

**Enlightenment and solidarity:  
National union movements, distributive norms  
and the union effect on support for redistribution**

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*Abstract:* Using data from the European Social Survey (2002-14), this paper explores the effect of union membership on support for redistribution. We hypothesize that the wage-bargaining practices of unions promote egalitarian distributive norms among low-wage and high-wage union members alike and that distributive norms in turn lead union members to support redistribution. Consistent with our expectations, the empirical analysis shows that the solidarity effect of union membership is strongest when unions encompass a very large share of the labor force or primarily organize low-wage workers. We also show that low-wage workers have become a significantly less important union constituency in many European countries over the time period covered by our analysis.

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This paper seeks to advance our understanding of individual preferences for redistribution by making the case that more attention ought to be paid to the formative role of the social networks in which individuals are embedded and, more specifically, the “intermediary organizations” to which they belong. It is fair to say, we think, that the recent literature on individual preferences for redistribution tends to treat individuals as disconnected from each other. This holds for scholars who emphasize self-interest, conceived in terms of income maximization (e.g., Meltzer and Richard 1981) or insurance (e.g., Moene and Wallerstein 2001, Iversen and Soskice 2001), but also for those who introduce “other-regarding” considerations, such as affinity with the poor (e.g., Alesina and Glaeser 2004) and self-identification with “the nation” (Shayo 2009). For some proponents of the other-regarding perspective, group membership matters, but the groups to which individuals belong are typically conceived in broad and abstract terms (ethnic groups, classes or nations).

Empirically, we focus on the effects of union membership on preferences for redistribution. Survey-based studies that include union membership as an explanatory variable consistently find that respondents who identify themselves as union members are more likely to support redistribution than other individuals, controlling for income and other socio-demographic characteristics (e.g., Finseeras 2009, Checchi, Visser and van de Werfhorst 2010). Confirmed by our own analysis of data from the European Social Survey (ESS), covering 21 countries over the period 2002-14, this finding represents something of a puzzle from the point of standard insurance models of support for redistribution. Everything else being equal, someone who belongs to a union ought to be less worried about job loss or demotion than someone who does not belong to a union. While existing studies treat union membership as a control variable, our goal here is to explain or, at least, shed some light on “the union effect.” To this end, we explore how the effect of union membership varies with income and also how it varies across countries and over time.

Our paper draws inspiration from Iversen and Soskice’s recent discussion of social networks and union membership as sources of political attitudes and behavior (Iversen and Soskice 2015). More loosely, we have also been inspired by Putnam’s ideas about membership in voluntary associations as a source of solidarity among individuals with different endowments or, in Putnam’s own

(2000) words, “bridging social capital.” For Iversen and Soskice (2015), unions disseminate information and provide a venue for political discussion among likeminded people, making union members more aware of their material interests and more sophisticated in choosing among political programs on offer. For Putnam, by contrast, social interaction among members of unions and any number of other voluntary associations breeds trust, tolerance and willingness to look beyond material self-interest (Putnam 2000: ch.1).

We will develop and present evidence in favor of an account of the union effect that differs from Putnam’s as well as Iversen and Soskice’s. Focusing on distributive norms created by unions, our core argument boils down to the following. Unions that organize low-wage workers commonly pursue compression of earnings differentials or, at a minimum, resist rising earnings differentials between firms and sectors. The labor-market practices of unions create distributive norms that union members adopt as their own and these norms induce union members to support redistribution. Crucially, not all unions are the same: some emphasize wage solidarity more than others. The variation among unions in this respect is, at least in part, a function of the percentage of union members drawn from the lower half of the earnings distribution. Very simply put, we do not expect high-wage workers who belong to a union that only organizes high-wage workers to be more supportive of redistribution than their non-union peers, but we do expect this to be the case for high-wage workers who belong to a union that primarily organizes low-wage workers.

Though distributive norms do not feature in their discussion of unions as “communities of fate,” our argument resembles that of Ahlquist and Levi (2013) in several respects. Like Putnam, and unlike Iversen and Soskice, Ahlquist and Levi argue that union membership can be a source of preferences (or dispositions) that cut against one’s material interests. In contrast to Putnam, however, they conceive the formation of solidaristic values as a political process, in which union leaders play a critical role. Most importantly, we join Ahlquist and Levi (2013) in emphasizing, against Putnam as well as Iversen and Soskice, the heterogeneity of unions and their internal dynamics.

While there are many national and cross-national surveys that allow us to explore whether the policy preferences of union respondents differ from those of non-union respondents, we are not aware of any survey that allows us to identify the type of union to which unionized respondents belong. In our empirical analysis, we rely on two country-level variables, union density and the compo-

sition of union membership by income, to capture variation in union context across countries and over time. We identify three ideal-types of union movements — comprehensive unionism, low-wage unionism and high-wage unionism — and hypothesize that the impact of union membership on support for redistribution varies across the three types.

The rest of the paper is organized as follows. In section 1, we develop our core argument about solidaristic norms generated by union practices, engage with alternative explanations of why union membership is associated with support for redistribution, and articulate the hypotheses that our empirical analysis will test. In section 2, we introduce the data that we use and define the variables included in our analysis. In section 3, we specify the models that we estimate. In section 4, we present and discuss empirical results that do not take into account union-movement types and, in section 5, we present and discuss results with union-movement characteristics as conditioning variables. In section 6, finally, we summarize our empirical findings and discuss the implications of the OECD-wide decline of unions for redistributive politics.

## **1. Theory and core hypotheses**

Earnings inequality has long been a topic of interest to comparative political economists. One of the most consistent empirical findings in this literature is that unionization is associated, across countries and over time, with compression of earnings differentials (see Wallerstein 1999, Rueda and Pontusson 2000, Pontusson 2013). We also know that in the US and other countries characterized by decentralized wage setting, between-firm differentials tend to be smaller in unionized sectors and between-skills differentials tend to be smaller in unionized firms (Freeman and Medoff 1984: ch.5, Card, Lemieux and Riddell 2004).

The existing literature provides at least three different explanations of why unions typically pursue some form of solidaristic wage policy in their bargaining with employers (and, sometimes, with governments). As suggested by Freeman and Medoff (1984), the standard median-voter framework can be invoked to explain such a policy orientation to the extent that (a) union policy is determined by majority voting and (b) the median union member earns less than the average wage of all union

members. Alternatively, a number of authors have argued, based on the Nordic experience, that wage solidarity should be seen as the outcome of bargaining between different unions (see, e.g., Wallerstein 1990). In essence, this line of argument posits that wage solidarity — higher wage increases (or smaller wage cuts) for low-wage workers — is a concession that workers and employers in more efficient (profitable) sectors, typically trade-exposed sectors, make to workers in less efficient sectors in order to solicit their cooperation in the exercise of wage restraint. Emphasizing fairness norms developed over long periods of time, Swenson’s (1989) historical study of union politics in Sweden and Germany constitutes a third kind of explanation of why unions promote solidaristic attitudes among their members as well as more egalitarian distributive outcomes.

For our present purposes, it is not necessary to choose among alternative accounts of why unions promote wage solidarity. All three of the accounts mentioned above are congruent with our core assumption that unions that primarily organize low-wage workers will emphasize wage solidarity more than unions that primarily organize high-wage workers. We do not have survey data that allow us to identify union members with particular unions, but the ESS allows us to estimate union density in each decile of the household income distribution for any given country in a given year. The ratio of union density in the lower half of the income distribution to union density in the upper half of the income distribution provides a simple summary measure of the low-income inclusiveness of national union movements. This measure is more or less the equivalent of the percentage of all union members drawn from the lower half of the income distribution, with values greater than 1 indicating that a bigger percentage of low-income respondents are unionized than high-income respondents and that the former constitute a majority of union members.<sup>1</sup> It is reasonable to suppose that the probability of survey respondents who identify themselves as union members being members of unions that include a large number of low-wage workers increases with low-income inclusiveness measured at the country level. In addition, we assume that that *the bargaining power of low-wage workers within the union movement as a whole* increases with low-income inclusiveness.<sup>2</sup> The fact that we cannot identify union members with unions represents a serious limitation of our analysis, but it also deserves to be noted that individual unions, at least in Western Europe, rarely set wage policies in an entirely autonomous manner.

Low-income inclusiveness constitutes a continuum on which individual unions or national union movements might be located. Quite plausibly, this continuum alone would suffice to test hypotheses about the effects of belonging to different types of unions on support for redistribution. However, overall union density must also be taken into account if our objective is to explore whether (or how) the characteristics of national union movements condition the effects of union membership on support for redistribution. It is a commonplace in the comparative political economy literature that highly encompassing union movements tend to be more centralized and, relatedly, that they are under more pressure to exercise wage restraint (see, e.g., Garrett 1998). As noted above, the existing literature suggests that these conditions will render low-wage workers more influential within the union movement than predicted by their share of total union membership.

Yet another reason why we ought to take union density into account concerns the distinction between what unions advocate (or demand) and what they are able to achieve. We hypothesize that unions that advocate for wage solidarity will influence distributive norms among union members. Unions that actually achieve a more egalitarian distribution of earnings, as Nordic unions have done, are likely to influence the distributive norms of non-union members as well.

Critically important for our purposes, overall density and low-income inclusiveness are not entirely independent of each other: at low levels of union density, low-income inclusiveness may vary a great deal, but as union density approaches 100%, low-income inclusiveness must, by definition, converge on 1. Figure 1 illustrates this point by plotting union density, as reported by Visser (2015), against our ESS-based measure of low-income inclusiveness. While the Left-hand panel presents the data for all ESS country-years included in our analysis, the Right-hand panel presents data for each country averaged across all ESS years.

[Figure 1]

Situated at the midpoint between the average density values for Norway (54%) and Italy (35%), the horizontal gridlines in Figures 1a and 1b represent a “natural cut-off” between countries with density above 50% and countries with density below 40%. The vertical gridlines represent the median inclusiveness values for all country-year observations below the horizontal gridline (.917).

Based on these data presented in these figures, we propose to distinguish three ideal-typical union movements. Exemplified by Denmark, Finland and Sweden, Type 1 is distinguished by the

combination of high density and a more or less equal split between low-wage and high-wage workers. For short, we will refer to this type as “*encompassing unionism*.” The other two types are characterized by union density below 40% and occupy opposite positions on the inclusiveness dimension. In Type 2, exemplified by Italy and Slovenia, low-wage workers constitute a clear majority of union members while in Type 3, exemplified by France, Greece and Portugal, high-wage workers are the majority — hence we will refer to these types as “*low-wage unionism*” and “*high-wage unionism*.”<sup>3</sup>

Following the preceding discussion, we expect encompassing union movements and low-wage union movements to promote support for redistribution among low-wage and high-wage union members alike. The main difference that we expect to observe between these two contexts concerns the preference of non-union members. Again, we expect distributive norms created by encompassing unions to diffuse beyond union members and, as a result, we expect the differences between unionized and non-unionized respondents to be smaller under encompassing unionism. Finally, we expect to observe lower levels of support for redistribution among union members — low-wage and high-wage members alike — and smaller differences between unionized and non-unionized respondents under Type 3 conditions (high-wage unionism) than under Type 1 or Type 2 conditions.

As far as high-income individuals are concerned, similar expectations might be derived from supposing that unions generate social affinity among their members and that this affinity is the source of other-regarding support for redistribution among individuals who do not stand to gain from redistribution.<sup>4</sup> We prefer the argument about distributive norms being created by (some) unions because it does not require union members to be very active in union activities or, in other words, to interact with other union members (as distinct from workmates) in a regular and meaningful fashion. For the norms-based argument to hold, it is sufficient that unions diffuse information and justify their collective-bargaining practices and political demands to their members. There is every reason to believe that unions commonly engage in this type of communication.<sup>5</sup>

It should also be noted that our argument about distributive norms yields two specific expectations that are at odds with social-affinity reasoning. First, our argument posits that the direction of the union effect will be the same for low-income and high-income individuals. By contrast, social affinity would seem to imply that low-income individuals who come into contact with high-income individuals through union activities will, at least to some extent, incorporate the latter’s utility into

their preference calculus and thus become less supportive of redistribution (while their high-income union comrades will become more supportive of redistribution). Secondly, our hypothesis that encompassing unionism affects distributive norms beyond the “community” of union members does not fit neatly with the social affinity approach.

Our empirical analysis engages with two other explanations of why union membership is associated with support for redistribution. One obvious alternative to our account holds that people who belong to unions have a better understanding of whether or not they would benefit from redistribution. The other, equally obvious, alternative attributes the association between union membership and support for redistribution to self-selection: Simply put, individuals who favor redistribution are more likely to join unions (Checchi, Visser and van de Werfhorst 2010; see also Kelly and Kelly 1994).<sup>6</sup>

The union-membership-as-enlightenment thesis speaks to a blind spot in the literature on preferences for redistribution. Most of the models proposed in this literature assume that citizens have a reasonably accurate understanding of where they are situated in the income distribution and, by extension, whether or not (or how much) they stand to gain from redistribution. Yet existing studies of public opinion, at least US public opinion, suggest that many citizens do not pass this test (e.g., Bartels 2005, 2008). The obvious question arises: Where and how do individuals gain the knowledge necessary to be guided by “enlightened self-interest”? Iversen and Soskice (2015) argue persuasively that unions generate and diffuse information that is relevant to preferences for redistribution. This information effect need not be restricted to union members, but it seems likely that it affects union members more than other individuals. In addition, Iversen and Soskice observe that union membership is associated with political interest and argue, quite plausibly, that political discussion among individuals with similar “objective interests” serves to clarify what these interests are and how they are best served.

For low-income survey respondents, the expectations generated by the enlightenment thesis are identical to the expectations generated by our argument about distributive norms. In particular, the enlightenment thesis also leads us to expect the union effect among low-income respondents to be smallest (perhaps absent) when unions primarily organize high-wage workers. However, the two arguments diverge with respect to the question of how the union effect among low-income respon-



ents compares to the union effect among high-wage respondents. Since low-income households gain more from redistribution than high-income households, the enlightenment thesis strongly implies that the union effect, regardless of context, will be stronger for low-income respondents than for high-income respondents. This implication does not follow from the argument that unions create distributive norms that influence individual preferences for redistribution.

Turning to the self-selection thesis, it is surely plausible, indeed likely, that preferences for redistribution have some influence over the choice whether or not to join a union, but the idea that policy preferences are formed, once and for all, prior to union membership seems hard to defend. In addition, it is implausible to suppose that preferences for redistribution are the primary determinant of the choice whether or not to join a union. As Ahlquist and Levi (2013: 16) put it, union membership "is generally determined by employment opportunities or job preferences, not by political persuasions." As noted by Iversen and Soskice (2015: 1797-98), moreover, the union effect on political attitudes does not vary significantly between politically informed and uninformed survey respondents. To paraphrase Iversen and Soskice, it is particularly implausible that politically uninformed individuals choose to join unions primarily for political reasons.

Within the constraints of the kind of survey data that we analyze, we address the self-selection hypothesis by reporting results that include ideological self-placement as a control variable and by engaging in two additional tests. To begin with, we leverage the fact that some countries (Belgium, Sweden, Denmark and Finland) have unemployment-insurance systems, so-called "Ghent systems," that are financed by the state but administered by unions. It is commonplace to explain high rates of unionization in these countries with reference to the selective incentives to join unions that Ghent systems create (Rothstein 1992, Western 1999, Ebbinghaus, Göbel and Koos 2011). This argument implies that the balance between self-interest and ideological disposition in the decision to join a union tilts towards self-interest in Ghent countries. If the self-selection hypothesis is correct, the association between union membership and support for redistribution should be absent or at least weaker in Ghent countries. Following a similar logic, we also estimate models that interact union membership with employment protection legislation (EPL). Protection against being fired arguably motivates low-wage and high-wage workers alike to join unions. Based on narrow self-interest, this motive should be most prominent when employment protection laws are weak. If the effect of union

membership on support for redistribution were entirely due to self-selection (pro-redistribution preferences motivating individuals to join unions), we would not expect to observe it when employment protection is weak.<sup>7</sup> To anticipate, neither of these tests yields significant evidence of self-selection.

We do not wish to imply that our analysis settles the issue of self-selection. A more definitive treatment would require some form of quasi-experimental research design or, alternatively, analysis of panel data (following individuals as they join or exit unions).<sup>8</sup> Kim and Margalit's (2014) analysis of the effect of union membership on trade policy preferences pursues the former approach, exploiting differences in legal provisions for union membership across US states to take account of potential selection effects. Kim and Margalit also show that an abrupt change in the position of the United Auto Workers in 2010 produced a clear shift in the trade policy preferences of UAW members. On the other hand, Hadziabdic's (2015) analysis of data from the Swiss Household Panel (1999-2011) finds little evidence of an average effect of joining a union.

Several limitations of panel-data studies such as Hadziabdic's deserve to be noted. To begin with, it may take a long time for the effects of joining a union to be fully realized. And even if there are no effects of joining a union, it may be that union members respond differently to economic, social or political developments than unorganized workers. Most importantly for our present purposes, Hadziabdic's analysis takes into account heterogeneity among individuals, but it does not—for data reasons cannot—take into account heterogeneity among unions.<sup>9</sup> In our view, the empirical results that we present below are readily explained in terms of hypothesized enlightenment and solidarity effects of union membership and ought not be dismissed on the basis of unsubstantiated concerns about self-selection.

## **2. Data, variables and further hypotheses**

To test the hypotheses set out above, we analyze individual-level data from rounds 1-7 of the European Social Survey (ESS), covering the period 2002-14. Our dataset encompasses 21 Western and Central European democracies: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Slovakia, Slo-

venia, Spain, Sweden, Switzerland and the UK. Some of these countries only participated in some ESS rounds and 2014 results for some countries have yet to become publically available. Moreover, we have had to drop a handful of surveys for lack of data on independent variables of interest. In the end, our full dataset includes data pertaining for 122 country-years (see Table A1 in the Appendix).

We restrict our analysis to working survey respondents between the ages of 15 and 65 or, in other words, to *the pool of potential union members* in most countries.<sup>10</sup> Our main models are estimated with samples ranging between 83,000 and 95,000 individual respondents. These respondents are unevenly distributed across surveys and countries, but our multilevel models do not require balanced data to generate efficient estimates (Rabash et al. 2009).<sup>11</sup>

#### *Dependent variable: support for redistribution*

Like most comparative studies of preferences for redistribution, we base our dependent variable on an ESS question asking respondents whether "the government should take measures to reduce differences in income levels." Respondents are presented with five response categories, ranging from "agree strongly" to "disagree strongly." We dichotomize this variable to facilitate interpretation of the results, treating individuals who respond with "strongly agree" and "agree" as supporters of redistribution and individuals who respond with "neither agree nor disagree", "disagree" and "disagree strongly" as opponents of redistribution. Support for redistribution is widespread across Europe. In our sample, fully 66% of all respondents either agree or strongly agree with the statement that the government should take measures to reduce income differences. Against this background, it seems appropriate to treat respondents in the middle category ("neither agree nor disagree") as implicit opponents of redistribution.<sup>12</sup>

#### *Explanatory variables at the individual level*

Building on existing studies of preferences for redistribution, our analysis includes a battery of individual-level variables. The variables of primary interest are union membership and relative income. Union membership is based on an ESS question that asks, "Are you or have you ever been a member of a trade union or similar organization?" We code respondents who currently belong to a union as 1 and respondents who previously or never belonged to a union as zero. Based on self-

reported net household income, our income variable refers to placement in the income distribution of survey respondents in our dataset or, in other words, employed individuals aged 15-64 in a particular country-year. In the first three rounds of the ESS, respondents were asked to place themselves in one of twelve somewhat arbitrary income bands. Starting in 2008, the ESS asks respondents to place themselves in one of ten income bands that correspond to deciles of their country's disposable income distribution. To render these measures comparable, we assign the mid-points of self-reported income bands to each survey respondent, adjust for the size of the household to which the individuals belong using the standard formula in the literature (household income divided by the square root of the number of household members), and then (re)assign respondents to deciles of the income distribution that we have estimated based on the adjusted incomes of individuals in our dataset.<sup>13</sup> Consisting of ten equally-sized income bands, we treat income as a continuous variable.<sup>14</sup> Following existing literature, we expect support for redistribution to fall with relative income.

Our analysis includes three other individual-level variables that pertain to labor-market status or employment conditions: skill specificity, fixed-term employment and establishment size. These variables serve to allay concerns about missing-variable bias or, in other words, to ensure that our analysis identifies the effects of union membership rather than the effects of employment conditions associated with unionization.<sup>15</sup> Iversen and Soskice (2001) argue famously that individuals with more skills are more vulnerable to significant income loss should they lose their current job and therefore more prone to support social insurance and redistribution. A number of subsequent studies have shown that support for policies associated with redistribution increases with skill specificity (e.g., Cusack, Iversen and Rehm 2006 and Rehm 2009). While we are not aware of any study exploring skill specificity as a determinant of union membership, it seems reasonable to suppose that unionized workers have, on average, more specific skills than other workers. To capture the degree to which specificity characterizes the skills of individual respondents, we use the measure proposed by Iversen and Soskice (2001) and refined by Rehm (2009).<sup>16</sup>

Individuals with fixed-term employment contracts are more vulnerable to employment and associated income loss than individuals with indefinite contracts. By the insurance logic articulated in the existing literature, they should be more likely to support redistribution. At the same time, there is every reason to suppose that individuals with fixed-term contracts are less likely to join unions. Not

controlling for fixed-term employment would likely lead us to underestimate the effect of union membership.

Our analysis also controls for the size of establishment where the respondent works, operationalized as a continuous variable ranging from 1 to 5.<sup>17</sup> One of the most consistent findings in the literature on within-country variation in unionization is that large establishments and firms tend to be more unionized than small establishments and firms (see Schnabel 2012). It could be that the positive effect of union membership on support for redistribution identified by previous studies is actually a "workplace effect" rather than a "membership effect."

While it seems clear that relations between employees and management tend to be more conflictual in large establishments (firms) than in small establishments (firms), it is by no means obvious that solidarity between low-wage and high-wage workers increases with establishment size. The available evidence indicates that skill polarization falls with establishment size in manufacturing (see Pontusson 1995): on average, small establishments employ fewer semi-skilled workers, relative to unskilled as well as highly skilled workers. At the same time, smaller establishments are presumably characterized by greater social proximity between low-wage and high-wage workers.

We include three standard socio-demographic control variables: age, education and gender. We operationalize age as linear variable ranging from 15 to 65 and conceive it as a variable that captures cohort effects. Our expectation is that individuals for whom the era of postwar welfare-state expansion — or, in the case of Central European respondents, the era of state socialism — was formative will be more supportive of redistribution than younger individuals. Controlling for the effects of age is important for our purposes because union members are, on average, older than other working-age ESS respondents.<sup>18</sup> Our education variable refers to years spent in full-time education. Controlling for age, education serves, at least in part, as a proxy for prospects of upward income mobility and can thus be expected to have a negative effect on support for redistribution (see Alesina and Giuliano 2009). Gender is a dichotomous variable with males coded as 1. Following Iversen and Rosenbluth (2011), among others, we expect women's disadvantaged position in the labor market to translate into support for redistribution.

Finally, our analysis includes two variables that capture the subjective dispositions of survey respondents: self-assessed religiosity and ideology, both measured on a scale from zero to 10.<sup>19</sup> Fol-

lowing Scheve and Stasavage (2006), who argue that religiosity reduces anxiety in the face of economic adversity, we expect religiosity to have a negative effect on support for redistribution. Again, the premise here is that redistribution can be at least a form of insurance against future income loss. Including self-placement on the Left-Right dimension as a variable in models of support for redistribution may seem dubious to the extent that redistribution is itself a central component of how most people conceive the Left-Right dimension, but it provides one obvious way to address the issue of self-selection. If union members are more supportive of redistribution than non-members when we control for ideological self-placement, the idea that union membership is itself a source of support for redistribution gains some credibility. We negotiate the trade-off here by presenting results with and without ideological self-placement.

#### *Explanatory variables at the country(-year) level*

As explained above, the country-level variables of theoretical interest are union density and the low-income inclusiveness of unions. Taken from Visser (2015), our measure of union density is the number of employed union members in percentage of the employed labor force, lagged by one year. Calculated based on ESS data, our measure of low-income inclusiveness is the ratio of union density in the bottom five deciles of the income distribution to union density in the top five income deciles. Again, we expect these variables to condition the effect of union membership on support for redistribution jointly. While we do not have prior expectations about the direct effect of low-income inclusiveness, we expect union density to be associated with higher average support for redistribution.

As also explained above, we deploy a dummy for Ghent systems of unemployment insurance and a measure of employment protection legislation in models designed to explore selection effects. The Ghent dummy takes the value of 1 for the four countries with Ghent systems (Belgium, Denmark, Sweden and Finland), otherwise zero. Rising with restrictions on individual and collective dismissals, our measure of employment protection is version 2 of the OECD index of protection for permanent employees, available on an annual basis for the entire period covered by our analysis.<sup>20</sup> As with union density, we lag this variable by one year. Again, self-selection implies that the association between union membership and support for redistribution should be weaker in the Ghent countries and that it should be weaker when employment protection is low.

The models that include the aforementioned macro-level variables also include two country-level control variables: income taxation in percent of GDP and the Gini coefficient for disposable household income.<sup>21</sup> Observed annually and lagged by one year, these variables allow us to identify the effects of the macro-level variables of theoretical interest more accurately. Their inclusion is easy to justify theoretically. Regarding income taxation, it is reasonable to assume that most individuals are averse to paying taxes, that income taxation is particularly visible and that most individuals associate redistribution with higher taxes. Based on these three assumptions, we hypothesize that average support for redistribution declines as income taxation rises. Following the canonical Meltzer-Richard model (Meltzer and Richard 1981), we hypothesize that inequality will instead be associated with more support for redistribution. In Meltzer and Richard's formulation, inequality renders the median voter more supportive of redistribution. An alternative, perhaps more intuitive, formulation is that more citizens stand to gain from redistribution as inequality rises.

### 3. Methodology

We are interested in explaining the support for redistribution of individuals clustered within different country-years. Taking into account that our dependent variable is dichotomous and that individuals from the same country can be expected to be more alike than individuals drawn from a random sample, the results presented below are based on estimating multi-level logit models with random intercepts, using maximum likelihood estimation with continuous explanatory variables centered at their sample mean. These models take contextual variation into account and enable us to estimate the effects of individual and macro-level variables simultaneously (Rabash et al. 2009, Hox 2002). The consensus in the literature holds that 122 units at the upper level should be more than sufficient to calculate meaningful multi-level models (Rabe-Hesketh and Skrondal 2012).

The tables with regression results presented below report odds ratios and significance tests for the reported ratios. Odds ratios represent the probability of supporting redistribution divided by the probability of not supporting redistribution. For a dichotomous variable, an odds ratio of 1.00 means that an individual who is coded as 1 on the variable in question is just as likely to support redistribu-

tion as an individual who is coded as 0. An odds ratio of 2.00 means that the former individual is twice as likely to support redistribution and an odds ratio of .50 means that she is half as likely to support redistribution. For a continuous variable, an odds ratio of, say, 1.01 means that the probability of supporting redistribution increases by 1% for each one-unit increase of the variable in question (e.g., each additional year in age).

As explained above, we are interested in exploring whether (and how) the union effect varies by income. Hence most of the models presented below interact union membership and relative income. Adding further complexity, our core argument about distributive norms posits that union density and the low-income inclusiveness of unions condition the effects of union membership on redistribution support. To test this argument, we estimate a model that includes a four-way interaction among two individual-level variables, union membership and relative income, and two country-level variables, union density and low-income inclusiveness. Based on this model, we report predicted probabilities of supporting redistribution for union members and non-union respondents under conditions corresponding to the three union-movement ideal types identified above: comprehensive unionism, low-wage unionism and high-wage unionism.<sup>22</sup>

#### 4. Preliminary empirical results

Table 1 presents the results for a series of models that do not include any country-level variables. We begin by presenting the null model (void of any explanatory variables), which tells us that 11.2% of the variance in respondents' preferences for redistribution is due to the country-year context. In Model 1, we introduce relative income and union membership and in Model 2 we add all but one of the other individual-level variables in Model 2. In Model 3, we add ideological self-placement. Finally, we add the interaction of union membership and income, estimating the interaction model without ideological self-placement (Model 4) and then with ideological self-placement (Model 5).

[Table 1]



The effects of the individual-level variables included in Model 2 consistently conform to our expectations. With one exception, establishment size, the odds ratios for all these variables are statistically significant at the 99.9% confidence level. The probability of supporting redistribution falls with household income, years of education and religiosity while it rises with age and skill specificity. Women are more likely to support redistribution than men and individuals with fixed-term employment contracts are more likely to support redistribution than individuals with open-ended employment contracts. As for establishment size, the results suggest that individuals working in smaller establishments are, on average, more supportive of redistribution than individual working in larger establishments. This effect is not significant in Model 2, but it becomes significant at the 95% confidence level when we control for ideological self-placement (Model 3). According to Model 2, union members are nearly 1.5 times more likely to support redistribution than individuals who are not union members. The difference in support for redistribution between union members and non-members is substantially larger than the difference between women and men as well as the difference between temporary and permanent workers.

Not surprisingly, the results of estimating Model 3 confirm that individuals who place themselves farther to the Right of the ideological spectrum are significantly less likely to support redistribution. With one notable exception, the effects of the other individual-level variables are robust to the inclusion of ideological self-placement as a control variable. The exception is religiosity, which turns out to have a weak positive effect on support for redistribution once we control for ideological self-placement (as opposed a strong negative effect in Model 2). More importantly for our purposes, the union effect is smaller in Model 3 than in Model 2, but it remains substantial — controlling for ideological self-placement, union members are roughly 1.3 times more likely to support redistribution than non-members — and statistically significant at the 99.9% level.

Whether or not we control for ideological self-placement, we observe a highly significant positive effect of interacting union membership with income. Based on Models 4 and 5 in Table 1, Figure 2 shows the marginal effects of union membership for each income decile, with and without controls for ideological self-placement, while Table 2 reports predicted probabilities of supporting redistribution for union and non-union members in the 2<sup>nd</sup> and 9<sup>th</sup>, controlling for ideological self-placement.<sup>23</sup> For union members and non-union respondents alike, individuals with household in-

comes in the 9<sup>th</sup> decile are much less likely to support redistribution than individuals with household incomes in the 2<sup>nd</sup> decile, but the inter-decile difference in predicted support is 5 percentage points higher for non-union respondents. Conversely, our results indicate that the union effect, i.e., the difference in support for redistribution between union members and non-union respondents, is significantly smaller in the second decile (3.4 percentage points) than in the 9<sup>th</sup> decile (8.4 percentage points). Ignoring, for the time being, heterogeneity among unions, the evidence presented in Table 2 strongly suggests that the union effect cannot be adequately explained in terms of unions making individuals more aware of their relative economic status and more sophisticated in calculating whether or not they stand to gain from redistribution. While union membership can be said to produce an enlightenment effect among low-income individuals, it also produces a solidarity effect among high-income individuals, making them more supportive of policies that do not serve their immediate self-interest. Again, the latter effect is significantly bigger than the former.

[Figure 2 and Table 2]

Controlling for ideological self-placement does not make the union effect go away and does not alter the relative importance of enlightenment and solidarity. This renders the hypothesis that the union effect is simply due self-selection less plausible. However, ideological self-placement and support for redistribution are not conceptually the same nor are they perfectly correlated. Thus it remains possible that some kind of selection effect lurks behind our estimates of the union effect. In particular, it is plausible that Right-leaning high-income individuals with some preference for redistribution are more likely to join unions than Right-leaning high-income individuals who are opposed to redistribution.

In the Appendix (Table A3), we report the results of estimating hierarchical models that interact a dummy for Ghent systems of unemployment insurance or levels of (legal) employment protection with union membership. As explained above, the motivation behind this exercise is the following: as selective incentives to join unions are high under Ghent and when employment protection is low, preferences for redistribution should be a less important determinant of union membership under these conditions. To take into account the possibility that self-selection operates primarily (or exclusively) among high-wage workers, we estimate the models for a sample restricted to respondents in the top half of the income distribution as well as the entire sample. Figure 3 summarizes the re-

sults of this exercise by plotting the marginal effects of union membership on redistribution support and 95% confidence intervals that we obtain for the two samples in different macro-contexts. For the full sample and for high-income respondents only, the union effect is slightly smaller in Ghent countries than in non-Ghent countries, but the confidence intervals overlap very extensively, and both effects are significantly different from zero. It is equally clear that the union effect does not vary with employment protection and this holds, again, for the restricted sample as well as the full sample. In short, we do not find any evidence that the effects of union membership on support for redistribution vary with selective incentives to join unions.

[Figure 3]

## 6. Union movement characteristics and membership effects

Let us now turn to the question of whether (or how) union characteristics condition the effects of union membership on support for redistribution among low-income and high-income individuals. As explained above, we address this question with country-level data and focus on two dimensions of union-movement variation across countries and over time: union density and low-income inclusiveness. The results that we obtain by estimating a model that interacts these variables with each other and with union membership and individual income (i.e., a four-way interaction model) are presented in Table 3. Again, we present results with and without controlling for ideological self-placement. As the two models presented in Table 3 yield very similar results, our discussion focuses on the model that includes ideological self-placement.

[Table 3]

To begin with, it deserves to be noted that the inclusion of country-level variables does not alter the effects of individual-level variables in any significant way and that the two country-level control variables included in these models perform as anticipated. Higher income taxation (in percent of GDP) is associated with lower average support for redistribution while higher inequality of disposable household income, measured by the Gini coefficient, is associated with higher average support for redistribution. Both associations clear the 99.9% significance threshold. Controlling for these varia-

bles, we find that average support for redistribution tends to rise with union density, but there is no significant association between low-income inclusiveness and average support for redistribution.<sup>24</sup>

Interpreting the interaction effects shown in Table 3 requires us to calculate predicted probabilities in different macro-contexts. Based on the typology of union movements proposed earlier, Table 4 reports predicted probabilities of supporting redistribution in three different union-movement contexts, defined by the following parameters:<sup>25</sup>

- Type 1 (comprehensive unionism): density=75%, inclusiveness=1;
- Type 2 (low-wage unionism): density=25%, inclusiveness=1.25;
- Type 3 (high-wage unionism): density=25%, inclusiveness=.75.

[Table 4]

We have designed Table 4 to focus attention on the differences between union members and non-union survey respondents in different income deciles and macro-contexts, but the results presented in this table also speak to cross-context differences among union members and non-union workers in different income deciles. Looking at the results from the latter perspective, we observe that union members in Type 1, i.e., in country-years characterized by comprehensive union movements, are more supportive of redistribution than union members in Type 2 and Type 3. This holds for low-wage and high-wage union members alike. The probability of supporting redistribution for a union member in the second decile of the income distribution is 85.2% in Type 1, as compared to 72.4% in Type 2. Still more strikingly, the probability of supporting redistribution for a union member in the 9<sup>th</sup> decile of the income distribution is 78.3% in Type 1, as compared to 58.9% in Type 2. At the same time, we find that respondents who are not union members are also more supportive of redistribution in Type 1 than in Type 2 or Type 3. The biggest contrast in this respect concerns 9<sup>th</sup>-decile respondents in Type 1 and Type 2: Non-unionized 9<sup>th</sup>-decile respondents have a 72.2% probability of supporting redistribution under comprehensive unionism and a 48.4% probability of supporting redistribution under low-wage unionism. While all the differences in levels of support for redistribution between Type 1 and the other two types shown in Table 5 clear the 99% threshold of statistical significance, only one of the differences between Type 2 and Type 3 is statistically signifi-

cant by conventional standards (the difference in support among 9<sup>th</sup>-decile non-union respondents, with a p-value of .003).

Summarized in this fashion, the results presented in Table 4 strongly support the argument that comprehensive union movements promote egalitarian distributive norms and that the influence of their rhetoric and behavior extends beyond union members. Alternatively, we might say that comprehensive union movements promote both enlightenment among low-wage workers and solidarity among high-wage workers.

Turning now to the union effect, the first observation to be made is that the difference between union members and non-union workers does not vary by income in the context of comprehensive unionism. For low-income and high-income respondents alike, union members in this context are roughly 6 percentage points more likely to support redistribution than non-members. By contrast, the union effect does vary with income in the other macro-contexts identified in this analysis and, importantly, these contexts condition the union effect in different ways. With comprehensive unionism as the reference point, consider first the union effect in the context of low-wage unionism. One might suppose that the rhetoric and behavior of union movements dominated by low-wage workers would promote the enlightenment of low-wage workers to a greater extent than the rhetoric and behavior of comprehensive union movements, but this turns out not to be the case. The union effect for 2<sup>nd</sup>-decile respondents is actually smaller in Type 2 than in Type 1, but the difference-in-differences is not statistically significant ( $p=.267$ ) and so we ought to conclude that the union effect among low-wage workers is more or less the same in these two contexts. On the other hand, we do find a statistically significant difference between the effects of union membership among high-wage workers ( $p=.022$ ). The difference between union and non-union respondents in the 9<sup>th</sup> decile under low-wage unionism exceeds the difference under comprehensive unionism by more than 4 percentage points. In short, low-wage union movements would appear to promote egalitarian distributive norms among high-wage union members to a greater extent than comprehensive union movements, but their influence over the preferences of unorganized workers is more limited.

Finally, our results indicate that union movements that primarily organize high-wage workers promote solidarity, or egalitarian distributive norms, among high-workers to the same extent as comprehensive union movements. By contrast, the union effect among low-wage workers is significantly

smaller in this context (the p-value for the difference-in-difference between Type 1 and Type 3 is .009). While the latter observation fits our theoretical framework very well in that we would not expect the policies, rhetoric and behavior of high-wage unions to promote enlightenment among low-wage workers, the fact that the solidarity effect among high-wage workers is comparable to that of comprehensive unions represents a puzzle that calls for further thinking and empirical exploration.

Our most important findings are that high-wage workers who belong to unions dominated by low-wage workers are particularly prone to support redistribution and that low-wage workers who belong to unions dominated by high-wage workers are not more supportive of redistribution than unionized respondents. It makes little sense to invoke self-selection as an explanation of the absence of a union effect in the latter, but perhaps self-selection explains the formed result? It is hardly far-fetched to suppose that preferences for (or against) redistribution preferences would be a particularly important factor determining whether or not high-wage workers join unions dominated by low-wage workers. It should again be noted that the results presented in Table 4 are based on a model that includes ideological self-placement as a control variable. As a further test of the self-selection hypothesis, we have estimated our models interacting employment protection and union membership for a sample restricted to country-years that fall in the lower-right quadrant of Figure 1a (union density below 45% and low-income inclusiveness above .917), broadly corresponding to our conception of low-wage unionism. The results are presented in the Appendix (Table A3). Like Figure 3, Figure 4 shows the marginal effects of union membership on redistribution support and 95% confidence intervals at opposite extremes of the EPL spectrum, for all respondents (left-hand panel) and for respondents in the top five income deciles only (right-hand panel). Consistent with the particular version of self-selection suggested above, the union effect is noticeably smaller in low-EPL context when the sample is restricted to high-income respondents, but the difference between high and low EPL contexts is not statistically significant (and, again, both effects are significantly different from zero).

[Figure 4]

## 6. Final remarks

To summarize, the analysis presented above generalizes across 21 European countries over the period 2002–14. We find that union membership is associated with support for redistribution among low-wage workers but also, indeed more significantly, among high-wage workers. While the union effect on low-wage workers can be conceived as an enlightenment effect, the effect on high-wage represents a solidarity effect. The solidarity effect might be generated by social interaction among union members with different skill endowments and household incomes, but it is more plausible, we believe, to conceive this effect as the internalization of distributive norms promoted by unions through wage bargaining.

We have identified three ideal-typical union movements, distinguished by different constellations of union density and low-income inclusiveness, and shown that union-movement characteristics condition the effect of union membership on support for redistribution. Our results suggest that comprehensive unionism and low-wage unionism promote both enlightenment among low-wage workers and solidarity among high-wage workers and that the solidarity effect rises with the share of union members drawn from the bottom half of the income distribution. At high levels of union density, enlightenment and solidarity promoted by unions diffuse beyond union members. Union movements dominated by high-wage workers promote enlightenment and solidarity to a lesser extent than union movements dominated by low-wage workers, but the solidarity effect, contrary to our expectations, is comparable to that of comprehensive union movements.

What is the relevance of our analysis for the politics of redistribution? Much of the recent comparative literature on this topic has focused on the so-called “Robin Hood paradox.” While there are theoretical reasons to expect, following Meltzer and Richard (1981), that inequality generates demand for redistribution, it is a well-established fact that countries with a more egalitarian distribution of earnings (or “market income”) tend to have more redistributive tax-transfer systems than countries with less egalitarian earnings distributions (see, e.g., Iversen and Soskice 2009). Setting comparative statistics aside, scholars working in this domain have increasingly begun to ask: Why is it that tax-transfer systems in many OECD countries have become less, not more, redistributive as inequality has risen over the last two decades?

Many other factors must surely be taken into account, but the fate of unions would seem to be an important piece of this puzzle. As documented by Pontusson (2013), union decline has become an OECD-wide trend since the 1980s, with implications for the electoral pressure on governments to engage in compensatory redistribution. We know that union members are more likely to vote than non-members and several studies, notably Kerrissey and Schofer (2013), show that the association between union membership and voting is strongest for individuals with low education and low earnings, i.e., those who stand to gain the most from redistribution (and are, as our analysis shows, also most likely to support redistribution).

The approach adopted in this paper and the empirical results that we have presented suggest that unionization trends matter not only to the electoral mobilization of low-wage workers, but also to preferences for redistribution among high-wage as well as low-wage workers. Crucially, the trends that matter from this point of view have to do with the membership composition of unions as well as changes in aggregate union density. To illustrate, Figure 5 maps how countries have moved on the two dimensions of our typology of union movements over the time period covered by our analysis (i.e., from the first to the last observation for each country between 2002 and 2014).

[Figure 5]

Figure 5 confirms that union density declined in virtually all these countries over the period 2002-14, but changes in union density appear to have been modest when compared to the massive shift away towards less low-inclusiveness in many countries, most notably Slovakia, Italy and Austria. In four countries, union movement became marginally more low-income inclusive (Great Britain, Greece, Hungary and the Netherlands) and in three countries we observe no change in inclusiveness (Denmark, Finland and Norway), but in the remaining fourteen countries union movements became less inclusive. The latter group includes Sweden and Belgium, but for the most part, what we observe in Figure 3 are shifts from low-wage unionism (Type 2) to high-wage unionism (Type 3). Our analysis suggests that that these shifts have caused a significant decline in support for redistribution among low-wage workers and, above all, among high-wage workers.

It is hardly necessary to point out, again, that the analysis presented in this paper is limited by the fact that union characteristics are measured exclusively at the country level. In the future, we hope to be able to identify or undertake surveys that allow us to explore the effects of belonging to



more or less inclusive unions in the same country. We would also like to be able to identify how long individuals have been union members and how active they are, perhaps also whether or not other members of their household are union members. Yet another avenue for future research might involve measuring distributive norms directly.<sup>26</sup> Finally, we are keen to find out whether (or how) the effects of union membership compare to effects of membership in other kinds of intermediary associations, allowing us to parse more cleanly between social affinity and distributive norms as sources of other-regarding support for redistribution.

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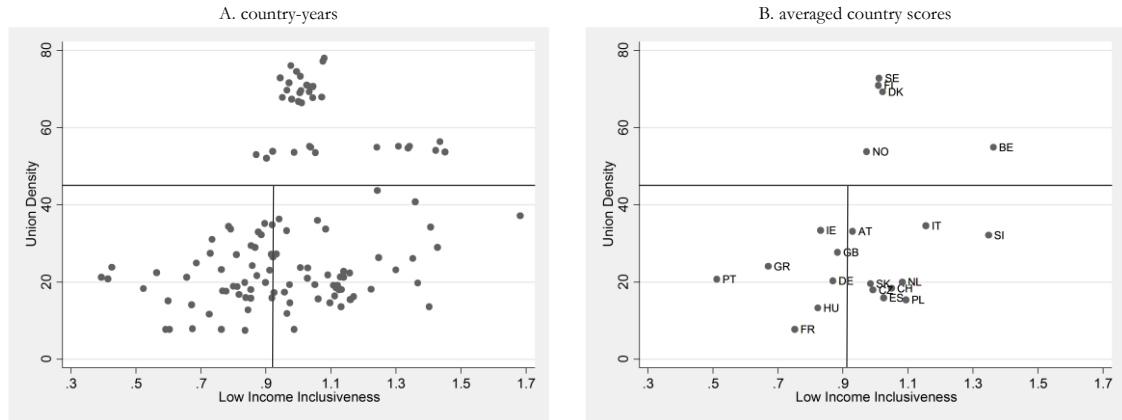
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## Tables and Figures

**Figure 1.** Unions' encompassment and inclusiveness



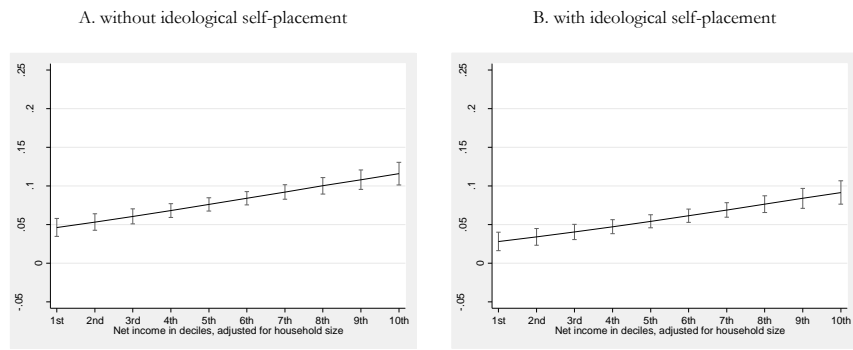
Data: Visser 2015, ESS 2002 to 2014.

**Table 1.** Determinants of redistribution support at the individual level, two-level random intercept logit models

| Variables   | Model 0        | Model 1            | Model 2            | Model 3            | Model 4            | Model 5            |
|---|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>FIXED EFFECTS</b>                                |                |                    |                    |                    |                    |                    |
| <i>Level 1</i>                                      |                |                    |                    |                    |                    |                    |
| Union membership                                    |                | 1.481***<br>(.026) | 1.445***<br>(.027) | 1.312***<br>(.026) | 1.433***<br>(.027) | 1.300***<br>(.025) |
| Income  |                | .900***<br>(.002)  | .906***<br>(.003)  | .914***<br>(.003)  | .899***<br>(.003)  | .906***<br>(.003)  |
| Age   |                |                    | 1.010***<br>(.001) | 1.010***<br>(.001) | 1.010***<br>(.001) | 1.010***<br>(.001) |
| Gender (ref. Female)                                |                |                    | .697***<br>(.011)  | .744***<br>(.012)  | .698***<br>(.011)  | .746***<br>(.012)  |
| Education   |                |                    | .959***<br>(.002)  | .949***<br>(.002)  | .959***<br>(.002)  | .949***<br>(.002)  |
| Relative Skill Specificity                          |                |                    | 1.139***<br>(.015) | 1.129***<br>(.016) | 1.139***<br>(.014) | 1.128***<br>(.016) |
| Fixed Term Employment                               |                |                    | 1.216***<br>(.031) | 1.202***<br>(.033) | 1.213***<br>(.031) | 1.199***<br>(.033) |
| Establishment Size                                  |                |                    | .992<br>(.006)     | .986*<br>(.006)    | .993<br>(.006)     | .987*<br>(.006)    |
| Religiosity   |                |                    | .985***<br>(.003)  | 1.007*<br>(.003)   | .985***<br>(.003)  | 1.007*<br>(.003)   |
| Left-Right Self-placement                           |                |                    |                    | .794***<br>(.003)  |                    | .794***<br>(.003)  |
| <i>Level 1 interactions</i>                         |                |                    |                    |                    |                    |                    |
| Income * Union membership                           |                |                    |                    |                    | 1.025***<br>(.006) | 1.025***<br>(.006) |
| <b>RANDOM EFFECTS</b>                               |                |                    |                    |                    |                    |                    |
| Between-country variance ( $\sigma^2_{\text{id}}$ ) | .413<br>(.058) | .515<br>(.068)     | .505<br>(.066)     | .470<br>(.062)     | .504<br>(.066)     | .469<br>(.062)     |
| Log likelihood                                      | -69'332        | -56'012            | -52'326            | -47'758            | -52'316            | -47'749            |
| Wald chi <sup>2</sup>                               | .              | 2'489***           | 3'480***           | 6'003***           | 3'509***           | 6'025***           |
| ICC   | .112           | .135               | .133               | .125               | .133               | .125               |
| Chi <sup>2</sup>                                    | 7'810***       | 6'796***           | 6'054***           | 5'111***           | 6'040***           | 5'099***           |
| N Level 2   | 122            | 122                | 122                | 122                | 122                | 122                |
| N Level 1   | 114'757        | 94'229             | 89'140             | 83'421             | 89'140             | 83'421             |

Log odds ratios. Standard errors in brackets - \*\*\* significant at .01%, \*\* significant at 1%, \* significant at 5%, † significant at 10% - continuous variables centered at their sample mean.  
European Social Survey 2002, 2004, 2006, 2008, 2010, 2012 and 2014 maximum likelihood estimation using adaptive Gaussian quadrature.

**Figure 2.** Marginal effects of union membership conditional on income with 95% confidence intervals



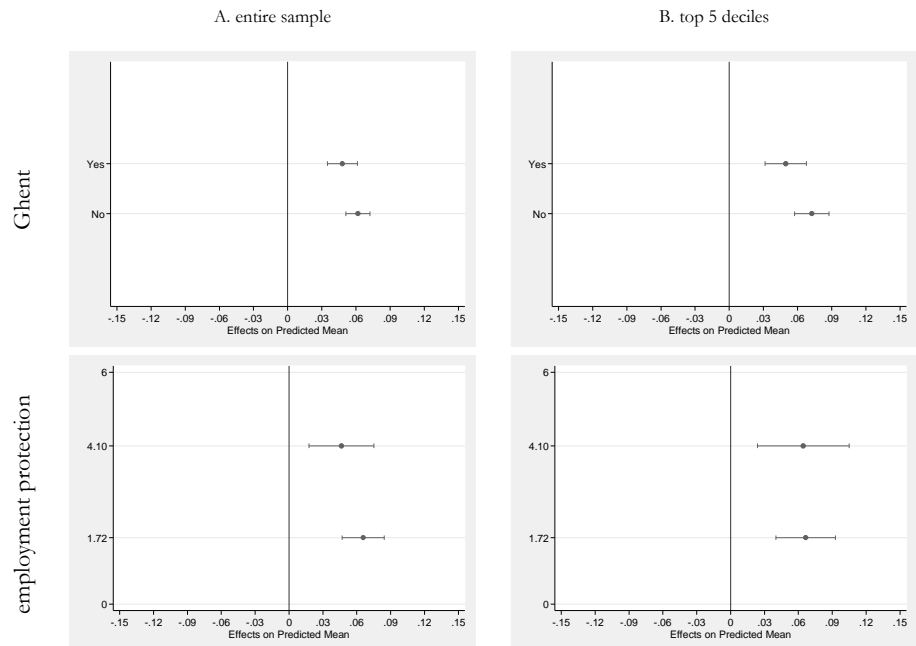
**Table 2.** Predicted probabilities of support for redistribution conditional on union membership and income, with ideological self-placement as control

|                   | income                 |                        | <i>diff</i> |
|-------------------|------------------------|------------------------|-------------|
|                   | 2 <sup>nd</sup> decile | 9 <sup>th</sup> decile |             |
| union members     | .760***<br>(.012)      | .655***<br>(.015)      | .105***     |
| non union members | .726***<br>(.013)      | .571***<br>(.016)      | .155***     |
| <i>diff</i>       | .034***                | .084***                | .050***     |

Standard errors in brackets - \*\*\* significant at .01%, \*\* significant at 1%, \* significant at 5%, † significant at 10% - based on fixed effects parameters of model 5, table 1.  
European Social Survey 2002, 2004, 2006, 2008, 2010, 2012 and 2014; t test of equality hypothesis for differences.



**Figure 3.** Marginal effects of union membership conditional on Ghent unemployment insurance or employment protection with 95% confidence intervals



Based on models 8, 9, 10 and 11, table A3 in the appendix.

High EPL corresponds to employment protection of 4.1 as in Portugal, low EPL corresponds to employment protection of 1.72 as in Great Britain. Income set to sample mean.

**Table 3.** Conditioning of the union membership effect on redistribution support by low-income inclusiveness and encompassment of national union movements, two-level random intercept logit models

| Variables  | Model 6            | Model 7            |
|--|--------------------|--------------------|
| <b>FIXED EFFECTS</b>   |                    |                    |
| <i>Level 1</i>   |                    |                    |
| Union Membership   | 1.427***<br>(.030) | 1.303***<br>(.029) |
| Income   | .900***<br>(.003)  | .909***<br>(.004)  |
| Age  | 1.010***<br>(.001) | 1.009***<br>(.001) |
| Gender (ref. Female)   | .702***<br>(.011)  | .749***<br>(.012)  |
| Education  | .960***<br>(.002)  | .950***<br>(.002)  |
| Relative Skill Specificity   | 1.137***<br>(.015) | 1.126***<br>(.016) |
| Fixed Term Employment  | 1.211***<br>(.031) | 1.198***<br>(.033) |
| Establishment Size   | .992<br>(.006)     | .986*<br>(.006)    |
| Religiosity  | .985***<br>(.003)  | 1.006*<br>(.003)   |
| Left-Right Self-Placement  |                    | .794***<br>(.003)  |
| <i>Level 1 interaction</i>   |                    |                    |
| Union Membership * Income  | 1.025***<br>(.007) | 1.018*<br>(.008)   |
| <i>Level 2</i>   |                    |                    |
| Union Density  | 1.008*<br>(.004)   | 1.012***<br>(.004) |
| Low-Income Inclusiveness   | 1.195<br>(.284)    | .971<br>(.228)     |
| Income Taxation  | .894***<br>(.013)  | .900***<br>(.012)  |
| Gini   | 1.073***<br>(.016) | 1.067***<br>(.016) |
| <i>Level 2 interaction</i>   |                    |                    |
| Union Density * Low-Income Inclusiveness                             | 1.058***<br>(.015) | 1.051***<br>(.015) |
| <i>Cross Level Interaction</i>                                       |                    |                    |
| Union Density * Union Membership                                     | 1.005***<br>(.001) | 1.003***<br>(.001) |
| Union Density * Income   | 1.001***<br>(.000) | 1.001***<br>(.000) |
| Union Density * Union Membership * Income                            | .999**<br>(.000)   | .999**<br>(.000)   |
| Low-Income Inclusiveness * Union Membership                          | 1.088<br>(.112)    | 1.170<br>(.127)    |
| Low-Income Inclusiveness * Income                                    | .958*<br>(.018)    | .950**<br>(.019)   |
| Low-Income Inclusiveness * Union Membership * Income                 | 1.038<br>(.037)    | 1.033<br>(.039)    |
| Union Density * Low-Income Inclusiveness * Union Membership          | .977***<br>(.006)  | .980**<br>(.006)   |
| Union Density * Low-Income Inclusiveness * Income                    | 1.001<br>(.001)    | 1.001<br>(.001)    |
| Union Density * Low-Income Inclusiveness * Union Membership * Income | 1.001<br>(.002)    | 1.001<br>(.002)    |
| <b>RANDOM EFFECTS</b>  |                    |                    |
| Between-country variance ( $\sigma^2_{\mu}$ )                        | .229<br>(.031)     | .220<br>(.030)     |
| Log likelihood   | -52'238            | -47'676            |
| Wald chi <sup>2</sup>  | 3'674***           | 6'166***           |
| ICC  | .065               | .063               |
| Chi <sup>2</sup>   | 2'778***           | 2'393***           |
| N Level 2  | 122                | 122                |
| N Level 1  | 89'140             | 83'421             |

Log odds ratios. Standard errors in brackets - \*\*\* significant at .01%, \*\* significant at 1%, \* significant at 5%, † significant at 10%.

Continuous variables centered at their sample mean.

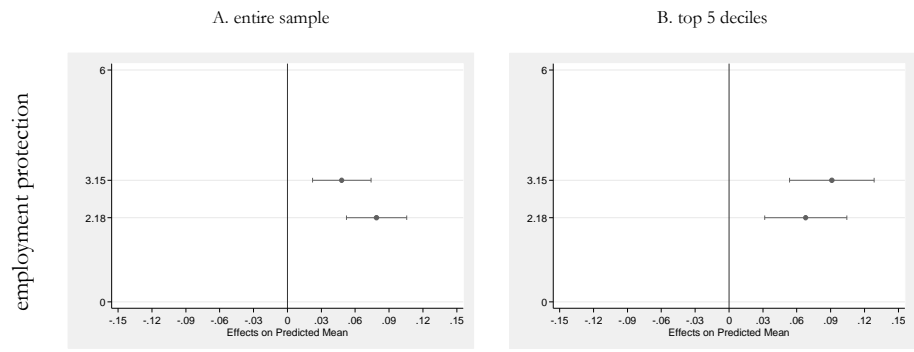
European Social Survey 2002, 2004, 2006, 2008, 2010, 2012 and 2014; maximum likelihood estimation using adaptive Gaussian quadrature.

**Table 4.** Predicted probabilities of support for redistribution among respondents in countries with different national union movements, controlling for ideological self-placement

|             |                  | income                 |                                       |             |
|-------------|------------------|------------------------|---------------------------------------|-------------|
|             |                  | 2 <sup>nd</sup> decile | 9 <sup>th</sup> decile                | <i>diff</i> |
| type 1      | Union Member     | .852***<br>(.020)      | Union Member<br>.783***<br>(.027)     | .069***     |
|             | Non Union Member | .790***<br>(.027)      | Non Union Member<br>.722***<br>(.032) | .068***     |
| <i>diff</i> |                  | .062***                | .061***                               | .001        |
| type 2      | Union Member     | .724***<br>(.019)      | Union Member<br>.589***<br>(.023)     | .135***     |
|             | Non Union Member | .680***<br>(.018)      | Non Union Member<br>.484***<br>(.020) | .196***     |
| <i>diff</i> |                  | .044***                | .105***                               | .061**      |
| type 3      | Union Member     | .727***<br>(.018)      | Union Member<br>.616***<br>(.020)     | .111***     |
|             | Non Union Member | .707***<br>(.016)      | Non Union Member<br>.560***<br>(.019) | .147***     |
| <i>diff</i> |                  | .020                   | .056***                               | .036†       |

Standard errors in brackets - \*\*\* significant at .01%, \*\* significant at 1%, \* significant at 5%, † significant at 10% - based on model 7, table 3.  
 Type 1 corresponds to low-income inclusiveness of 1.00 and union density of 75, type 2 corresponds to low-income inclusiveness of 1.25 and union density of 25, and type 3 corresponds to low-income inclusiveness of .75 and union density of 25.  
 European Social Survey 2002, 2004, 2006, 2008, 2010, 2012 and 2014; t test of equality hypothesis for differences.

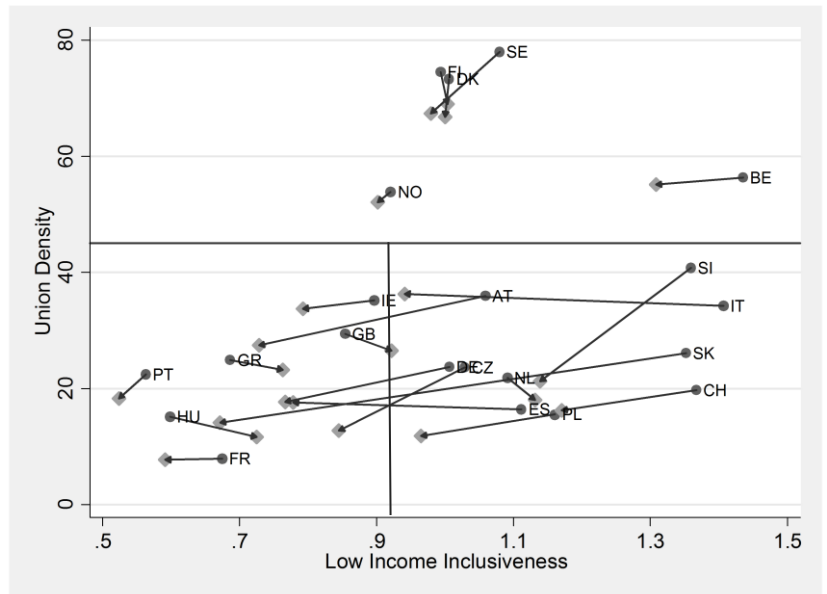
**Figure 4.** Marginal effects of union membership in type 2 unionism conditional on employment protection with 95% confidence intervals



Based on models 12 and 13, table A3 in the appendix.

High EPL corresponds to employment protection of 3.15 as in Italy, low EPL corresponds to employment protection of 2.18 as in Switzerland. Income set at sample mean.

**Figure 5.** Movement of countries from earliest to latest observation, paired-coordinate plot



Data: Visser 2015, ESS 2002 to 2014.

## Appendix

**Table A1.** Country-years included in analysis

| Country        | 2002 | 2004 | 2006 | Year<br>2008 | 2010 | 2012 | 2014 |
|----------------|------|------|------|--------------|------|------|------|
| Austria        | x    | x    | x    | .            | .    | .    | x    |
| Belgium        | x    | x    | x    | x            | x    | x    | x    |
| Czech Republic | x    | x    | .    | x            | x    | x    | x    |
| Denmark        | x    | x    | x    | x            | x    | x    | x    |
| Finland        | x    | x    | x    | x            | x    | x    | x    |
| France         | .    | x    | x    | x            | x    | x    | x    |
| Germany        | x    | x    | x    | x            | x    | x    | x    |
| Great Britain  | x    | x    | x    | x            | x    | x    | .    |
| Greece         | x    | x    | .    | x            | x    | .    | .    |
| Hungary        | .    | .    | .    | x            | x    | x    | .    |
| Ireland        | .    | x    | x    | x            | x    | x    | x    |
| Italy          | x    | x    | .    | .            | .    | x    | .    |
| Netherlands    | x    | x    | x    | x            | x    | x    | x    |
| Norway         | x    | x    | x    | x            | x    | x    | x    |
| Poland         | x    | x    | x    | x            | x    | x    | x    |
| Portugal       | x    | x    | x    | x            | .    | x    | .    |
| Slovakia       | .    | x    | x    | .            | x    | x    | .    |
| Slovenia       | x    | x    | x    | x            | x    | x    | x    |
| Spain          | x    | x    | x    | x            | x    | .    | .    |
| Sweden         | x    | x    | x    | x            | x    | x    | x    |
| Switzerland    | x    | x    | x    | x            | x    | x    | x    |

**Table A2a.** Descriptive Statistics

| Variable                   | N       | MEAN   | S.D  | MODUS                  | MEDIAN                 |
|----------------------------|---------|--------|------|------------------------|------------------------|
| Redistribution Support     | 114'895 | -      | -    | Agree                  | -                      |
| Low-income Inclusiveness   | 114'895 | .962   | .001 | -                      | -                      |
| Union Density              | 114'895 | 33.952 | .062 | -                      | -                      |
| Ghent                      | 114'895 | -      | -    | Non-Ghent              | -                      |
| Employment Protection      | 112'484 | 2.589  | .001 | -                      | 2.62                   |
| Income Taxation            | 114'895 | 9.171  | .014 | -                      | -                      |
| Gini                       | 114'895 | 27.929 | .011 | -                      | -                      |
| Union Membership           | 113'674 | -      | -    | Non-member             | -                      |
| Income                     | 95'092  | 5.314  | .009 | 3 <sup>rd</sup> decile | 5 <sup>th</sup> decile |
| Age                        | 114'895 | 42.105 | .037 | -                      | -                      |
| Gender                     | 114'844 | -      | -    | Male                   | -                      |
| Education                  | 114'102 | 13.628 | .012 | -                      | -                      |
| Relative Skill Specificity | 110'563 | 1.149  | .002 | -                      | -                      |
| Fixed-Term Employment      | 114'895 | -      | -    | Permanent Employment   | -                      |
| Establishment Size         | 112'687 | 2.565  | .004 | -                      | 2                      |
| Religiosity                | 114'040 | 4.248  | .009 | -                      | 5                      |
| Left-Right Self-Placement  | 104'841 | 5.077  | .006 | -                      | 5                      |

**Table A2b.** Macro variables per country (average values)

| Country        | N              | Redistribution Support % | Low-income inclusiveness | Union Density | Ghent    | Employment Protection | Income Taxes | Gini         |
|----------------|----------------|--------------------------|--------------------------|---------------|----------|-----------------------|--------------|--------------|
| Austria        | 4'595          | 68.87                    | .93                      | 33.11         | No       | 2.69                  | 9.56         | 27.28        |
| Belgium        | 6'057          | 65.76                    | 1.36                     | 54.86         | Yes      | 2.84                  | 12.70        | 25.79        |
| Czech Republic | 6'357          | 53.40                    | .99                      | 17.94         | No       | 2.83                  | 3.88         | 24.59        |
| Denmark        | 5'781          | 36.56                    | 1.02                     | 69.25         | Yes      | 2.45                  | 24.71        | 23.61        |
| Finland        | 7'128          | 71.59                    | 1.01                     | 70.95         | Yes      | 2.07                  | 12.85        | 25.80        |
| France         | 5'672          | 75.62                    | .75                      | 7.69          | No       | 2.70                  | 7.51         | 29.05        |
| Germany        | 9'705          | 62.69                    | .87                      | 20.29         | No       | 2.95                  | 8.85         | 28.26        |
| Great Britain  | 6'431          | 57.44                    | .88                      | 27.69         | No       | 1.72                  | 9.89         | 34.97        |
| Greece         | 4'140          | 87.95                    | .67                      | 24.01         | No       | 2.93                  | 4.53         | 32.90        |
| Hungary        | 2'273          | 83.59                    | .82                      | 13.21         | No       | 2.4                   | 6.41         | 27.19        |
| Ireland        | 5'525          | 70.38                    | .83                      | 33.41         | No       | 1.89                  | 8.63         | 29.69        |
| Italy          | 1'694          | 78.39                    | 1.16                     | 34.54         | No       | 3.15                  | 10.42        | 32.98        |
| Netherlands    | 6'479          | 52.29                    | 1.08                     | 20.00         | No       | 2.91                  | 6.91         | 26.12        |
| Norway         | 7'044          | 58.51                    | .97                      | 53.81         | No       | 2.38                  | 8.87         | 24.45        |
| Poland         | 5'643          | 73.62                    | 1.09                     | 15.36         | No       | 2.45                  | 4.46         | 30.19        |
| Portugal       | 4'317          | 87.95                    | .51                      | 20.76         | No       | 3.93                  | 2 5.43       | 35.52        |
| Slovakia       | 3'232          | 70.73                    | .98                      | 19.49         | No       | 2.69                  | 2.94         | 26.44        |
| Slovenia       | 4'032          | 82.29                    | 1.35                     | 32.10         | No       | 2.83                  | 5.52         | 23.27        |
| Spain          | 4'814          | 77.61                    | 1.03                     | 15.90         | No       | 2.76                  | 6.64         | 31.78        |
| Sweden         | 7'245          | 64.01                    | 1.01                     | 72.82         | Yes      | 2.58                  | 13.63        | 23.74        |
| Switzerland    | 6'731          | 63.77                    | 1.05                     | 18.38         | No       | 2.18                  | 8.56         | 29.45        |
| <i>Total</i>   | <i>114'895</i> | <i>66.42</i>             | <i>.97</i>               | <i>33.95</i>  | <i>-</i> | <i>2.59</i>           | <i>9.17</i>  | <i>27.92</i> |

**Table A3.** Conditioning of union membership effect on redistribution support by Ghent and level of employment protection, two-level random intercept logit models

| Variables  | Model 8            | Model 9 <sup>a</sup> | Model 10              | Model 11 <sup>a</sup> | Model 12           | Model 13 <sup>a</sup> |
|--|--------------------|----------------------|-----------------------|-----------------------|--------------------|-----------------------|
|  | Ghent              |                      | employment protection |                       |                    |                       |
|  |                    |                      | entire sample         | type 2                |                    |                       |
| <b>FIXED EFFECTS</b>                             |                    |                      |                       |                       |                    |                       |
| <i>Level 1</i>                                   |                    |                      |                       |                       |                    |                       |
| Union membership                                 | 1.311***<br>(.031) | 1.354***<br>(.045)   | 1.312***<br>(.026)    | 1.340***<br>(.037)    | 1.306***<br>(.063) | 1.377***<br>(.091)    |
| Income   | .914***<br>(.003)  | .875***<br>(.007)    | .915***<br>(.003)     | .877***<br>(.007)     | .897***<br>(.005)  | .861***<br>(.014)     |
| Age  | 1.010***<br>(.001) | 1.008***<br>(.001)   | 1.010***<br>(.001)    | 1.008***<br>(.001)    | 1.006***<br>(.001) | 1.005*<br>(.002)      |
| Gender (ref. Female)                             | .746***<br>(.012)  | .776***<br>(.018)    | .748***<br>(.012)     | .778***<br>(.018)     | .784***<br>(.026)  | .837***<br>(.039)     |
| Education  | .950***<br>(.002)  | .948***<br>(.003)    | .951***<br>(.002)     | .950***<br>(.003)     | .953***<br>(.005)  | .963***<br>(.007)     |
| Relative Skill Specificity                       | 1.128***<br>(.016) | 1.115***<br>(.024)   | 1.129***<br>(.016)    | 1.115***<br>(.024)    | 1.149***<br>(.032) | 1.122***<br>(.047)    |
| Fixed Term Employment                            | 1.201***<br>(.033) | 1.320***<br>(.055)   | 1.198***<br>(.033)    | 1.320***<br>(.056)    | 1.165**<br>(.060)  | 1.401**<br>(.107)     |
| Establishment Size                               | .986*<br>(.006)    | .972**<br>(.008)     | .985*<br>(.006)       | .973**<br>(.008)      | 1.005<br>(.012)    | 1.006<br>(.017)       |
| Religiosity                                      | 1.007*<br>(.003)   | 1.015***<br>(.004)   | 1.006*<br>(.003)      | 1.014***<br>(.004)    | 1.007<br>(.006)    | 1.011<br>(.008)       |
| Left-Right Self-Placement                        | .795***<br>(.003)  | .759***<br>(.005)    | .791***<br>(.003)     | .755***<br>(.005)     | .825***<br>(.007)  | .796***<br>(.009)     |
| <i>Level 2</i>                                   |                    |                      |                       |                       |                    |                       |
| Ghent System                                     | 2.088***<br>(.366) | 2.300***<br>(.436)   |                       |                       |                    |                       |
| Employment Protection                            |                    |                      | 1.246*<br>(.137)      | 1.298*<br>(.158)      | 1.060<br>(.383)    | 1.108<br>(.422)       |
| Income Taxation                                  | .891***<br>(.013)  | .894***<br>(.014)    | .943***<br>(.010)     | .950***<br>(.012)     | .940<br>(.046)     | .948<br>(.049)        |
| Gini   | 1.069***<br>(.015) | 1.076***<br>(.016)   | 1.062***<br>(.016)    | 1.064***<br>(.017)    | 1.109**<br>(.042)  | 1.104*<br>(.044)      |
| <i>Cross Level Interaction</i>                   |                    |                      |                       |                       |                    |                       |
| Ghent System * Union Membership                  | 1.026<br>(.041)    | .980<br>(.055)       |                       |                       |                    |                       |
| Employment Protection * Union Membership         |                    |                      | .983<br>(.046)        | 1.022<br>(.066)       | .908<br>(.136)     | 1.295<br>(.266)       |
| <b>RANDOM EFFECTS</b>                            |                    |                      |                       |                       |                    |                       |
| Between-country variance ( $\sigma^2_{\omega}$ ) | .237<br>(.032)     | .270<br>(.038)       | .264<br>(.036)        | .312<br>(.044)        | .271<br>(.071)     | .291<br>(.079)        |
| Log likelihood                                   | -47'718            | -24'081              | -47'021               | -23'679               | -11'246            | -5'705                |
| Wald chi <sup>2</sup>                            | 6'089***           | 3'366***             | 6'018***              | 3'332***              | 1'295***           | 639***                |
| ICC  | .067               | .076                 | .074                  | .087                  | .076               | .081                  |
| Chi <sup>2</sup>                                 | 2'532***           | 1'367***             | 3'213***              | 1'758***              | 698***             | 396***                |
| N Level 2  | 122                | 122                  | 118                   | 118                   | 32                 | 32                    |
| N Level 1  | 83'421             | 40'456               | 81'942                | 39'753                | 19'240             | 9'302                 |

Log odds ratios. Standard errors in brackets - \*\*\* significant at .01%, \*\* significant at 1%, \* significant at 5%, † significant at 10% - continuous variables centered at their sample mean.

<sup>a</sup> Sample restricted to affluent respondents (6<sup>th</sup> income decile and above).

European Social Survey 2002, 2004, 2006, 2008, 2010, 2012 and 2014; maximum likelihood estimation using adaptive Gaussian quadrature.

**Note.** No data on employment protection for Slovenia 2002, 04, 06 and 08.



## Endnotes

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- <sup>1</sup> The percentage of union members drawn from the bottom half of the income distribution may be a more intuitive measure of low-income inclusiveness, but it is also more sensitive to high rates of non-response to the union membership question among low-income respondents in a handful of country surveys. The ratio-of-density-ratios measure mitigates this problem in that the density ratio in each half of the income distribution is the ratio of respondents who identify as union members to all respondents who answer the union membership question. Note the income distribution that we use to generate this measure is the distribution of disposable household income among employed survey respondents aged 15-65. See Becher and Pontusson (2011) for further discussion of methodological issues and descriptive data on unionization by income.
- <sup>2</sup> To be specified more precisely below, our survey-based measure of relative income refers to disposable household income. Throughout the text, we will use the terms “low-wage (high-wage) workers” and “low-income (high-income) respondents” respondents interchangeably.
- <sup>3</sup> Needless to say perhaps, we are keenly aware that the institutional structures of national union movements also differ. Some union movements are more fragmented than others and the sources of fragmentation (occupational, political, religious) differ. See Arndt and Rennwald (2015) for an analysis of how these differences condition the effect of union membership on party choice in national elections.
- <sup>4</sup> Cregan, Bartram and Stanton (2009) apply social identity theory to internal union dynamics.
- <sup>5</sup> The ESS does not ask any questions about the degree to which respondents are active in unions (or other associations), nor does it ask about the length of time that respondents have been union members. In future research, we hope to identify (or undertake) surveys that will allow us to tap into these dimensions of union membership.
- <sup>6</sup> Self-selection is a common objection to Putnam’s claim that participation in voluntary associations breeds interpersonal trust and political engagement: see van Ingen and van der Meer (2016) for a review of relevant literature.
- <sup>7</sup> In our view, the EPL test represents an improvement on Donnelly’s (2014) use of collective-bargaining coverage as an “instrument” to capture (absence of) selective incentives to join unions.
- <sup>8</sup> The problem of self-selection might also be addressed by estimating bivariate probit model (Heckman 1979, Guo and Fraser 2010). In our case, such a model would require the identification of a theoretically meaningful “exclusion criterion” that is associated with union membership, but not with support for redistribution. None of the variables in our current dataset satisfies these criteria.
- <sup>9</sup> Having presented a panel-data analysis that calls into question the claim that civic participation breeds political participation, van Ingen and van der Meer (2016:100) note that “our data did not allow us to separate between types of associations” and propose that “future research may want to examine whether there are special circumstances under which political socialization effects occur.”
- <sup>10</sup> While some unions have significant numbers of unemployed and retired members, this is not the norm across the 21 countries included in our analysis.
- <sup>11</sup> At the two extremes, we have 440 respondents for Italy in 2012 and 1,534 respondents for Germany in 2014. For further descriptive statistics, see Tables A2a and A2b in the Appendix.
- <sup>12</sup> See Aalberg (2003) and Jæger (2006) for useful discussions of semantics and substantive meaning of the redistribution question on which our dependent variable is based. Cavaille and Trump (2015) argue persuasively that this question taps into one of two distinct dimensions of support for redistribution,

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which they refer to as "redistribution from the rich." Whether and how union membership matters to the other dimension — "redistribution to the poor" — is an interesting topic for future research.

- <sup>13</sup> Our solution to the problem that the top income band does not have an upper boundary relies on the formula proposed by Hout (2004), extrapolating from the next-to-last category's midpoint and the frequencies of both the next-to-last and last (open-ended) categories a formula based on the Pareto curve. We thank Noam Lupu for sharing his code to convert ESS income measure in the manner described here. The fact that the income variable pertains to household income may be problematic in that some poorly-paid workers will be coded as "high-income" by virtue of living with well-paid workers, but household income surely matters to (arguably dominates) self-interested calculations of the costs/benefits of redistribution. In any case, this is an unavoidable problem shared by most empirical studies of preferences for redistribution.
- <sup>14</sup> Tests with income as an ordinal variable indicate that the effect of income on support for redistribution is indeed linear.
- <sup>15</sup> We would also like to control for employment in the public sector, since public-sector employees are, in most countries, more likely to belong to a union and more supportive of redistribution. However, only the last four ESS waves allow us to identify public-sector employees and maximizing the number of "level 2 units," i.e., country-years, is critical to estimating our macro-micro interaction models. In a companion paper (shortly available upon request), we explore how public-sector unionism differs from private-sector unionism and how these differences condition the effects of union membership on support for redistribution. For now, suffice it to say that estimating out models without macro-micro interactions with data for 2008-14 only and with public-sector employment as a control variable yields results that are very similar to those presented in Table 1.
- <sup>16</sup> A relative skill specificity value for every ISCO 88 category is available online [www.people.fas.harvard.edu/~iversen/SkillSpecificity.htm](http://www.people.fas.harvard.edu/~iversen/SkillSpecificity.htm) (last accessed March 9, 2016). Our recoding of ISCO 08 into ISCO 88 for ESS 2012 and 2014 is based on information from the ILO, available online at [www.ilo.org/public/english/bureau/stat/isco/docs/corrtab88-0](http://www.ilo.org/public/english/bureau/stat/isco/docs/corrtab88-0) (last accessed March 9, 2016). In our sample, average relative skill specificity is 1.15 for union members and 1.13 for non-members. On average, however, the probability of being a union member is 26% for respondent with low levels of specific skills (.05) and 39% for a respondent with high levels of specific skills (4.00). These differences are significant at the .01% level.
- <sup>17</sup> The ESS provides 5 possible responses to the question about establishment size: less than 10 employees, 10-25 employees, 25-99 employees, 100-499 employees and 500 or more employees.
- <sup>18</sup> In our sample (again, restricted to working-age ESS respondents), the average age of union members is 44.5 years, as compared to 41.2 years for non-members. On average, the probability of being a union member is 21% for respondents aged 25 and 37% for respondents aged 55. These differences are significant at the .01% level. See Pontusson and Rueda (2010) on the rightward ideological shift of the median voter in OECD countries over the period 1970-2000.
- <sup>19</sup> Zero stands for respondents who identify themselves as being not religious or having a strong left ideology; 10 for those who declare themselves to be very religious or being on the far right side of the left-right axis. The religiosity question reads as follows: "Regardless of whether you belong to a particular religion, how religious would you say you are?" The ideological self-placement question goes as follows: "In politics people sometimes talk of "left" and right". Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?"
- <sup>20</sup> Source: <http://www.oecd.org/els/emp/oecdindicatorsofemploymentprotection.htm>.
- <sup>21</sup> Sources: income taxation in percent of GDP from OECD (<http://stats.oecd.org>) and Gini coefficients from Solt (2014).

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- <sup>22</sup> We obtain very similar results if we sort country-years into three groups based on the grid in Figure 1 and estimate interactions of union membership and income for each group separately. The obvious advantage of the four-way interaction model is that it avoids the problem of arbitrary cut-offs for coding country-years.
- <sup>23</sup> These marginal effects and predicted probabilities are for male respondents aged 45 with an average level of skill specificity (1.149), with a permanent employment contract, working in an establishment of average size (2.5, corresponding to the low end of the 25-99 category), having spent an average number of years in full time education (13.5) and reporting an average level of religiosity (4) as well as average Left-Right placement (5).
- <sup>24</sup> It is noteworthy that the direct effect of union density becomes more significant when we control for ideological self-placement at the individual level.
- <sup>25</sup> These predicted probabilities are again based on the values of individual control variables specified in note 24. The country-level control variables have been set at the sample means (9.171 for income taxation and 27.919 for the Gini coefficient).
- <sup>26</sup> See Osberg and Smeeding (2006) for an interesting attempt to tackle the question of distributive norms through comparative analysis.