



King's Research Portal

DOI:

[10.1177/0032321720933082](https://doi.org/10.1177/0032321720933082)

Document Version

Version created as part of publication process; publisher's layout; not normally made publicly available

[Link to publication record in King's Research Portal](#)

Citation for published version (APA):

Giani, M., & Gelepithis, M. (2020). Inclusion without Solidarity: Education, economic security, and attitudes towards redistribution. *POLITICAL STUDIES*, 0(0), [0032321720933082].
<https://doi.org/10.1177/0032321720933082>

Citing this paper

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

General rights

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

Take down policy

If you believe that this document breaches copyright please contact librarypure@kcl.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

Inclusion without Solidarity: Education, Economic Security, and Attitudes toward Redistribution

Political Studies

1–17

© The Author(s) 2020



Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/0032321720933082

journals.sagepub.com/home/psx

Margarita Gelepithis¹ and Marco Giani² 

Abstract

Highly educated individuals tend to be less supportive of redistribution by most accounts because they have more to lose and less to gain from it. In this article, we use European Social Survey data to develop the argument that university education reduces support for redistribution in large part independently of the improved material circumstances with which it is associated. While university encourages a range of progressive ideas related to cultural inclusivity, it simultaneously encourages conservative redistribution preferences that are reinforced—but only partly explained—by the economic security it tends to provide. In short, European universities foster norms of cultural inclusion, while simultaneously eroding norms of economic solidarity.

Keywords

ideas, interests, education, university, redistribution, attitude

Accepted: 15 May 2020

It is a notable consequence of the success of interest-based accounts of distributional politics that the link between education and redistribution has received rather little theoretical attention. In light of a long-standing scholarly consensus that support for redistribution is structured by economic self-interest (see Esping-Andersen, 1990; Korpi, 1983; Lipset, 1959; Meltzer and Richard, 1981; Moene and Wallerstein, 2001 Iversen and Soskice, 2001 among many others), education is assumed to shape redistribution preferences primarily through the effect it has on individual economic security. By increasing individual economic security, education encourages a self-interested reduction in support for redistribution, and more conservative ideological positioning on the left–right scale.

¹The University of Warwick, Warwick, UK

²King's College London, London, UK

Corresponding author:

Marco Giani, King's College London, London WC2R 2LS, UK.

Email: marco.giani@kcl.ac.uk

Of course, education does more than just structure economic interests. It also directly shapes ideas, both in a top-down way, as a result of what is taught, and because education constitutes a locus of socialization. Yet to the extent that education shapes redistribution preferences independently of the material conditions with which it is associated, it is unclear whether it should reinforce or temper anti-redistributive preferences.

On one hand, education fosters non-economic ideas that are closely, causally linked with support for redistribution. Through top-down processes that increase cognitive sophistication, and through bottom-up exposure to difference, education is expected to foster norms of inclusion toward other races, cultures, and ways of life, and relatedly, social and institutional trust. Trust and inclusion are closely associated with support for redistribution, tempering the solidarity-eroding effect of individual economic security.

On the other hand, a more critical tradition in political sociology views education as a conservative rather than a progressive ideational force. It draws attention to the status quo—preserving ideas imparted top-down by elite educators. And instead of emphasizing how bottom-up processes of educational socialization increase exposure to difference, it highlights how concentrated privilege reinforces established power relations (Bourdieu and Passeron, 1977).

In this article, we use data from eight rounds of the European Social Survey (ESS Rounds 1–8, 2016) to empirically disentangle the interest-based from the ideational effects of education on redistribution preferences. We present the results of an ordinary least squares (OLS) analysis in which we draw on interest-based theories of redistribution preferences to isolate the effect that education exerts on support for redistribution through improved individual economic circumstances. We interpret our results in light of associations between education and a range of attitudes closely linked to redistribution preferences, as well as in light of a comparison between vocational and university education. A quasi-experimental analysis based on non-parametric matching reinforces our argument.

We find that net of individual economic circumstances, education is associated with less support for redistribution, and it is university education in particular that produces this outcome. University education is associated with more conservative redistribution preferences despite fostering sociopolitical trust and inclusive ideas closely linked with support for redistribution.

Theoretically, the implications of our analysis are twofold. First, our argument implies that theories of redistribution should take ideas more seriously than they currently do. Influential accounts of welfare preferences have centered on the role of economic self-interest and have not tried to separate the effect of education from the effect of economic security on support for redistribution. Empirical work has followed suit, with a tendency to include education only as a control for economic security. We show that the role of education in providing economic security is only half the story when explaining support for redistribution. Of equal importance is education's role in shaping ideas rather than interests through a variety of top-down and bottom-up educational processes.

Second, our analysis suggests a need to qualify the prominent view that education is a coherent force for progressive social change. We show that while it is indeed the case that university encourages a range of progressive ideas related to cultural inclusivity, it simultaneously encourages conservative redistribution preferences that are reinforced—but only partly explained—by the economic security it tends to provide. In short, we suggest that university education fosters norms of inclusion, while eroding norms of solidarity.

Education and Political Attitudes

There is a formidable scholarly consensus that support for redistribution—and more generally the traditional “economic” dimension of political conflict—is structured by the material self-interest of different socioeconomic classes (Esping-Andersen, 1990; Korpi, 1983; Lipset, 1959) or individuals (Meltzer and Richard, 1981; Moene and Wallerstein, 2001).

Education is seen to be relevant for explaining redistribution preferences primarily through the effect it has on material self-interest. Education provides productive skills and labor market signals that increase income and reduce economic insecurity (Cusack et al., 2006; Marshall, 2019). Educated people are more likely to have higher incomes, less likely to be unemployed, and more likely to have wealth to fall back on if they do face an interruption in earnings (Cutler et al., 2015; Pteffer, 2018; Tobias and Mingliang, 2004). In short, education reduces individual need for redistributive support from the state, and correspondingly reduces demand for redistribution.

Yet education does more than simply to structure economic interests. In addition to providing skills and signals that shape preferences by providing greater economic security, education also directly shapes ideas about how the world is and ought to be. This occurs in two different ways. One is top-down, as a result of what is taught by professors and teachers. Another is bottom-up, the result of processes of socialization within educational institutions. It is worth unpacking these two types of mechanism.

Education and Ideas of Inclusion

In terms of top-down ideational effects of education, scholars have long highlighted the direct instilling within education systems of culturally progressive or inclusive ideas (Dee, 2004; Lipset, 1959; Stubager, 2009). These ideas of inclusion are commonly conceptualized as “liberal,” as opposed to “authoritarian.” They are underpinned by an aversion to social hierarchies, and by a contrasting belief in the equal right to individual freedom (Stubager, 2009). The equal right to individual freedom implies tolerance of individual differences, and this tolerance in turn is associated with trust in political institutions that safeguard the expression of these differences (Niemi and Junn, 1998).

A less overtly political top-down mechanism through which education shapes ideas relates to the increased cognitive sophistication that results from the teaching and learning process. In some ways, cognitive sophistication is ideologically neutral, enabling people to develop policy preferences that more accurately reflect the circumstances they face. It relates redistributive preferences more closely to the economic structure, and increases the likelihood that those who stand to gain or lose from redistribution are aware that this is the case (Bartels, 2005; Converse, 1964).

Less neutrally, however, cognitive sophistication is also associated with ideas of inclusion (Kitschelt, 1994; Lipset, 1959). Cognitive sophistication enables people to better understand individual differences, reducing prejudice toward other races and cultures (Hagendoorn, 2018; Lipset, 1959), and increasing social trust (Hooghe et al., 2012). By supporting the understanding of abstract concepts and of complex causal processes, cognitive sophistication also fosters trust in complex political institutions that protect minority rights and individual freedoms (Hagendoorn, 2018; Lipset, 1959; Spruyt, 2014).

The inclusive ideas associated with top-down educational influences on how people think are reinforced from the bottom-up, by processes of educational socialization. In

particular, education increases exposure to difference and to culturally liberal views from peers. Socialization within culturally diverse, liberal educational networks fosters trust in and tolerance of other races, cultures, and ways of life (Hagendoorn, 2018; Newcomb, 1943; Sidanius et al., 2008), social trust more generally (Hall, 1999) and trust in liberal democratic institutions (Nie et al., 1996).

Overall, a substantial body of theoretical work identifies top-down and bottom-up mechanisms that connect education with inclusive ideas and sociopolitical trust.¹

Ideas of Inclusion and Support for Redistribution

Top-down and bottom-up ideational mechanisms reinforce the interest-based effects that education has on certain political preferences. For instance, inclusive ideas stemming from cognitive sophistication and exposure to difference permit an appreciation of the cultural diversity related to European integration and immigration. At the same time, higher skills and qualifications equip people to benefit from the economic competition related to increased economic openness (Bovens and Wille, 2010; Cavaille and Marschall, 2019; Hainmueller and Hiscox, 2007; Hakhverdian et al., 2013; Hausermann and Kriesi, 2011).

Unlike preferences regarding European integration and immigration that clearly relate to both cultural and economic concerns, redistribution preferences are usually placed on a left-right dimension of political conflict relating solely to economic considerations. Yet there are substantial reasons to believe that support for redistribution is not independent of the cultural inclusivity and trust that education fosters.

In particular, racially inclusive ideas associated with education are expected to facilitate the social affinity that underpins support for redistribution (Arts and Gelissen, 2001; Kreisi, 2015), and conversely, racial prejudice is associated with reduced support for redistribution (Alesina and Glaeser, 2004; Roemer et al., 2008). Where political elites supply nationalist policy options, the racial prejudice and mistrust associated with lower education may manifest in welfare chauvinism, the opinion that immigrants are less entitled to welfare benefits and services than the native population (Andersen and Bjorklund, 1990; de Koster et al., 2012; Mewes and Mau, 2013; Van Oorschot et al., 2013). In the absence, however, of welfare chauvinistic policy options, less education is simply associated with lower support for redistributive spending, as migrants and racial minorities are seen as key recipients of such spending (Alesina and Glaeser, 2004; Roemer et al., 2008).

Regarding social and political trust, recent work associates support for redistribution with trust in the fairness and effectiveness of liberal democratic institutions (Rothstein et al., 2012; Svallfors, 2013). Conversely, a lack of trust in liberal democratic institutions manifests in reduced support for redistribution, because it erodes confidence in the ability of governments fairly to redistribute resources (de Koster et al., 2012). The social mistrust associated with lower levels of educational attainment is linked to reduced support for political action in general and redistribution in particular, because it fuels the belief that benefit recipients are undeserving of state support, and likely to misuse the welfare system (Daniele and Geys, 2015; Hall, 1999).

To summarize the discussion so far, in addition to structuring economic interests, education fosters ideas—both in a top-down way as a result of what is taught, and because it constitutes a locus of socialization. Through both top-down and bottom-up mechanisms, education is expected to foster norms of cultural inclusion that reinforce skills-based cleavages relating to cross-national economic openness. At the same time, these inclusive ideas—and the social and institutional trust they support—are closely associated with

support for redistribution. They can be expected to temper the anti-redistributive attitudes that education encourages by providing greater economic security.

Education and Ideas of Solidarity

A more critical tradition in political sociology views both bottom-up processes of educational socialization and top-down processes of teaching as conservative rather than progressive ideational forces. It draws attention to the status quo-preserving ideas imparted top-down by elite educators, and instead of emphasizing exposure to difference within bottom-up processes of educational socialization, it highlights the concentration of privilege (Bourdieu and Passeron, 1977).

The view that anti-redistributive ideas are imparted top-down through the education system receives qualified empirical support (Pascarella and Terenzini, 1991). Where faculty is economically conservative, student support for redistribution is slightly reduced, but educators tend to hold progressive economic preferences (Gross and Fosse, 2012; Mendelberg et al., 2017). Educational curricula can decrease support for redistribution by teaching ideas that associate it with aggregate welfare losses, and indeed the study of social science subjects is associated with lower support for redistribution (Mendelberg et al., 2017). Beyond individual subjects, national educational systems can institutionalize individualistic educational cultures within which erode support for redistribution, but they can also institutionalize strong collectivist rationales for education likely to increase economic solidarity (Martin, 2018).

The view that anti-redistributive ideas are imparted bottom-up through processes of educational socialization has also received recent attention. In an in-depth study, Mendelberg et al. (2017) show how affluent college campuses in the US foster anti-redistributive norms by concentrating majorities of students from well-to-do family backgrounds. By emphasizing the concentration of affluence rather than exposure to difference, Mendelberg et al. show how educational socialization can reduce support for redistribution rather than increase inclusive ideas.

Overall, the highly educated tend to be economically better off and more secure, with less to gain from redistribution. Yet to the extent that education shapes redistribution preferences independently of the material conditions with which it is associated, it is unclear whether it should reinforce or temper anti-redistributive preferences. On one hand, education fosters trust and inclusive ideas that are closely and causally linked with increased support for redistribution. On the other hand, recent work suggests that affluent student campuses and economically conservative ideas imparted by educators can erode economic solidarity.

In what follows, we empirically test the effect of education on redistribution preferences at the individual level. We expect that education should reduce support for redistribution overall. But since the ideational effects of education are ambiguous, we control for (and match on) economic security to test whether top-down and bottom-up educational processes contribute to this reduction.

Empirical Analysis

We use data from the ESS. The ESS includes information about socioeconomic status and sociopolitical attitudes, and is run biennially in about 35 countries. Combining all eight available rounds of ESS data results in a large dataset ($N = 366,035$) spanning from

2002 to 2016. We limit our main analysis to respondents aged over 25 and living in the EU15. In this way, we drop those that are likely to be making ongoing educational choices, and restrict our analysis to comparable institutional contexts. We relax the spatial restriction in our robustness checks. Most of our analysis is based on an effective sample of $N = 194,916$.

We capture support for redistribution in the usual way, with answers to the following question:

- *Redistribution*. Government should reduce differences in income levels. 1 (Agree strongly); . . . ; 5 (Disagree strongly).

Estimation

Denoting respondent i 's attitude on redistribution, we use the following repeated cross-section specification

$$Y_{i,t,c} = \alpha + \beta x_{i,c} + \gamma' Z_{i,t,c} + \mu_c + \phi_t + \varepsilon_{i,t,c}.$$

In the above equation, α is the constant. $x_{i,c} \in \{0,1\}$ is a dummy that takes the value 1 if respondent i at time t in country c has a university diploma (Bachelor or higher) and 0 otherwise. Hence, β is the effect of education. To control for unobserved country heterogeneity, we include country fixed effects μ_c . Similarly, ϕ_t controls for survey round's effects. Finally, $\varepsilon_{i,t,c}$ is an idiosyncratic error term, with $E[\varepsilon|T, X, \mu] = 0$. Finally, we weight observations using the design weights provided by the ESS to control for the relative likelihood of each observation being sampled. The first model that we estimate (model i) is limited to these controls. $Z_{i,t,c}$ summarizes individual-level characteristics. We organize individual-level characteristics into three categories (demographics, income, and economic insecurity) as follows.

Demographics. Since age is strongly correlated with political attitudes and educational attainment is difficult to compare across age cohorts, we control for the age of respondents. To account for known non-linearities, we also include age squared. We control for gender, as it is associated with both educational attainment (in our sample, the unconditional correlation between being female and highly educated is moderately positive), and political attitudes/behavior. In addition, as both political attitudes (Jennings et al., 2009) and educational attainments (Holmlund et al., 2011) are affected by family socialization, we control for parental education proxied by whether the respondent's father and mother hold a university degree (0–1). We refer to this set of covariates as “Demographics,” and include them in models ii and iii.

Income. As education correlates strongly with income ($\rho = 0.36$ in our sample), economic security, and higher living standards, we control for two income measures: net income decile (1–10) and feeling of income (1–4). The former, objective measure does better in accounting for relative income, but presents a high amount of possibly non-random missing data, as the “refusal to report” may be more common among specific groups. The latter measure is based on the following survey item: “Feeling about

household's income nowadays: (1) Living comfortably on present income [. . .] (4): Very difficult with present income." While subjective, this proxy has the advantage of partly accounting for household wealth, and failure to respond is more limited. We label these covariates "Income," and include them in model iv.

Economic Insecurity. Political attitudes are shaped not only by low income and economic hardship but also by the risk of low income and economic hardship (Cusack et al., 2006). Such risk is closely associated with education—higher education levels reduce the risk of economic hardship and increase lifetime income (Rueda et al., 2014). To disentangle the effect of education from the effect of economic insecurity, we control for three further measures. First, we control for relative skill specificity, a concept intended to capture the portability of worker's skills and thus "the ability of workers to navigate successfully through the labor market as the tides of employment opportunities ebb and flow" (Cusack et al., 2006: 366). To measure skill specificity, we follow Cusack et al. (2006) using occupational data based on the International Standard Classification of Occupations from 2008 (ISCO08). Relative skill specificity is calculated by dividing the share of occupational groups in the broadest ISCO class to which that occupation belongs by the share of the labor force in that class, and then dividing the resulting absolute measure by the International Labour Organization's measure of occupational skill level. Relative skill specificity is high for occupations that are very specialized but require a relatively low level of skills. It is low if the occupation is not very specialized while the level of skills required is high. Second, we control for whether respondents are labor market outsiders. Employment Protection Legislation (EPL) tends to be stronger—and the risk of unemployment consequently lower—in standard than in atypical forms of employment (Rueda, 2005). In addition, in contributory systems, atypical employment is associated with lower levels of protection against the risks of ill-health or old age (Emmenegger et al., 2012). Taken together, the unemployed and those on atypical employment contracts may be seen as labor market outsiders, and contrasted to those with secure jobs, the insiders (Rueda, 2005). Although the categories of insider and outsider cut across skill level and skill specificity (Schwander and Hausermann, 2013: 252), they are distinctive in terms of the risk of economic hardship with which they are associated. To distinguish labor market insiders from outsiders, we rely on two objective measures. We create a dummy taking the value of 1 if the respondent is currently unemployed, employed fixed-term, or employed part-time. We also include a binary measure of long-run unemployment (any period of unemployment and job-seeking lasting 12 months or more). We refer to this set of covariates as "Labor market insecurity," and include them in model v.

Although we restrict our main analyses to socioeconomic covariates, in an augmented model, we test for the possibility that other attitudes may—as omitted variables—account for a large part of the observed effects. We include two key attitudes: left-right self-placement (0–10) and political interest (1–4). These attitudes may crystallize through the university experience, and they correlate with redistribution. Typically, left-wing individuals are more supportive of redistribution than right-wing individuals, though the effect is non-linear. Political interest may contribute to the decision to study at university, and may systematically shape attitudes toward redistribution by increasing information (e.g. about existing policies and their effects). Finally, we control for religious beliefs (0–1). We refer to this set of covariates as "Ideological attitudes," and include them in model vi.

In a final model (model vii), we propose an alternative specification. Ideally, testing the causal effect of education requires that higher education be randomly assigned to

control and treatment groups that are otherwise identical. In the absence of a full-scale randomized experiment, matching techniques can be used within an observational study to mimic the experimental method (e.g. Bol and Giani, 2019). The basic idea is to match untreated (low-educated) observations that are equal on relevant covariates, with treated (high-educated) observations. The underlying logic is that comparing individuals who are equal across all relevant covariates and only differ on the treatment variable is logically equivalent to comparing individuals randomly assigned to different treatments in an experiment (Dehejia and Wahba, 2002).²

Results

Table 1 reports our main results. For all columns, the dependent variable is the score in support of redistribution, which ranges from 1 (strong support for redistribution) to 5 (strong opposition to redistribution). Positive (negative) coefficients in Table 1 therefore associate independent variables with more conservative (progressive) attitudes toward redistribution. All regressions incorporate time and country effects, and we relax the assumption of independence of errors within countries. In all specifications except our matching model (model vii), standard errors are clustered at the country level.

Column (*i*) in Table 1 reports the (uncontrolled) effect of university on support for redistribution. As expected, the sign of the coefficient is positive: having a university degree correlates with more conservative redistribution preferences. The average difference between individuals with or without a university diploma amounts to slightly more than one-fourth. As the unconditional average on the redistribution item is 2.09, we can say that having a diploma decreases support for redistribution by about 12.5%. While the magnitude of the university effect on redistribution preferences is sizable in light of the multifaceted nature of social attitude formation, it is of limited explanatory value in the absence of controls for demographics, income, economic security, and socioeconomic background.

Column (*ii*) presents the results of the model that includes Demographics. Controlling for age and gender does not substantially alter the main coefficient. A slightly stronger reduction in the magnitude of the university effect can be observed once we account for parental education. Indeed, having parents with university degrees captures part of the overall university effect, with a university-educated dad exerting a conservative influence on redistribution preferences that is five times greater than that of a university-educated mum.

Column (*iii*) presents the results of the model that controls for income, and hence for the correlation between education and improved material circumstances. The magnitude of the university effect is considerably reduced, as expected, shrinking to just over half of the effect reported in column (*ii*) but remaining significant at $p < 0.01$. Adding controls for economic insecurity in column (*iv*) produces changes in line with expectations. More specific skills, labor market outsider status, and past experience of long-run unemployment all increase support for redistribution. Yet the university effect remains. After isolating the effect that education exerts on redistribution preferences through improved individual economic circumstances, the university effect remains sizable, and significant at $p < 0.01$. Net of its effect on material self-interest, university adds a $\cong 6\%$ right-wing bias to redistribution preferences. As a summary, we might say that being educated to university level entails a 12.5% reduction in support for redistribution, roughly half of which cannot be explained by theoretically salient measures of material self-interest.

Column (*vi*) in Table 1 rules out the possibility that intermediate attitudes explain our main findings. Finally, column (*vii*) reports the average treatment effect from the

Table 1. Effect of Education on Support for Redistribution.

	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
Redistribution:							
(1) Support; –; (5) Oppose							
University (0–1)	0.273	0.258	0.228	0.119	0.121	0.141	0.094
SE	(0.028)	(0.026)	(0.023)	(0.026)	(0.028)	(0.021)	(0.012)
Female (0–1)		–0.135	–0.135	–0.125	–0.123	–0.118	
SE		(0.020)	(0.020)	(0.019)	(0.020)	(0.019)	
Age (25–99)		–0.009	–0.008	–0.016	–0.015	–0.012	
SE		(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	
Age squared		0.000	0.000	0.001	0.001	0.001	
SE		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
University: Father (0–1)			0.132	0.107	0.108	0.100	
SE			(0.015)	(0.017)	(0.017)	(0.015)	
University: Mother (0–1)			0.027	0.028	0.026	0.037	
SE			(0.015)	(0.015)	(0.016)	(0.013)	
Household income (1–10)				0.042	0.041	0.035	
SE				(0.005)	(0.005)	(0.004)	
Subjective income (1–4)				0.120	0.114	0.103	
SE				(0.013)	(0.012)	(0.012)	
Relative skill specificity (0–1)					–0.046	–0.042	
SE					(0.010)	(0.010)	
Labor market outsider (0–1)					–0.049	–0.037	
SE					(.014)	(.012)	
Long-run unemployment (0–1)					–0.104	–0.077	
SE					(0.024)	(0.023)	
Left-right scale (1–10)						0.108	
SE						(0.012)	
Political interest (1–4)						0.001	
SE						(0.005)	
Religion (0–1)						–0.031	
SE						(0.027)	
N.Obs	170,651	169,945	169,945	135,780	113,098	103,826	99,620
R ²	0.10	0.10	0.11	0.13	0.13	0.18	NA
Country effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Models i to vi are estimated with ordinary least squares (OLS), and standard errors reported in brackets are clustered at country-level in each regressions. Alternative clustering strategies leave the outcomes unaffected. Variables' descriptives are included in an Online Appendix. For model vii, we use nearest neighbor matching. Exact matching is required on every dummy variable. After each round, poor matches are deleted. This process is reiterated until the quality of matches is sufficiently good, leading to the observed loss of effective sample. For non-dummy variables, Mahalanobis distance is chosen as distance-minimizing algorithm. Finally, bias adjustment is included for each continuous and categorical variable.

Source: European Social Survey (ESS).

matching specification, using the same controls as in model vi as “matching covariates” (details in the Online Appendix). There is a large drop in the effective sample (39,166 individuals are pruned) due to the fact that some individuals in the treatment group (with a university diploma) may not have a sufficiently good match in the control group

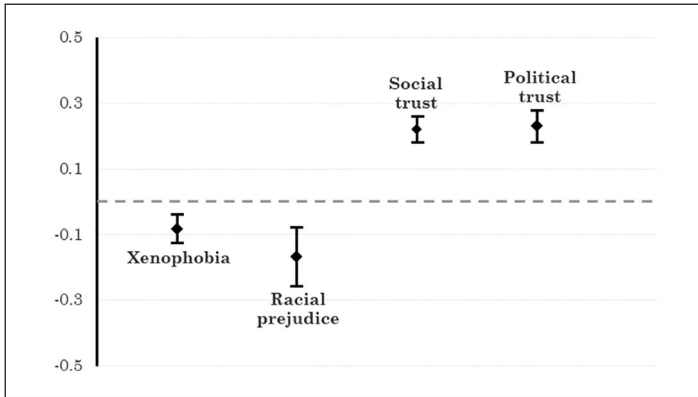


Figure 1. Education and Liberal Attitudes.

(individuals without a university diploma). The average treatment effect is unsurprisingly of lower magnitude, but still sizable and significant at $p < 0.01$. If we use the full set of matching covariates of model vi instead, the effective sample size reduces to 88,088 and the estimated average treatment effect goes up to 0.102, significant at $p < 0.01$ (standard error is 0.010).

Digging Deeper

In this section, we dig a little deeper to inform interpretation of our main results. We examine the associations between education and culturally inclusive attitudes that are closely related to redistribution; we compare the effect of university education on redistribution preferences with that of vocational education, and we summarize key results from the further analysis presented in the Online Appendix.

Education, Inclusion, and Trust

Figure 1 plots the regression coefficients and 95% confidence intervals for the following four further survey items. These questions proxy attitudes that are identified by the literature reviewed above as closely linked with redistributive preferences:

- *Xenophobia*. Country's cultural life undermined or enriched by immigrants? 1 (Enriched); . . .; 10 (Undermined).
- *Racial Prejudice*. Some races or ethnic groups are born harder working. 0 (Disagree); . . .; 1 (Agree).
- *Social Trust*. Most people can be trusted. 1 (Disagree); . . .; 10 (Agree).
- *Political Trust*. Trust in country's parliament. 1 (Not at all); . . .; 10 (Completely).

The plot confirms that, while university is associated with less solidaristic redistribution preferences, it is associated with greater inclusivity and higher levels of trust. Having a university degree makes individuals more likely to embrace the cultural diversity resulting from immigration and express support for racial equality, and it increases both social trust and trust in political institutions.³

The Significance of University

In our main analysis, we capture education with possession of a university degree. What is the significance of this choice? Both university and vocational studies belong to the category of tertiary education and improve economic circumstances over the life-course, but they can be expected to differ with respect to both bottom-up and top-down ideational processes.

While vocational education is technical and aimed at increasing particular labor market skills, university education is more theoretical. Studying social science at university can decrease support for redistribution by imparting causal ideas that associate it with aggregate welfare losses. Indeed combining country-level ESS and Eurostat data, we find that the greater the proportion of students studying social science at the tertiary level, the lower the average support for redistribution (see Online Appendix). This suggests that the effect of university on redistribution preferences should be stronger than the effect of vocational training (always holding economic security constant).⁴

We can also expect the negative effect of university on support for redistribution to be stronger than that of vocational training if education reduces support for redistribution through bottom-up processes of socialization. This is because European universities concentrate affluence to a much greater extent than vocational education does. From ESS data, we can see that those who have completed vocational training are raised in very different family backgrounds on average from those who have completed university. They are about three times less likely to have graduate fathers and about four times less likely to have graduate mothers. Smaller but substantial differentials are observed when looking at parental income. This pattern holds in each single Western European country. Both bottom-up and top-down processes identified by the literature as ideational mechanisms that can erode support for redistribution are therefore expected to operate within university rather than within vocational education. So we expect that the negative effect of university on support for redistribution should be stronger than that of vocational training, other things equal.

To test this expectation, we mimic a difference-in-difference approach in a no-experimental setting. In particular, we run two simultaneous equations

$$Y_{i,t,c} = \alpha_U + \beta_U x_{i,t,c}^{\text{uni}} + \gamma'_U Z_{i,t,c} + \mu_c + \phi_t + \varepsilon_{i,t,c}$$

$$Y_{i,t,c} = \alpha_V + \beta_V x_{i,t,c}^{\text{voc}} + \gamma'_V Z_{i,t,c} + \mu_c + \phi_t + \varepsilon_{i,t,c},$$

where the subscript “*U*” stands for university and “*V*” stands for vocational. Using the same econometric specification as in model v, and allowing a single covariance matrix for the two OLS regressions, we then use a Wald statistic to test—in a two-sided test—whether $(\beta_U - \beta_V) \neq 0$ against the alternative hypothesis, and report chi-square statistics.

Table 2 reports the regression outputs. For every single dependent variable, the university effect is significantly larger (at least at $p < 0.05$) than the vocational effect. This means that, in comparison with vocational training, university makes individuals more conservative in the economic dimension and more liberal in the non-economic dimensions. Regarding redistribution preferences (column (i)), the university effect almost doubles the vocational effect ($\beta_U / \beta_V \cong 1.8$).

Table 2. The Significance of University—Vocational Versus University Studies.

	Redistribution		Xenophobia		Racial prejudice		Social trust		Political trust	
	V	U	V	U	V	U	V	U	V	U
Diploma (0–1)	0.069	0.133	-0.585	-1.007	-0.032	-0.094	0.316	0.572	0.383	0.621
SE	(0.017)	(0.028)	(0.074)	(0.069)	(0.013)	(0.021)	(0.042)	(0.044)	(0.050)	(0.058)
N.Obs	113,098		119,999		12,419		114,213		117,630	
University—Vocational	0.064		-0.423		-0.062		0.256		0.238	
χ^2	4.61		45.51		8.14		24.10		17.70	

Coefficients are obtained by running simultaneous regressions for each output variable, clustering standard errors at country level. Standard errors are reported in parentheses. For all regressions, model v in Table 1 was used. It must be noticed that the control group is the same when the main dependent variable is “vocational” or “university” diploma. “V” (“U”) columns report the effect of obtaining a vocational (university) diploma. We then test with a Wald two-sided test whether the output coefficients are equal to each other, and report chi-square statistics. All tests reveal a statistically significant difference at least at $p < 0.05$.

Source: European Social Survey (ESS).

Further Analysis and Robustness

The Online Appendix presents descriptive statistics, and a discussion of potential endogeneity issues. To deal with potential *reverse causality*, we begin by replacing our main independent variable with a continuous measure of educational attainment (years of completed education) to mimic a regression discontinuity design and strengthen the internal validity of the proposed causal link between education and support for redistribution. To deal with potential *omitted variable bias*, we run additional regressions to better capture the potentially confounding roles of parental background and political attitudes, as well as expectations about income over the life-course, constructed following Rueda et al. (2014). We also discuss potential measurement errors and show that our main outcome is robust to the use of alternative dependent variables, as well as to non-linear regression models which may provide a better fit in light of a rather non-linear data generating process.⁵ Finally, we disaggregate our analysis by country to show the main results are not driven by outliers

Discussion

Theory leads us to expect that redistribution preferences are shaped by material self-interest, and our results are consistent with this canon. Yet, we also find that education substantially decreases support for redistribution independently of its effect on income and economic security. It is of course exceedingly difficult to isolate economic self-interest motives for redistribution, and we recognize that our models do so only imperfectly. Nevertheless, the magnitude and robustness of what is left unexplained after controlling for the best theory-guided proxies for economic security is striking. We are therefore quite confident that education reduces economic solidarity not just by reducing expected net gains from redistribution, but also by directly shaping ideas about redistribution.

When we consider the effect of education on other attitudes, we find, in line with theoretical expectations, that independently of its effect on income and economic security, education fosters trust and inclusivity. Net of economic self-interest, education is associated with greater political trust, greater social trust, and more positive views about immigrants and racial minorities. Such views are in turn expected to increase economic solidarity, since people are more likely to support redistribution if they do not mistrust their governments and their fellow citizens, and if they do not hold negative views about minority groups. Yet, we find that inclusive attitudes do not translate into economic solidarity. Education exerts a conservative ideational effect on redistribution preferences, despite fostering inclusivity and trust.

Education therefore seems to foster what Kymlica (2015) calls “neoliberal multiculturalism” or “inclusion without solidarity.” The economic security, cognitive sophistication, and exposure to difference associated with education act as mutually reinforcing progressive forces on the non-economic issue dimension, encouraging multiculturalism and inclusion. Yet, on the economic dimension of distributive conflict, ideational processes within education combine with the economic benefits of education to create a strong conservative force, eroding solidarity and upholding skepticism of redistribution.

As we dig deeper into the ESS data, we find that it is not education in general, but university in particular, that exerts this strong conservative effect on redistribution preferences. Our analysis in section 2 shows that, net of economic security, university education makes people almost twice as conservative in their redistribution preferences as vocational education does. And our supplementary analysis in the Online Appendix shows that it is attainment of a university degree that reduces support for redistribution net of economic security, rather than a gradual increase in educational attainment over the years.

The university effect is consistent with both top-down and bottom-up ideational explanations. The former draw attention to economically conservative ideas imparted by educators. This may be through university social science curricula that reduce support for redistribution, possibly by teaching ideas that associate it with aggregate welfare losses. Or it may be that beyond the social sciences, university teaching institutionalizes individualistic educational cultures, similar to that of the Danish school system (Martin, 2018), according to which redistribution is more likely to be seen as unjustly reducing deserved returns on educational investments.

Bottom-up explanations instead emphasize how processes of educational socialization reduce support for redistribution by concentrating affluence and amplifying anti-redistributive norms picked up from family socialization (Mendelberg et al., 2017). Such a mechanism would also be consistent with our results, given the high concentration of affluent students in university relative to vocational education, across our sample of European countries.

In sum, this article departs from interest-based approaches to explaining redistribution preferences to join a relatively small literature that emphasizes the explanatory importance of ideas (Larsen, 2008; Oorschot, 2006; Rothstein, 1998; Scheve and Stasavage, 2016). It develops the argument that in addition to affecting economic prospects, education has the capacity to impart ideas top-down through the content of what is taught, and to shape ideas from the bottom-up through processes of educational socialization. Our main contribution is to show that the role of education in providing skills and associated economic security is only half the story when explaining support for redistribution. Of equal importance is education’s role in shaping ideas rather than interests. Future research

might aim to disentangle the bottom-up and top-down ideational processes identified in this article, to better understand just what is happening at European universities to foster norms of cultural inclusion while simultaneously eroding norms of economic solidarity.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Marco Giani  <https://orcid.org/0000-0001-9510-0538>

Notes

1. There is also noteworthy research that underscores each of these associations empirically, without theorizing the causal mechanisms involved (see, for example, Bovens and Wille, 2010; Hooghe et al., 2012; Hyman and Wright, 1979; Wagner and Zick, 1995).
2. Whenever treatment and control groups are unbalanced, a simple regression model produces non-valid estimates of the average causal treatment effect. When there is some overlap between the control and treated group, the estimates of OLS or Logit models will not capture the effect of the treatment in non-overlapping segments of the data. In the case of education, this problem can be severe. As observed by Persson (2014), if the dataset lacks individuals from low socioeconomic backgrounds who gain higher education and individuals from high socioeconomic backgrounds without higher education, the dataset lacks overlap. Our final model therefore uses a matching procedure, trading off representativeness for internal validity.
3. The European Social Survey (ESS) includes several other immigration-related attitudes. We focus on those used by most scholars in the field of immigration (Hainmueller and Hiscox, 2007) or racial attitudes (Giani and Méon, 2019). However, given the high correlation among different proxies, our results would hold with alternative proxies as well.
4. This is especially the case given that social sciences are overrepresented at the tertiary level compared to other fields of study (Eurostat, 2015).
5. We resist the temptation to use ESS data to test dependent variables related to support for specific social policies, since the redistributive effect of specific policies can be ambiguous (Berens and Gelepithis, 2019; Gelepithis, 2018). Instead, we maintain a tight focus on support for redistribution and test a dependent variable that asks whether differences in standards of living should be small for a fair society.

Supplementary Information

Additional Supplementary Information may be found with the online version of this article.

Content

Descriptive statistics

Endogeneity issues

Table 3. Reverse causality

Table 4. Omitted variable bias: increasing controls

Table 5. Omitted variable bias: considering future expected income

Table 6. Measurement issues

Conditional effects

Figure 2. A comparative look: education and redistribution, by country

Table 7. Effect of business and economic studies on redistribution

References

- Alesina A and Glaeser EL (2004) *Fighting Poverty in the US and Europe: A World of Difference*. Oxford: Oxford University Press.
- Andersen JG and Bjorklund T (1990) Structural Changes and New Cleavages: The Progress Parties in Denmark and Norway. *Acta Sociologica* 33 (1): 195–217.
- Arts W and Gelissen J (2001) Welfare States, Solidarity and Justice Principles: Does the Type Really Matter? *Acta Sociologica* 44: 283–299.
- Bartels LM (2005) Homer Gets a Tax Cut: Inequality and Public Policy in the American Mind. *Perspectives on Politics* 3 (1): 15–31.
- Berens S and Gelepithis M (2019) Welfare State Structure, Inequality, and Public Attitudes Towards Progressive Taxation. *Socioeconomic Review* 17 (4): 823–850.
- Bol D and Giani M (2019) It's a (Coarsened Exact) Match! Non-Parametric Imputation of European Abstainers' Vote. *Political Science Research and Methods*. Epub ahead of print 30 October. DOI: 10.1017/psrm.2019.44.
- Bourdieu P (1984) *Distinction: A Social Critique of the Judgement of Taste*. London: Routledge.
- Bourdieu P and Passeron J (1977) *Reproduction in Education, Society and Culture*. London: SAGE Publishing.
- Bovens M and Wille A (2010) The Education Gap in Participation and Its Political Consequences. *Acta Politica* 45 (4): 393–422.
- Cavaille C and Marschall J (2019) Education and Anti-Immigration Attitudes: Evidence from Compulsory Schooling Reforms across Western Europe. *American Political Science Review* 113 (1): 254–263.
- Converse PE (1964) The Nature of Belief Systems in Mass Publics. In: Apter DE (ed.) *Ideology and Discontent*. Glencoe, IL: Free Press, pp.206–261.
- Cusack T, Iversen T and Rehm P (2006) Risks at Work: The Demand and Supply Sides of Government Redistribution. *Oxford Review of Economic Policy* 22 (3): 365–389.
- Cutler MD, Huang W and Lleras-Muney A (2015) When Does Education Matter? The Protective Effect of Education for Cohorts Graduating in Bad Times. *Social Science & Medicine* 127: 63–73.
- Daniele G and Geys B (2015) Interpersonal Trust and Welfare State Support. *European Journal of Political Economy* 39: 1–12.
- Dee T (2004) Are There Civic Returns to Education? *Journal of Public Economics* 88 (9): 1697–1720.
- Dehejia RH and Wahba S (2002) Propensity Score-Matching Methods for Non-Experimental Causal Studies. *Review of Economics and Statistics* 84 (1): 151–161.
- de Koster W, Achterberg P and van der Waal J (2012) The New Right and the Welfare State: the Electoral Relevance of Welfare Chauvinism and Welfare Populism in The Netherlands. *International Political Science Review* 34 (1): 30–20.
- Emmenegger P, Hausermann S, Palier B, et al. (2012) *How We Grow Unequal: The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies*. Oxford: Oxford University Press.
- Esping-Andersen G (1990) *The Three Worlds of Welfare Capitalism*. Cambridge: Polity Press.
- ESS Rounds 1-8 (2016) *European Social Survey Round Cumulative File*. Bergen: Norwegian Social Science Data Services, Norway—Data Archive and Distributor of ESS Data.
- Eurostat (2015) Distribution of Tertiary Graduates by Field and Sex, EU-28. Available at: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Distribution_of_tertiary_graduates_by_field_and_sex,_EU-28,_2015_\(%25\)_YB17.png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Distribution_of_tertiary_graduates_by_field_and_sex,_EU-28,_2015_(%25)_YB17.png) (accessed 20 August 2018).
- Gelepithis M (2018) Institutional Mismatch, Party Reputation, and Industry Interests: Understanding the Politics of Private-Heavy Pension Systems. *Political Studies* 66 (3): 735–751.
- Giani M and Méon PG (2019) Global Racist Contagion Following Donald Trump's Election. *British Journal of Political Science*. Epub ahead of print 9 December. DOI: 10.1017/S0007123419000449.
- Gross N and Fosse E (2012) Why Are Professors Liberal? *Theory and Society* 41: 127–168.
- Hagendoorn L (2018) *Education and Racism: A Cross National Inventory of Positive Effects of Education on Ethnic Tolerance* (eds Hagendoorn L and Nekuee S), 2nd edn. New York: Routledge.
- Hainmueller J and Hiscox MJ (2007) Educated Preferences: Explaining Attitudes toward Immigration in Europe. *International Organization* 61: 399–442.
- Hakhverdian A, Elsas EV, Van Der Brug W, et al. (2013) Euroscepticism and Education: A Longitudinal Study of 12 EU Member States, 1973-2010. *European Union Politics* 14 (4): 522–541.
- Hall P (1999) Social Capital in Britain. *British Journal of Political Science* 29: 417–461.
- Hausermann S and Kriesi H (2011) What Do Voters Want? Dimensions and Configurations in Individual-level Preferences and Party Choice. *Paper Presented at the Future of Democratic Capitalism, Zurich*, 16–18 June.

- Holmlund H, Lindahl M and Plug E (2011) The Causal Effect of Parents' Schooling on Children's Schooling: A Comparison of Estimation Methods. *Journal of Economic Literature* 49 (3): 615–651.
- Hooghe M, Marien S and de Vroome T (2012) The Cognitive Basis of Trust: The Relation between Education, Cognitive Ability, and Generalized Political Trust. *Intelligence* 40: 604–613.
- Hyman H and Wright C (1979) *Education's Lasting Influence on Values*. Chicago, IL: University of Chicago Press.
- Iversen T and Soskice D (2001) An Asset Theory of Social Policy Preferences. *American Political Science Review* 95 (4): 875–893.
- Jennings MK, Stoker L and Bowers J (2009) Politics across Generations: Family Transmission Reexamined. *The Journal of Politics* 71 (3): 782–799.
- Kitschelt H (1994) *The Transformation of European Social Democracy*. Cambridge: Cambridge University Press.
- Korpi W (1983) *The Democratic Class Struggle*. London: Routledge.
- Kreisi H (2015) Enlightened Understanding, Empowerment and Leadership: Three Ways to Enhance Multiculturalism: Comment on Will Kymlicka's Article: Solidarity in Diverse Societies. *Comparative Migration Studies* 3 (1): 18.
- Kymlicka W (2015) Solidarity in Diverse Societies: Beyond Neoliberal Multiculturalism and Welfare Chauvinism. *Paper Presented at the IMISCOE Mobility in Crisis, Florence, 29–30 January*.
- Larsen CA (2008) The Institutional Logic of Welfare Attitudes: How Welfare Regimes Influence Public Support. *Comparative Political Studies* 41 (2): 145–168.
- Lipset S (1959) Democracy and Working-Class Authoritarianism. *American Sociological Review* 24 (4): 482–501.
- Marshall J (2019) The Anti-Democrat Diploma: How High School Education Decreases Support for the Democratic Party. *American Journal of Political Science* 63 (1): 67–83.
- Martin CJ (2018) Imagine All The People: Literature, Society, and Cross-National Variation in Education Systems. *World Politics* 70 (3): 398–442.
- Meltzer AH and Richard SF (1981) A Rational Theory of the Size of Government. *Public Choice* 41: 914–927.
- Mendelberg T, McCabe KT and Thal A (2017) College Socialization and the Economic Views of Affluent Americans. *American Journal of Political Science* 61 (3): 606–623.
- Mewes J and Mau S (2013) Globalization, Socio-Economic Status and Welfare Chauvinism: European Perspectives on Attitudes toward the Exclusion of Immigrants. *International Journal of Comparative Sociology* 54 (3): 228–245.
- Moene KO and Wallerstein M (2001) Inequality, Social Insurance and Redistribution. *American Political Science Review* 95 (4): 859–874.
- Newcomb TM (1943) *Personality and Social Change: Attitude and Social Formation in a Student Community*. New York: Dryden.
- Nie NH, Junn J and Stehlik-Barry K (1996) *Education and Demographic Citizenship in America*. Chicago, IL: University of Chicago Press.
- Niemi RG and Junn J (1998) *Civic Education: What Makes Students Learn*. New Haven, CT: Yale University Press.
- Oorschot W (2006) Making the Difference in Social Europe: Deservingness Perceptions among Citizens of European Welfare States. *Journal of European Social Policy* 16 (1): 23–42.
- Pascarella ET and Terenzini PT (1991) *How College Affects Students: Findings and Insights from Twenty Years of Research*. San Francisco, CA: Jossey-Bass.
- Persson M (2014) Testing the Relationship between Education and Political Participation Using the 1970 British Cohort Study. *Political Behavior* 36 (4): 877–897.
- Pteffer FT (2018) Growing Wealth Gaps in Education. *Demography* 55: 1033–1068.
- Roemer JE, Lee W and Van Der Straeten K (2008) Racism, Xenophobia, and Distribution: Multi-Issue Politics in Advanced Democracies. *Perspectives on Politics* 6 (2): 409–411.
- Rothstein B (1998) *Just Institutions Matter: The Moral and Political Logic of the Universal Welfare State*. Cambridge: Cambridge University Press.
- Rothstein B, Samanni K and Teorell J (2012) Explaining the Welfare State: Power Resources Vs the Quality of Government. *European Political Science Review* 4 (1): 1–28.
- Rueda D (2005) Insider-Outsider Politics in Industrialized Democracies: The Challenge to Social Democratic Parties. *American Political Science Review* 99 (1): 61–74.

- Rueda D, Segmueller D and Idema T (2014) The Effects of Income Expectations on Redistribution Preferences in Western Europe. *Paper presented at the Annual Meeting of the American Political Science Association (APSA), Washington, DC, 28–31 August.*
- Scheve K and Stasavage D (2016) *Taxing the Rich: A History of Fiscal Fairness in the United States and Europe.* Oxford: Princeton University Press.
- Schwander H and Hausermann S (2013) Who Is in and Who Is Out? A Risk-Based Conception of Insiders and Outsiders. *Journal of European Social Policy* 23 (3): 248–269.
- Sidanius J, Levin S and Van Laar C (2008) *The Diversity Challenge: Social Identity and Intergroup Relations on the College Campus.* New York: Russell Sage Foundation.
- Spruyt B (2014) An Asymmetric Group Relation? An Investigation into Public Perceptions of Education-Based Groups and the Support for Populism. *Acta Politica* 49 (2): 123–143.
- Stubager R (2009) Education-Based Group Identity and Consciousness in the Authoritarian-Libertarian Value Conflict. *European Journal of Political Research* 48 (2): 204–233.
- Svallfors S (2013) Government Quality, Egalitarianism, and Attitudes to Taxes and Social Spending: A European Comparison. *European Political Science Review* 5 (3): 363–380.
- Tobias JL and Mingliang L (2004) Returns to Schooling and Bayesian Model Averaging: A Union of Two Literatures. *Journal of Economic Surveys* 18 (2): 153–180.
- Van Oorschot W, de Koster W and van der Waal J (2013) Three Worlds of Welfare Chauvinism? How Welfare Regimes Affect Support for Distributing Welfare to Immigrants in Europe. *Journal of Comparative Policy Analysis: Research and Practice* 15 (2): 164–181.
- Wagner U and Zick A (1995) The Relation of Formal Education to Ethnic Prejudice: Its Reliability, Validity and Explanation. *European Journal of Social Psychology* 25: 41–56.

Author Biographies

Margarita Gelepithis is an Assistant Professor in the department of Politics and International Studies at the University of Warwick. Drawing on an interdisciplinary foundation in Philosophy, Politics and Economics, her research interests include the comparative study of how rich democracies deal with prevalent forms of labour market inequality.

Marco Giani is a Lecturer in the Department of Political Economy at King's College London. His research is at the intersection between comparative politics and political economy and focuses on political representation, discrimination and inequality.