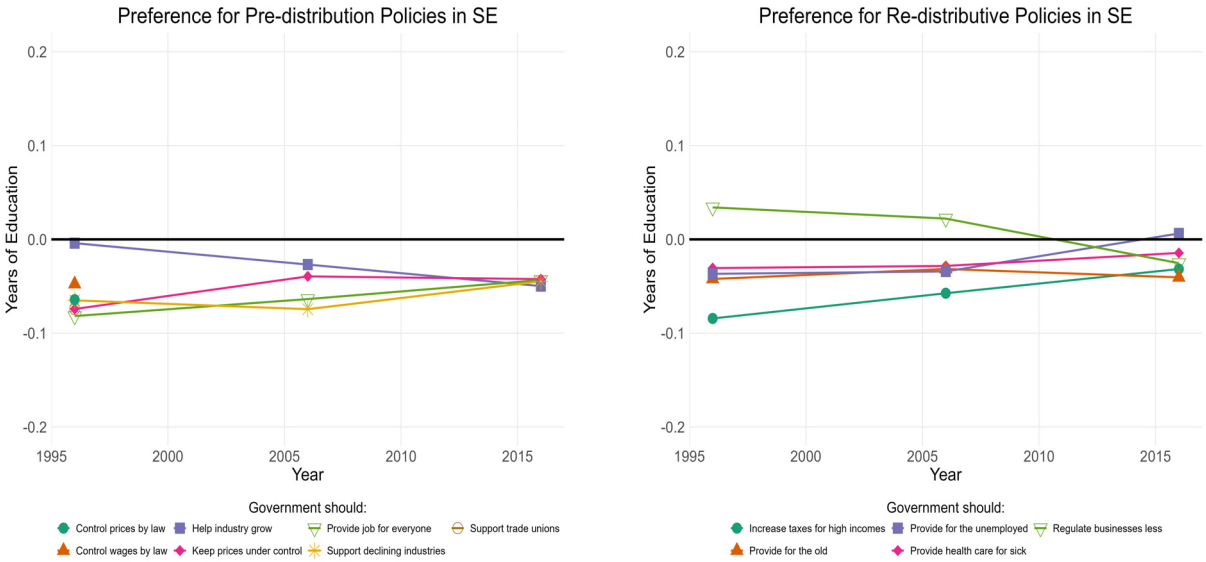


Figure A.22: Slovenia

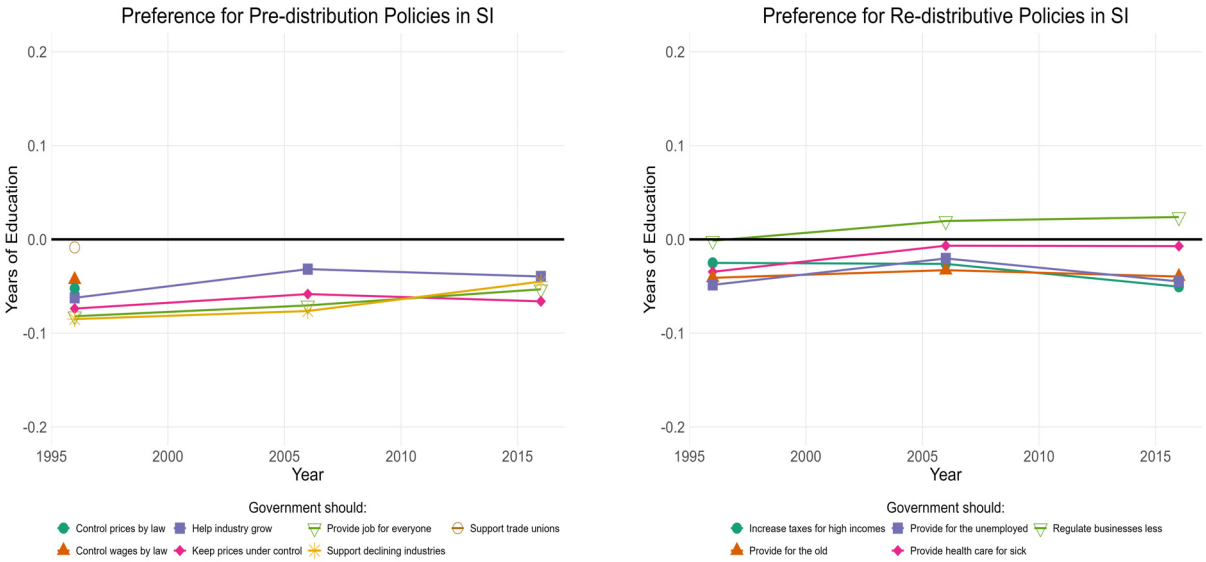


Figure A.23: Switzerland

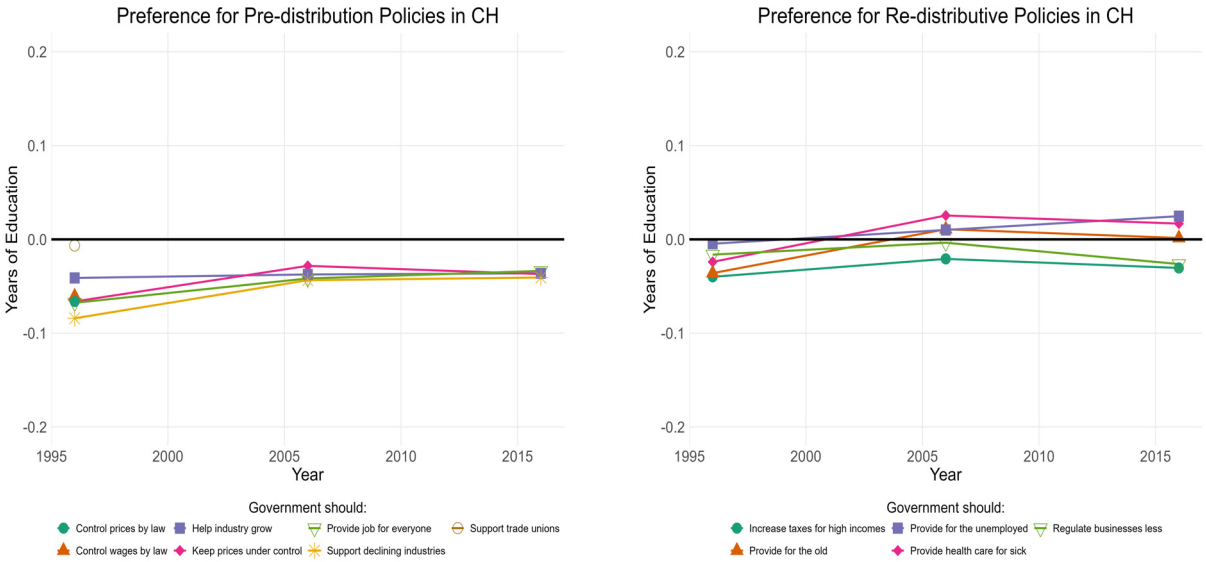


Figure A.24: Czech Republic

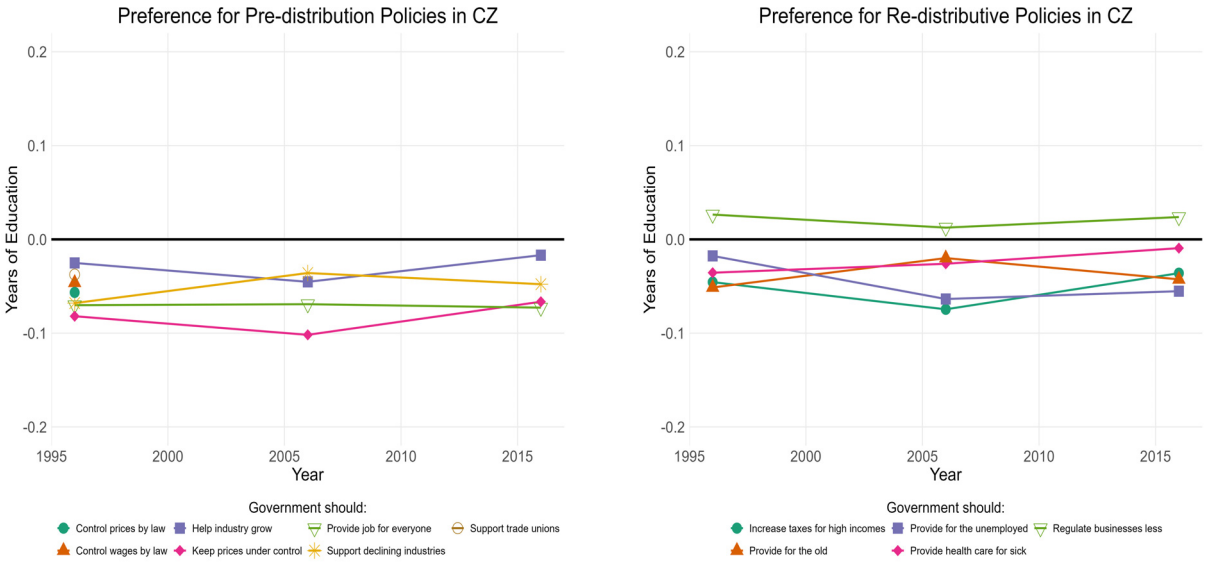


Figure A.25: Hungary

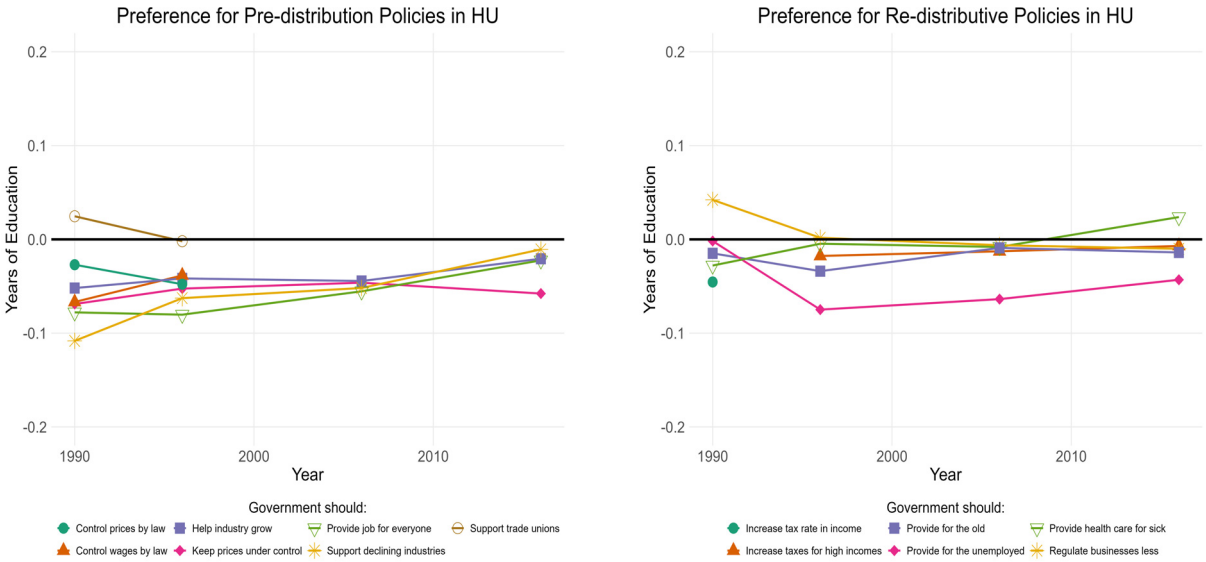
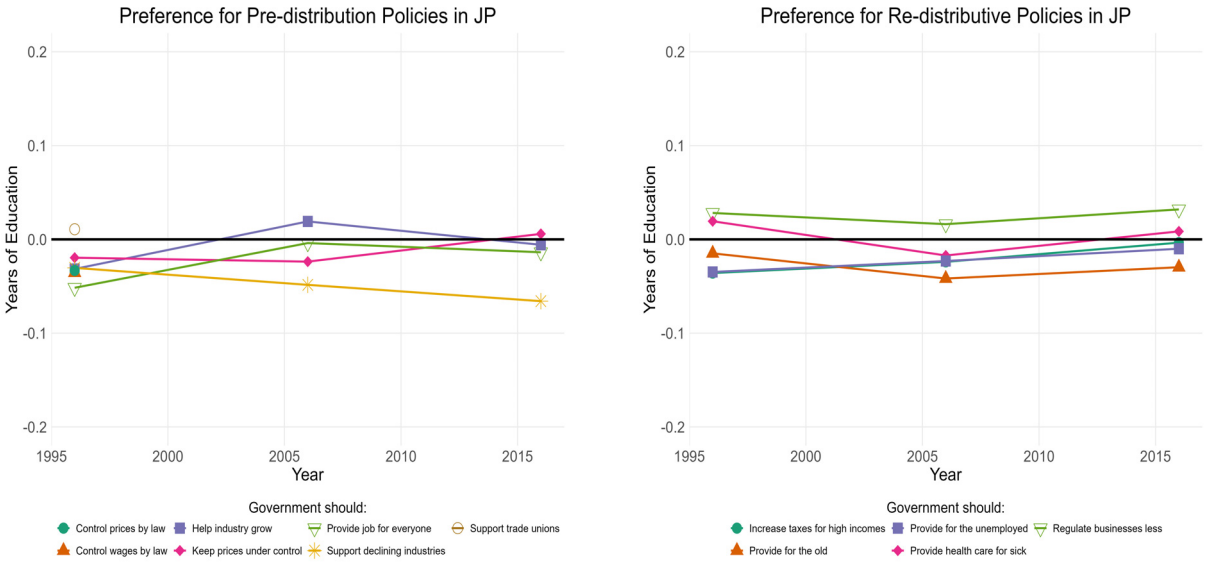


Figure A.26: Japan



A.2 Tables

Table A.1: Economic Policy Axes

Predistribution	**Redistribution**
per406 = Protectionism: Positive	per407 = Protectionism: Negative
per505 = Welfare State Limitation	per504 = Welfare State Expansion
per412 = Controlled Economy	
per413 = Nationalisation	
Left	**Right**
per403 = Market Regulation	per401 = Free Market Economy
per404 = Economic Planning	per402 = Incentives: Positive
per406 = Protectionism: Positive	per407 = Protectionism: Negative
per504 = Welfare State Expansion	per505 = Welfare State Limitation
per413 = Nationalisation	per507 = Education Limitation
per412 = Controlled Economy	per410 = Economic Growth: Positive
per701 = Labor Groups: Positive	per414 = Economic Orthodoxy
per405 = Corporatism/Mixed Economy	per702 = Labor Groups: Negative
per409 = Keynesian Demand Management	
per506 = Education Expansion	
per503 = Equality: Positive	
Regulated-	**Free Market**

Continued on next page

Economic Policy Axes (continued)

per403 = Market Regulation	per401 = Free Market Economy
per412 = Controlled Economy	per402 = Incentives: Positive
per413 = Nationalisation	
per415 = Marxist Analysis	
Planned-	**Market Economy**
per403 = Market Regulation	per401 = Free Market Economy
per404 = Economic Planning	per414 = Economic Orthodoxy
per412 = Controlled Economy	
Consumption	**Investment**
per409 = Keynesian Demand Management	per402 = Incentives: Positive
per406 = Protectionism: Positive	per506 = Education Expansion
per412 = Controlled Economy	per411 = Technology and Infrastructure: Positive
per701 = Labor Groups: Positive	per407 = Protectionism: Negative
State Service Provision	
per504 = Welfare State Expansion	per505 = Welfare State Limitation
per506 = Education Expansion	per507 = Education Limitation
State involvement in the economy	
per403 = Market Regulation	per401 = Free Market Economy
per412 = Controlled Economy	per407 = Protectionism: Negative

Continued on next page

Economic Policy Axes (continued)

per404 = Economic Planning	per402 = Incentives: Positive
per406 = Protectionism: Positive	per414 = Economic Orthodoxy
per413 = Nationalisation	per505 = Welfare State Limitation
per504 = Welfare State Expansion	
per506 = Education Expansion	
per701 = Labor Groups: Positive	

Table A.2: Classification of Predistribution—Redistribution Policies

	Kuziemko et al. (2023)	**ISSP - Variable Code in Brackets**
Predistribution	Do you favor ... the government guaranteeing a job to everyone who wants to work?	.. should it be or should it not be the government's responsibility to: Provide a job for everyone.. (v50)
	Do you think that labor unions in this country have too much power or too little power?	Do you think that trade unions in this country have too much power or too little power? (v44)
	Do you favor placing new limits on imports?	
		Should it be the government's responsibility to: Keep prices under control (v51), Provide industry with the help ..to grow (v54), Control wages by law (v27), Control of prices by law (v28), Support declining industries to protect jobs (v33)
Redistribution	For those with high incomes, are taxes too low, too high?	For those with high incomes, are taxes ... (v67) - Do you think those with high incomes should pay a higher proportion of their earnings in taxes? (v25)
	If the government had a choice between reducing taxes or spending more on social programs ... what should it do?	Should it be or should it not be the government's responsibility to: provide health care for sick (v52), living standard for the old (v53) living standard for unemployed (v55)
	Are we spending too much, too little, or about the right amount on welfare?	
	Would you prioritize tax cuts, even if the government would have to put on other goals.	
		Less government regulation of business (v31)

Table A.3: Predistribution—Redistribution Policy Supply on Share of Less Educated Voters - with Support for Labour Unions as Predistributive Policy

	POLS			**FE**		
	(1) No Controls	(2) Party Level Controls	(3) All Controls	(4) No Controls	(5) Party Level Controls	(6) All Controls
Lagged Dependent Variable	0.74***	0.63***	0.46***	0.15	0.22	0.08
	(0.09)	(0.12)	(0.17)	(0.12)	(0.16)	(0.10)
Pre-/Redistribution	0.14	0.72	1.81	0.52	0.62	0.02
	(0.34)	(0.45)	(1.23)	(0.47)	(0.39)	(0.99)
Low Income Voters		0.28***	0.49***		0.29**	0.54***
		(0.06)	(0.09)		(0.12)	(0.10)
Young Voters		0.01	-0.01		-0.08	-0.15
		(0.05)	(0.06)		(0.08)	(0.11)
Old Voters		0.01	0.01		0.09	-0.10
		(0.07)	(0.08)		(0.11)	(0.09)
Leading Running Gov		-0.99	-0.73		-1.63	-1.87
		(1.06)	(1.37)		(1.32)	(1.61)
Part of Running Gov		2.93**	1.81		2.64**	2.56
		(1.22)	(1.34)		(1.28)	(1.57)
% Voted for Party		0.09**	0.29***		0.11	0.25**
		(0.04)	(0.10)		(0.07)	(0.10)
Party's Cultural Policies		-0.47	0.02		-0.22	0.43
		(0.44)	(0.54)		(0.50)	(0.40)
Far Left Party Present			2.39*			-2.31
			(1.30)			(2.12)
Unemployment Rate			0.11			0.34
			(0.16)			(0.21)
Unionization			5.47**			-9.69
			(2.10)			(6.28)
GDP Growth			-14.95			-22.79
			(16.70)			(14.80)
Parties in Parliament			1.44**			1.46*
			(0.70)			(0.74)
Unionization x P-/Redistr.			-2.54			-0.28
			(2.02)			(1.82)
Constant	12.52***	0.31	-13.80***	43.62***	24.86***	18.46
	(4.56)	(5.07)	(5.14)	(6.50)	(8.95)	(10.97)
Observations	306	277	192	306	277	192
Adj. R^2	0.54	0.66	0.68	0.14	0.34	0.52
Party and Year FE				X	X	X

Note: Parties in Parliament is the effective number of parliamentary parties as defined by Laakso and Taagepera (1979). All countries, parties, and years are pooled in these estimations. Standard errors are reported in parentheses; they are robust in the pooled OLS models and clustered at the party level in the fixed effects specifications. *p<0.10, **p<0.05, ***p<0.01.

A.2.1 Results

Table A.4: Predistribution—Redistribution Policy Supply on Overall Election Result

	POLS			**FE**		
	(1) No Controls	(2) Party Level Controls	(3) All Controls	(4) No Controls	(5) Party Level Controls	(6) All Controls
Lagged Dependent Variable	0.94***	0.97***	0.92***	0.49***	0.45***	0.27***
	(0.01)	(0.02)	(0.04)	(0.07)	(0.07)	(0.09)
Pre-/Redistribution	0.11	-0.23	0.47	-0.01	0.01	1.01
	(0.25)	(0.35)	(1.05)	(0.27)	(0.35)	(1.10)
Low Income Voters		0.03	0.06		0.11	0.01
		(0.04)	(0.07)		(0.08)	(0.10)
Young Voters		0.01	0.01		0.05	-0.03
		(0.04)	(0.05)		(0.05)	(0.06)
Old Voters		-0.06	-0.04		-0.12**	-0.14
		(0.06)	(0.07)		(0.05)	(0.09)
Leading Running Gov		-0.68	-0.11		0.31	0.70
		(0.96)	(1.38)		(1.26)	(1.83)
Part of Running Gov		-2.52***	-1.98**		-2.16*	-1.75
		(0.64)	(0.99)		(1.11)	(1.66)
Party's Cultural Policies		-0.45	-0.16		-0.22	-0.07
		(0.41)	(0.55)		(0.39)	(0.56)
Far Left Party Present			0.40			0.30
			(1.21)			(1.23)
Unemployment Rate			-0.20			-0.20
			(0.19)			(0.22)
Unionization			-1.15			-8.22
			(2.33)			(8.32)
GDP Growth			14.85			-15.29
			(20.54)			(20.44)
Parties in Parliament			-0.53*			-2.05**
			(0.30)			(0.75)
Unionization x P-/Redistr.			-1.32			-1.58
			(2.32)			(2.11)
Constant	1.27***	1.24	2.62	16.73***	12.22**	41.95***
	(0.39)	(2.88)	(5.32)	(2.44)	(4.52)	(9.52)
Observations	464	310	202	464	310	202
Adj. R^2	0.88	0.88	0.87	0.49	0.43	0.42
Party and Year FE				X	X	X

Note: Parties in Parliament is the effective number of parliamentary parties as defined by Laakso and Taagepera (1979). All countries, parties, and years are pooled in these estimations. Standard errors are reported in parentheses; they are robust in the pooled OLS models and clustered at the party level in the fixed effects specifications. *p<0.10, **p<0.05, ***p<0.01.

Table A.5: Preferences for More Union Power

	(1)	(2)	(3)	(4)
Education	-0.003	-0.006	-0.013	
	(0.01)	(0.005)	(0.009)	
Household Income			-0.052***	
			(0.016)	
Lowest formal qualification				0.011
				(0.029)
Above lowest qualification				0
				(0.028)
Higher secondary completed				-0.037
				(0.035)
Above higher secondary level				-0.089*
				(0.051)
University degree completed				-0.036
				(0.056)
Age Bin Controls	X	X	X	X
FE: Year		X	X	X
FE: Country		X	X	X
Individual Controls			X	
Observations	42224	42224	5861	42080
R^2	0.008	0.296	0.341	0.297
Adjusted R^2	0.007	0.295	0.335	0.296

Table A.6: Aggregated Preferences for Predistribution over Redistribution

	(1)	(2)	(3)	(4)
Education	-0.033***	-0.025***	-0.024***	
	(0.003)	(0.003)	(0.002)	
Household Income			-0.06***	
			(0.009)	
Lowest formal qualification				0.001
				(0.018)
Above lowest qualification				-0.038*
				(0.022)
Higher secondary completed				-0.126***
				(0.028)
Above higher secondary level				-0.179***
				(0.032)
University degree completed				-0.287***
				(0.036)
Age Bin Controls	X	X	X	X
FE: Year		X	X	X
FE: Country		X	X	X
Individual Controls			X	
Observations	120577	120577	27695	120059
R^2	0.039	0.136	0.171	0.139
Adjusted R^2	0.039	0.136	0.169	0.138

A.2.2 Robustness Demand

Table A.7: Aggregated Predistribution Preferences (All Variables Standardized)

	(1)	(2)	(3)
Education	-0.179***	-0.138***	-0.11***
	(0.016)	(0.015)	(0.012)
Household Income			-0.11***
			(0.012)
Age Bin Controls	X	X	X
FE: Year		X	X
FE: Country		X	X
Individual Controls			X
Observations	120640	120640	27701
R^2	0.064	0.191	0.227
Adjusted R^2	0.064	0.191	0.225

Table A.8: Aggregated Redistribution Preferences (All Variables Standardized)

	(1)	(2)	(3)
Education	-0.056***	-0.043***	-0.02**
	(0.012)	(0.008)	(0.009)
Household Income			-0.054***
			(0.007)
Age Bin Controls	X	X	X
FE: Year		X	X
FE: Country		X	X
Individual Controls			X
Observations	120909	120909	27763
R^2	0.016	0.098	0.125
Adjusted R^2	0.015	0.098	0.123

Table A.9: Aggregated Predistribution Preferences (Unweighted)

	(1)	(2)	(3)	(4)
Education	-0.048***	-0.037***	-0.028***	
	(0.004)	(0.004)	(0.003)	
Household Income			-0.116***	
			(0.014)	
Lowest formal qualification				0.039
				(0.023)
Above lowest qualification				-0.05**
				(0.024)
Higher secondary completed				-0.175***
				(0.029)
Above higher secondary level				-0.246***
				(0.031)
University degree completed				-0.406***
				(0.039)
Age Bin Controls	X	X	X	X
FE: Year		X	X	X
FE: Country		X	X	X
Individual Controls			X	
Observations	120640	120640	27701	120121
R^2	0.066	0.185	0.221	0.191
Adjusted R^2	0.066	0.185	0.219	0.19

Table A.10: Aggregated Redistribution Preferences (Unweighted)

	(1)	(2)	(3)	(4)
Education	-0.015***	-0.011***	-0.005*	
	(0.003)	(0.002)	(0.003)	
Household Income			-0.06***	
			(0.007)	
Lowest formal qualification				0.031*
				(0.015)
Above lowest qualification				-0.017
				(0.015)
Higher secondary completed				-0.058***
				(0.013)
Above higher secondary level				-0.075***
				(0.018)
University degree completed				-0.124***
				(0.02)
Age Bin Controls	X	X	X	X
FE: Year		X	X	X
FE: Country		X	X	X
Individual Controls			X	
Observations	120909	120909	27763	120387
R^2	0.016	0.098	0.123	0.099
Adjusted R^2	0.016	0.097	0.12	0.099

Table A.11: Aggregated Predistribution Preferences (Smallest Sample)

	(1)	(2)	(3)	(4)
Education	-0.046***	-0.036***	-0.029***	
	(0.003)	(0.003)	(0.003)	
Household Income			-0.117***	
			(0.013)	
Lowest formal qualification				-0.001
				(0.036)
Above lowest qualification				-0.059
				(0.04)
Higher secondary completed				-0.188***
				(0.043)
Above higher secondary level				-0.236***
				(0.044)
University degree completed				-0.399***
				(0.041)
Age Bin Controls	X	X	X	X
FE: Year		X	X	X
FE: Country		X	X	X
Individual Controls			X	
Observations	27577	27577	27577	27577
R^2	0.061	0.2	0.227	0.202
Adjusted R^2	0.061	0.198	0.225	0.201

Table A.12: Aggregated Redistribution Preferences (Smallest Sample)

	(1)	(2)	(3)	(4)
Education	-0.011***	-0.009***	-0.005**	
	(0.003)	(0.002)	(0.002)	
Household Income			-0.059***	
			(0.007)	
Lowest formal qualification				0.057***
				(0.019)
Above lowest qualification				0.016
				(0.021)
Higher secondary completed				-0.027
				(0.022)
Above higher secondary level				-0.038
				(0.023)
University degree completed				-0.073***
				(0.025)
Age Bin Controls	X	X	X	X
FE: Year		X	X	X
FE: Country		X	X	X
Individual Controls			X	
Observations	27639	27639	27639	27639
R^2	0.017	0.114	0.125	0.115
Adjusted R^2	0.017	0.112	0.123	0.114