UNEQUAL DEMOCRACIES

Working paper n°12

January, 2020

Heterogeneity of the Trade Union Membership Effect on Support for Redistribution in Western Europe

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European Research Council
Established by the European Commission

UNIVERSITÉ DE GENÈVE

ABSTRACT:

Many analyses of cross-national survey data find that union members are more likely to be supportive of redistributive policies than respondents who are not union members. Analyzing British, German, and Swedish survey data, this paper demonstrates that the union membership effect on support for redistribution varies depending on the kinds of unions to which individuals belong. Regardless of their own income, wage-earners who belong to unions whose membership encompasses a wide swath of the income distribution tend to be more supportive of redistribution than members of unions that are less inclusive. This suggests that the decline of union membership among poorly paid wage-earners—a common trend across OECD countries—has more far-reaching implications for the politics of redistribution than commonly recognized.

ACKNOWLEDGEMENTS:

The research for this paper has been financed by the European Research Council (Grant Agreement no. 741538). Earlier versions of the paper were presented at the International Conference of Europeanists (Madrid, June 2019), two workshops at the University of Geneva (December 2018 and June 2019) and a workshop at the University of Zürich (December 2019). For helpful comments, we are indebted to Tarik Aboud-Chadi, Paul Marx, Line Rennwald and Hanna Schwander.

This paper forms part of a larger research agenda that explores the implications of union decline and changes in the composition of union membership for the politics of rising inequality and compensatory redistribution. As documented by Pontusson (2013), union density has declined sharply in most OECD countries since the 1980s. Less commonly recognized, the socio-economic characteristics of union members have changed as union membership has held up better in the public sector than in the private sector and, relatedly, has held up better among white-collar professionals (and semi-professionals) than among unskilled workers. In most countries, union members occupy higher positions in the income distribution today than they did thirty years ago and they are more likely to belong to unions that do not organize many low-wage workers (Becher and Pontusson 2011, Pontusson 2013, Mosimann and Pontusson 2017).

The most obvious consequences of these developments have to do with electoral turnout and other forms of political participation. For the US, Kerrissey and Schofer (2013) demonstrate convincingly that union members are more likely to participate in politics than non-members and that this is particularly true for citizens with low education and income. Arguably, the decline of unionization among these citizens is an important factor in rising income and class bias in voter turnout, reducing the electoral pressure on political parties to pursue redistributive policies (see, e.g., Flavin and Radcliffe 2011, Armingeon and Schädel 2015).

A second channel whereby the level of unionization and the characteristics of unions may affect the politics of inequality has to do with the effects of union membership on policy preferences among politically active citizens.[1] In previous work (Mosimann an Pontusson 2017), we argued that unions which organize low-wage workers promote solidarity among their high-wage members as well as enlightenment among their low-wage members and showed, with country-level data, that many West European union movements have become less "low-income-inclusive"

over time. In this follow-up paper, we explore heterogeneity in the effect of union membership on support for redistribution by leveraging within-country variation in union characteristics, conceived in terms of inclusiveness or, in other words, encompassment of a wide range of the income distribution.

Following a brief recapitulation of our core ideas and earlier results, we will present the results of three complementary analyses. To begin with, we present the results of an analysis of data from the October 1974 British Election Study. Among the many (non-US) national opinion surveys that we have consulted, this is a rare instance of a survey that asks not only whether or not respondents are union members and about their preferences for redistribution, as many national and cross-national surveys do, but also asks unionized respondents to identify the union to which they belong. Following conventional practice in the literature on British industrial relations, we distinguish between general unions, sectoral (industrial) unions and occupational (craft) unions. Our results indicate that low-wage workers who belong to general and sectoral unions are more supportive of redistribution than low-wage workers who belong to occupational unions and that high-wage workers who belong to general unions are particularly supportive of redistribution.

Our second analysis relies on Swedish survey data over the period 1986-2001 and focuses on white-collar employees. The surveys on which this analysis is based allow us to identify union members as belonging to unions affiliated with different trade-union confederations. Swedish unions organize either blue-collar workers (*arbetare*) or white-collar employees (*tjänstemän*) and there are two confederations of white-collar unions, TCO and SACO. While TCO unions are organized on a sectoral basis (like the blue-collar unions affiliated with LO), SACO unions are organized on an occupational basis and membership in SACO unions is typically restricted to individuals with university degrees. We find that members of TCO-affiliated unions are significantly more likely to support redistribution than members of SACO-affiliated unions as well as non-union respondents and that this holds across the income distribution.

Thirdly, we use data from the European Social Survey from 2002 to 2016 to explore the effects of the 2001 union merger that created Ver.di, Germany's second largest union. Based on occupational criteria, we identify survey respondents as former members of the unions that formed Ver.di, in 2001 and compare the evolution of support for redistribution among these respondents to the evolution of support for redistribution among other respondents over the fifteen years following the merger. Though very tentative, this exercise suggests that Ver.di members became more supportive of redistribution than other union members over this period and that this is particularly true for Ver.di members who came from constituent unions that were less low-income inclusive prior to the merger.

We eschew the standard practice of pooling survey data across countries in order to distinguish between members of different kinds unions. This move obviously entails a loss of "statistical power." The problem is magnified by the fact that our samples of survey respondents belonging to different kinds of unions end up being quite small. In our view, less stringent criteria of statistical significance should be adopted when the creative use of disparate datasets is necessary to address important research questions. Our paper is intended to illustrate the gains that such an approach can yield. It is also meant to illustrate that the creative use of disparate datasets requires attention to specific historical and institutional contexts.

Preliminary discussion

Mosimann and Pontusson (2017) identify two hypothetical effects of belonging to a trade union for individual preferences for redistributive policy: an enlightenment effect and a solidarity effect (see also MacDonald 2019a). The enlightenment hypothesis posits that union membership is a source of knowledge about the distribution of income and one's relative position therein and that union members are therefore better able to calculate whether or not they stand to gain from

redistribution than non-members. The Marxist version of the enlightenment hypothesis holds that union members are more "class conscious" than non-members while the rational-choice version holds that they are more "rational" in their pursuit of self-interest. By contrast, the solidarity hypothesis posits other-regarding motives for supporting redistributive government policies as well as wage-bargaining outcomes that favor low-wage workers relative to high-wage workers. Simply put, this hypothesis holds that high-wage workers who belong to a union that encompasses many low-wage workers will, to some extent, take the latter's interests into account when they form policy preferences.

Enlightenment and solidarity alike may be a result of direct social interactions among union members and, in particular, political discussions among union members in the workplace or at union meetings, as suggested by Iversen and Soskice (2015). However, it seems far-fetched to conceive of contemporary unions as "close-knit communities." It is more realistic, we think, to suppose that information provided by unions and arguments that they advance, in public media as well as newsletters and meetings directly targeted to their members, shape preferences of union members by promoting self-interested rationality and/or egalitarian norms.[2] Importantly, union rhetoric commonly holds that egalitarian policies in the domain of wage bargaining serves the collective interests of all workers and that such policies will benefit high-wage workers over the long run by strengthening the "worker collective." In this sense, the logic of union solidarity is different from "altruism" (see Yang and Kwon 2019).

The solidarity effect of union membership presupposes that unions organize workers with different skill levels and earnings. Suppose that there are ten unions and that each union exclusively organizes workers in a specific income decile. In this scenario, we would not expect there to be any solidarity effect associated with union membership. Assuming that unions consistently enlighten their members, and that the benefits (or costs) of redistribution are strictly a function of relative income, we would expect union members in low income deciles to be more supportive of

redistribution than their non-union counterparts and union members in high income deciles to be less supportive of redistribution than their non-union counterparts.[3]

The extent to which unions engage in solidaristic rhetoric and practices varies a great deal, within and across countries, and also over time. Much of this variation can be explained, we think, by the distribution of union members across the income distribution. More specifically, we hypothesize that egalitarian union practices and rhetoric are a function of the extent to which unions (as organizations) and elected union leaders (as "politicians") depend on the support of workers who stand to benefit from redistribution.[4]

Mosimann and Pontusson (2017) distinguish between three union ideal types: (1) unions that primarily organize low-wage workers ("low-wage unionism"); (2) unions that primarily organize high-wage workers ("high-wage unionism"); and (3) unions whose membership is spread more evenly across the income distribution ("comprehensive unionism"). As briefly sketched above, our theoretical framework predicts that belonging to a low-wage union should have a strong enlightenment effect on individuals below the median income and a strong solidarity effect among individuals above the median income. These effects should also be observed for individuals belonging to encompassing unions, that is, the third type of unionism, but they should be less pronounced. For high-wage unions, both effects—enlightenment among low-wage members and solidarity among high-wage members—should be absent or even reversed, with high-wage members being more rationally self-interested and low-wage members solidaristically aligning themselves with the interests of the majority.

Pooling European Social Survey (ESS) data from 21 countries over the period 2002-14, our previous analysis showed that union membership is positively associated with support for redistribution, measured by agreement with the statement that "the government should take measures to reduce differences in income levels," and that this association is stronger for survey respondents with higher incomes. Our previous analysis also explored how cross-national and

temporal variation in levels of unionization and the distribution of union members across income levels, measured at the country level, conditions the effects of union membership. To do so, we sorted country-years into three groups, as illustrated by Figure 1. While the vertical axis in this figure records the overall level of unionization, as reported by Visser (2016), the horizontal axis records the ratio of unionization in the bottom half of the income distribution to unionization in the top half of the income distribution (based on self-reported household income in the ESS). An inclusiveness score greater than one (1) means that the majority of union members fall below the median income. By mathematical necessity, inclusiveness scores converge on 1 as union density approaches 100%, but we observe a lot of variation in union inclusiveness when overall union density is below 45%.

[Figure 1]

Re-estimating our model of support for redistribution for the three samples identified in Figure 1 yields the union effects reported in Table 1, with the "union effect" defined as the difference in predicted probabilities of support for redistribution between respondents who belong to a union and those who do not belong to a union. The results in Table 1 suggest that the national union characteristics do indeed condition union effects on support for redistribution. Consistent with our expectations, we find the biggest solidarity effect in the context of low-wage unionism (the lower-left cell in Figure 1) and the smallest enlightenment effect under high-wage unionism (the lower-right cell in Figure 1). Contrary to expectations, however, the enlightenment effect is smaller under low-wage unionism than under encompassing unionism (the upper cell in Figure 1) and there is a sizeable solidarity effect under high-wage unionism.[5]

[Table 1]

It is hardly necessary to point out that the issue of self-selection looms large in the literature on union membership effects on political attitudes and behavior. In our case, it could be that individuals who support redistribution are more likely to join unions and that union membership

has no effect on support for redistribution. In particular, it seems plausible to suppose that high-income earners who choose to join unions that primarily organize low-income earners are already favorably disposed to redistribution. Mosimann and Pontusson (2017) address this problem in two ways. First, we show that membership effects rise with age. Assuming that older respondents have, on average, been union members for a longer period of time, we interpret this finding as support for the idea that the duration of union membership matters and, by extension, that the union membership is at least partly a "socialization effect." Secondly, we show that the main effects of union membership hold for countries with Ghent systems of unemployment insurance, which provide selective incentives for individuals to join unions, as well as non-Ghent countries.[6] To the extent that it is due to self-selection, the association between union membership and support for redistribution ought to be weaker when union membership serves as a means to gain access to unemployment insurance or other material benefits.[7]

The ideal solution to the problem of self-selection is to analyze panel data—in other words, to assess the effects of joining (or leaving) unions on the attitudes and behavior of the same individuals over multiple surveys. Analyzing Swiss and British panel data, Hadziabdic and Baccaro (2018) show that the effects of switching status, from union member to non-member or vice-versa, on a range of behavioral and attitudinal variables (political participation, interest in politics, party identification, vote choice, and support for specific policies with distributive implications) disappear once individual-level fixed effects are introduced. However, Hadziabdic and Baccaro recover important union membership effects when they adopt a dynamic perspective: there are significant "anticipation effects" in the sense that individuals change attitudes and behavior in the 1-3 years before they join a union and the effects of joining a union play themselves out over several years. Their analysis also suggests that some of the effects of union membership persist after individuals have stopped being union members.

As Hadziabic and Baccaro (2018) stress, the attraction of analyzing panel data is that it allows us to take into account unobserved heterogeneity among individuals. On the other hand, existing panel data do not allow us to take into account *heterogeneity among unions*. For all its insights, Hadziabdic and Baccaro's analysis pertains to the average effects of joining either an encompassing union or a narrow occupational union. In what follows, we seek to break new ground, relative to Hadziabdic and Baccaro (2018) as well as Mosimann and Pontusson (2017), by leveraging within-country variation in unioncharacteristics.[8] In due course, we will return to the issue of self-selection.

Britain 1974

The postwar British trade-union landscape was notoriously fragmented, characterized by a multiplicity of unions with overlapping jurisdictional boundaries. The literature on British trade-unionism (e.g. Pelling 1976 and Clegg 1979) conventionally identifies three distinctive types of unions: (1) craft unions organizing skilled workers based on their occupation (or vocational qualifications); (2) industrial unions organizing workers in a more or less well-defined economic sectors, regardless of qualifications and tasks performed; and (3) general unions organizing across sectors and occupations. Dwarfing all but one of the sectoral unions in terms of sheer membership, the Transport and General Workers' Union (TGWU) and the General and Municipal Workers' Union (GMWU) emerged in the postwar era as the main representatives of the interests of low-wage workers within the trade-union movement.[9] Most importantly for our present purposes, these unions insisted on relative gains for low-wage workers as a prerequisite for the voluntary wage restraint that the Labour Party wanted the TUC and its affiliates to deliver in the 1970s (Bornstein and Gourevitch 1984: 52-62).

Fielded in 1963, 1964, and 1970, the survey program called "Political Change in Britain" asked survey respondents whether or not they belonged to a union and followed up by asking respondents who answered in the affirmative to name the union to which they belonged. The Election Studies of February and October 1974 repeated these questions about union membership but subsequent election surveys stopped asking unionized respondents to identify the union to which they belong. We have, then, five British surveys over the period 1963-74 that are uniquely suited to explore heterogeneity in the union membership effect on political attitudes and policy preferences. However, pooling data from these five surveys is complicated for two reasons. First, the Political Change surveys of 1963, 1964, and 1970 asked unionized respondents to identify the union to which they belonged in an open-ended manner while the two election surveys of 1974 presented them with a list of (large) unions from which to identify their union (or indicate "other"). Secondly, most of the policy questions asked were not repeated across surveys and only one of the surveys, the October 1974 Election Study, directly asked about support for redistribution.

For the purposes of this paper, we analyze responses to the redistribution question in the October 1974 Election Study. Restricting the analysis to employed respondents between the ages of 15 and 65 or, in other words, the pool of potential union members while dropping cases with missing values on covariates, we end up with a sample of 949 respondents, of whom 27.3% declared themselves to be union members.[10] We distinguish three groups of union members: (1) respondents who identify themselves as members of the aforementioned general unions (N=99); (2) respondents who identify themselves as members of one of the five sectoral unions on the list provided in survey (N=106);[11] and (3) respondents who identified themselves as belonging to some other union, including, in the terminology of the election survey, "white-collar unions in the TUC," "white-collar unions not in the TUC," and "other mixed TUC unions" (N=243).[12] Though the third group includes members of unions with some ambition to organize on a sector-wide basis, we refer to these respondents as members of "occupational unions." Needless to say

perhaps, all white-collar unions have, by definition, an occupational profile and the occupational profile of white-collar unions was more pronounced in the 1970s than it is today (with the distinction between professional associations and trade unions being quite blurred in domains such as education and healthcare).[13]

Seeking to distinguish between enlightenment and solidarity, we are interested in the effects of union membership conditional on income. Based on self-reported household income, the income variable in our analysis refers to the income distribution among employed respondents aged 15 to 65. The 1974 British Election Study differentiates between 13 income bands. As in Mosimann and Pontusson (2017), we assign the mid-points of these income bands to each survey respondent and then assign respondents to income deciles based on the adjusted incomes of all individuals in our dataset.[14] Unfortunately, the income question does not clarify whether it is about income before or after taxes and respondents appear to have interpreted the question differently.[15] In view of this, decile assignments must surely be taken with a grain of salt. To separate high-income respondents from low-income respondents, we dichotomize the income variable while leaving out respondents in the fifth decile, so that we end up with two income groups: deciles 1-4 constitute the "below-median" income group (coded as 0) and deciles 6-10 constitute the "above-median" income group (coded as 1).[16] Plausibly, this serves to exclude most respondents who might have risen from below- to above-median income if they had indicated net income instead of gross income in their answer to the income question.

Table 2 reports our estimates of the percentage of individuals with household incomes below the median (that is, in the fourth income decile and below) among survey respondents who are not union members as well as respondents who are members of general unions, sectoral unions, and occupational unions. Members of general unions stand out as the group with the highest share of household incomes below the median. By this criterion, members of sectoral unions

closely resemble the population of non-union members while a clear majority of the members of occupational unions are in the upper half of the income distribution.[17]

[Table 2]

The dependent variable in our analysis of enlightenment and solidarity effects of union membership is support for the proposition that "the government should redistribute income and wealth in favor of ordinary working people" in the October 1974 survey. To facilitate and simplify the interpretation of our results, we create a dummy that is coded as one for individuals who say that it is "very important" or "fairly important" that this be done and zero for individuals who answer that "it doesn't matter either way" or say that it is "very important" or "fairly important" that it not be done. We estimate logistic regression models with robust standard errors to account for the dichotomous nature of our dependent variable. The models include age, sex, education, and religiosity as control variables.[18]

The main results are presented in Figure 2 and Table 3. As shown in the left-hand panel of Figure 2, union members are more likely to support redistribution than respondents who are not union members. This finding holds only for members of sectoral unions and general unions once we control for respondents' party identification in the right-hand panel of Figure 2.[19] In both models, the odds ratio for support of redistribution is almost twice as large for members of general unions than for members of occupational unions. Given the small number of survey respondents in each category of union members, it should come as no surprise that the 95% confidence intervals of our estimates of union membership effects overlap. Clearly, there is reason to be cautious in interpreting these results, but it would be a shame, we think, to simply dismiss this analysis on this account. The 95% criterion for statistical significance is, after all, entirely arbitrary.

Figure 2 confirms that having an income above the median is associated with less support for redistribution. Age and education also seem to be associated with supporting redistribution less, but these variables become only marginally significant once we control for respondents' party

identification. Gender is not associated with redistribution support and the effect of religiosity is not robust to the inclusion of the control for respondents' party identification. Unsurprisingly, those identifying as Labour are significantly more likely to support redistribution than those identifying as Conservative. The same is true for those identifying as Liberal or not feeling close to any party, but the effects are much smaller. We find no effects for those identifying as SNP.

[Figure 2]

Table 3 in turn reports our estimates of support for redistribution conditional on union membership and income, based on a model that interacts these explanatory variables. Note that the model used to estimate these results does not include partisan identification as a control variable. In our view, it is not terribly interesting to observe that individuals who identify with Labour are more likely to support redistribution than individuals who identify with the Tories and there are good reasons to think that membership in an encompassing union affects partisan identification as well as support for redistribution. The first thing to note is that household income is a significant predictor of redistribution support among respondents who are not union members, but not among union members. Below and above the median income, belonging to any union is associated with more support for redistribution but the difference in redistribution support between members of occupational unions and non-members only clears the 90% significance threshold. For respondents with incomes above the median, the effect of belonging to a general union is more than twice as large as the effect of belonging to an occupational union and the difference between these two union effects is significant at the 95% level. For respondents with incomes below the median, the difference between the effects of belonging to a general union and to an occupational union is not quite as large and fails to clear the 90% significance threshold.

Focusing on the point estimates rather than p-values, our results suggest that the enlightenment effects of membership in general and sectoral unions in the 1970s were similar and considerably larger than the enlightenment effect of membership in occupational unions. Relative to

sectoral unions and especially occupational unions, general unions stand out in that they seem to have promoted more solidaristic support for redistribution among their better-paid members.

[Table 3]

Swedish white-collar unions

Along with Denmark, Sweden has long stood at the top of the OECD unionization league. It is commonplace in the comparative literature to treat Sweden as the example *par excellence* of a strong, coherent, and unified labor movement. This characterization holds for the blue-collar unions affiliated with the LO (*Landsorganisationen*), but it misses the fact that LO-affiliated unions do not organize white-collar employees and that white-collar unions have become increasingly important over the last four decades. More importantly for our present purposes, the conventional view misses the heterogeneity of white-collar unions in Sweden. As noted at the outset, there are two distinct types of white-collar unions in Sweden, with separate confederations. One group of white-collar unions organizes on an industrial, that is, sectoral, basis. These unions belong to *Tjänstemännens Centralorganisation* (Swedish Association of Professional Employees) or TCO for short. The other group of white-collar unions organizes on an occupational basis and belong to a confederation with a Swedish name that literally translates as "the confederation of Swedish academics" (*Sveriges akademikers centralorganisation*), or SACO for short.[20] Historically, membership in SACO-affiliated unions has been restricted to individuals with tertiary degrees and, by and large, this remains the case today (see Kjellberg 2013).

Until the 1980s, SACO's presence was almost entirely confined to the public sector and civil servants played a dominant role within SACO. The dramatic increase in white-collar unionization that occurred in the 1960s and 1970s was spearheaded by the TCO unions. While overall union density increased from 61% in 1960 to 81% in 1980, the LO unions' share of total union membership fell from 75% to 62% and the TCO unions' share increased from 20% to 31% over

this period (Martin 1984: 345). While TCO unions and the confederal leadership embraced their own version of solidaristic wage policy, insisting that central wage agreements prioritize wage increases for their less well-paid members, the TCO joined the LO in pushing for employment protection and co-determination reforms in the 1970s (see Martin 1984). In marked contrast to SACO unions, the notion of a "wage-earner collective," bridging the blue-collar/white-collar divide, became an important feature of TCO rhetoric and practices in this period. As the LO's dominant role in coordinated wage bargaining has declined and SACO unions have expanded their membership since the 1980s, the TCO has become less closely aligned with the LO (Baccaro and Howell 2017: 160-168), but "solidarity" remains a more important principle for TCO unions than for SACO unions.[21]

Over the period 1986-2011, recurring surveys carried out by the SOM Institute at the University of Gothenburg asked respondents whether or not they were union members and, for union members, whether they belonged to a union affiliated with LO, TCO or SACO.[22] In what follows, we use data generated by these surveys to identify the characteristics of white-collar unions and estimate, in a second step, the effects of union membership on support for redistribution conditional on income and type of union membership. Our analysis is restricted to the period 1986-2001 because there is only one subsequent SOM survey that asked the questions on which we rely for our dependent variable. That survey was fielded in 2011, right after the economic crisis, raising concerns about comparability with earlier surveys.[23]

As the Swedish system of unemployment incentivizes individuals to remain union members when they become unemployed, we analyze a sample that encompasses all survey respondents in white-collar occupations who are either currently employed or looking for a job. Having removed cases with missing values on our covariates, we end up with a sample of 1,821 respondents for the entire period 1986-2001.

Over the time period covered by our analysis, SOM surveys consistently ask respondents about household income before taxes, but the number of income bands presented to respondents varies across surveys. To render responses to the income question comparable, the SOM Institute has created a 5-point scale that separates very low incomes from low, medium, high, and very high incomes. Collapsing the first two of these categories ("very low" and "low" income) yields four income groups that broadly resemble income quartiles, with 16% of SOM respondents in the low income group, 27% in the lower middle group, 30% in the upper middle group, and 27% falling into the high income group. For simplicity, we will here refer to the first two groups as the lower half of the income distribution and the second two groups as the upper half even though the first two groups only represent 43% of the income distribution.

In the time period covered by our analysis, TCO unions organized 54% and SACO unions organized 17% of white-collar employees in the lower half of the income distribution. For white-collar employees in the upper half of the income distribution, the corresponding figures are 52% and 21%. These aggregate figures conceal important differences between the public and private sectors as well as changes over time. Setting temporal changes aside, Table 4 reports our SOM-based estimates of the percentage of members of public-sector and private-sector TCO and SACO unions in the lower half of the income distribution. Public-sector TCO unions stand out as more inclusive of low-income earners than any of the other three types of white-collar unions that we can identify in this manner. In the public sector, individuals with household incomes below the median constitute nearly 44% of the membership of TCO unions. At the other end of the spectrum, private-sector SACO unions stand out as the least low-income-inclusive unions, with 29% of members in the lower half of the income distribution, while private-sector TCO unions and public-sector SACO represent intermediate cases.[24]

[Table 4]

Following the logic sketched above, we expect that the enlightenment as well as the solidarity effects of belonging to public-sector TCO unions are stronger than that the effects of belonging to other types of white-collar unions and that the effects of belonging to a private-sector SACO union are particularly weak. To test these hypotheses, we pool responses to two questions in the SOM surveys. In the 1986 and 1988 surveys, respondents were asked whether or not they favored a reduction of "income differences in society." In the 1998, 1999, and 2001 surveys, they were instead asked whether or not they favored an increase in "wage differences." In each case, respondents were presented with five response categories, ranging from "very good proposal" to "very bad proposal." As in our previous analysis of British data, we conceive individuals who think of the proposal to reduce income differences as "very good" or "rather good" and individuals who judge the proposal to increase wage differences as "very bad" or "rather bad" as supporters of redistribution, coded as 1, and those who choose one of the other three responses as opponents of redistribution, coded as 0. Again, we estimate logistic regression models with robust standard errors and include a number of control variables (including, in this case, being unemployed as well as age, educational attainment, sex, and income group). The regression models also include year dummies.

Figure 3 reports the odds ratios for redistribution support generated by our baseline model without any interactions. The left-hand panel presents the results of estimating the model without controlling for respondents' ideological (Left-Right) self-placement and the right-hand shows the results with this variable included. In both models, relative income (that is, income group) and higher education are associated with less support for redistribution while being female is associated with more support for redistribution. Being unemployed and working in the public sector also seem to be associated with support for redistribution, but these variables become only borderline significant, if at all, once we control for ideological self-placement. As for union membership, belonging to a TCO union is positively associated with support for redistribution, whether or not

we control for ideological self-placement. The positive effect of belonging to a SACO union is noticeably smaller in the left-hand panel and fails to clear the 95% threshold of statistical significance once we introduce ideological self-placement as a control variable.[25]

[Figure 3]

Based on a three-way interaction model, Table 5 reports our estimates of support for redistribution conditional on income, sector of employment, and union membership. To keep things simple, these results are based on a dichotomy between individuals in the lower and upper halves of the income distribution.[26] Note also that the underlying model does not include ideological self-placement as a control variable.

[Table 5]

The effect of belonging to a TCO-affiliated union, as compared to not being a union member, is consistently positive and statistically significant, regardless of respondents' location in the income distribution. By contrast, low-income respondents who belong to SACO-affiliated unions are not more likely to support redistribution than unorganized white-collar employees and the SACO membership effect in the upper half of the income distribution is significantly smaller than the TCO membership effects. These findings hold for the public sector as well as the private sector. As summarized in Table 6, the rank ordering of union membership effects conforms to our expectations, based on the descriptive membership statistics in Table 4. At the same time, it is noteworthy that the enlightenment as well as solidarity effects of belonging to a less inclusive (private-sector) TCO union resemble those of belonging to a more inclusive (public-sector) TCO union more than they resemble the effects of belonging to an equally inclusive (public-sector) SACO union. This suggests that there are confederation-wide political dynamics at work or, in other words, spillover effects within each confederation.

[Table 6]

The case of Swedish white-collar employees provides an opportunity to address the concerns about self-selection in a more rigorous manner than we did in Mosimann and Pontusson (2017). As noted above, the Swedish system of unemployment insurance is a Ghent-style system, with public subsidization of union-administered unemployment insurance funds. This system clearly incentivizes individuals to join unions.[27] At the same time, some white-collar employees have the option of joining either a TCO-affiliated union or a SACO-affiliated union while others can only join a TCO union. It seems reasonable to suppose that individuals in the former category would choose between TCO- and SACO-affiliated unions based on prior dispositions for or against redistribution while individuals in the latter category would join a TCO-affiliated union for essentially self-interested reasons, that is, to secure access to unemployment compensation. The key characteristic distinguishing these two categories of individuals from each other is that the former—potential SACO members—possess tertiary education degrees. By the logic of self-selection, then, the TCO union membership effect on support for redistribution (and other political attitudes) should be larger among individuals with tertiary education degrees than among other individuals. In testing this proposition, we restrict our analysis to public-sector employees because SACO unions have historically had a much stronger presence in the public sector. At least until recently, there were quite a few private-sector employees with tertiary degrees for whom joining a SACO-affiliated union probably did not make practical sense.

To begin with, Table 7 presents our SOM-based estimates of the distribution of educational achievement among unionized and non-unionized public-sector white-collars employees, confirming that the vast majority of SACO-affiliated union members hold tertiary degrees. Turning again to logistic regression results, we focus in Tables 8 and 9 on the effect of belonging to a TCO-affiliated union relative to not being a union member. While the results in Table 8 are based on estimating a model that interacts union membership with educational attainment alone, the results in Table 9 are based on estimating a three-way interacts between union membership,

educational attainment, and income below or above the median. Both models include the control variables included in the model reported in Tables 5 and 6 above. The idea behind the second model is that we ought to distinguish between enlightenment effects and solidarity effects in assessing the potential role of self-selection. The results presented in Table 8 are straightforward: the effect of belonging to a TCO-affiliated union is identical for individuals with and without tertiary degrees (that is, with or without the SACO option). In Table 9, we see some evidence of self-selection in that the enlightenment effect of belonging to a TCO union appears to be specific to low-income individuals with tertiary degrees. On the other hand, the association between membership in TCO-affiliated unions and support for redistribution is actually stronger for high-income individuals without tertiary degrees than for high-income individuals with tertiary degrees. As shown in Table 9, neither of these differences-in-differences comes close to conventional thresholds of statistical significance. In sum, we find surprisingly little evidence—really no robust evidence whatsoever—that individuals who have the choice of joining either a TCO union or a SACO union sort themselves based on predispositions for (or against) redistribution.

[Tables 7-9]

The Ver.di merger

Ver.di (*Vereinte Dienstleistungsgewerkschaft* or, in English, the United Services Union) was formed in 2001 through a merger of five unions organizing people working in public and private services: the Salaried Employees' Union (DAG), the Public Services, Transport, and Traffic Union (ÖTV), the Trade, Banking, and Insurance Union (HBV), the Media Union (IG Medien), and the Postal Union (DPG). With nearly 2 million members, Ver.di accounted for 34% of workers and employees belonging to unions affiliated with the German trade-union confederation DGB in 2010, making it the second largest DGB affiliate after IG Metall (36%).[28]

Typically undertaken to offset membership losses, union mergers represent a quite common occurrence in OECD countries over the last two or three decades. By definition, mergers produce more encompassing unions. From our perspective, the interesting question is whether mergers alter the composition of union membership and the internal political dynamics of unions. It is probably the case that unions with similar occupational and sectoral profiles are more likely to merge than unions with very different profiles, but it seems quite likely that union mergers involve some change in the key variable in our analytical framework: low-wage inclusiveness or, in other words, the political weight of low-wage workers within the union to which a given individual belongs. To the extent that this is so, union mergers might be conceived as "quasi-natural experiments," allowing for a particularly clean test of our core argument. Ideally, such a test would involve panel data and the panel data would allow us to identify individuals who belonged to the unions that merged. One would then track the evolution of support for redistribution (or other political attitudes) among these "treated" individuals over an extended period of time following the merger and compare changes in their support for redistribution to changes among "untreated" individuals, that is, members of unions that were not part of the merger or non-unionized survey respondents.[29]

Needless to say perhaps, we would not expect the merger treatment to have immediate effects on individual attitudes. Our core argument posits that a change in the composition of union membership—say, an increase in the percentage of low-wage workers—will lead union leaders to adapt their rhetoric and policy positions, but this adaptation is likely to take several years. Indeed, it may well involve the election of new leaders and/or the appointment of new staff. The process whereby union members internalize new messages emanating from the leadership and/or respond to changes in the tenor of workplace discussions organized by local unions is also bound to take time. The individual-level effects of the process of change that we have in mind may well take a decade (or more) to be fully realized.

We have not been able to identify a union merger and a panel dataset that together satisfy the specifications of our ideal research design. As a substitute, let us briefly, and very tentatively, explore the effects of the Ver.di merger by analyzing German data from the European Social Survey over the period 2002-16. As we explain below, this involves several questionable assumptions and quite a small number of observations. For both reasons, we eschew regression analysis and focus on descriptive statistics.

The ESS readily allows us to identify current union members, but there are no follow-up questions that would allow us to distinguish directly between members of different types of unions. In the German case, however, we can use occupational data included in ESS (4-digit ISCO codes) to identify, in a rough manner, categories of workers and employees who, if unionized, would likely have belonged to one of the unions that formed Ver.di in 2001.[30] Pooling several ESS surveys in order to obtain a reasonable number of observations for at least some of the constituent Ver.di unions, we propose to compare levels of support for redistribution among former members of these unions in 2002-06 (three surveys) with levels of support in 2012-16 (three surveys). In so doing, we assume that levels of support for redistribution in 2002-06 were determined by information and experiences that pre-date the merger and that changes from this period to the latter period can be considered, at least in part, as effects of the merger. We also assume that union members in the occupational categories that we identify with the five unions that merged in 2001 became Ver.di members (that is, we assume that they did not switch to another union) and that Ver.di did not, to any significant extent, organize new occupational categories in the wake of the merger. These assumptions seem reasonable in light of the stable membership shares of unions affiliated with the DGB and the general decline of union membership over the time period covered by our analysis.[31]

To make this exercise more credible, we restrict the sample of ESS respondents to working-age individuals who were at least 24 years of age in 2001 and thus could plausibly have been a

union member at the time of the Ver.di merger.[32] Table 10 reports the sample sizes that we obtain for each of the constituent Ver.di unions with these restrictions in place. With no ESS respondents who might have been former DPG members in 2002-06 and only 3 such respondents in 2012-16, we drop former DPG members from the following analysis.

[Table 10]

Following the procedure of Mosimann and Pontusson (2017), we sort working-age ESS respondents into income deciles based on self-reported disposable household income and household size. With data from the 2002 to 2006 surveys, we arrive at the estimates of the percentage of union members and non-union members with incomes below the median income shown in Table 11. By this crude measure, the share of Ver.di members with incomes below the median is slightly smaller than the share of low-income respondents among non-unionized respondents and slightly bigger than the share of low-income respondents organized by other unions. For our present purposes, the interesting question is how the membership composition of Ver.di compares to the membership composition of its constituent unions. According to these estimates, two of the constituent unions, ÖTV and IG Medien, were more low-income-inclusive than Ver.di while the other two constituent unions, HBV and DAG (not counting the DPG), were less low-income-inclusive than Ver.di.

[Table 11]

Our theoretical framework leads us to expect an increase in support of redistribution among former members of HBV and DAG over the 10-15 years following the merger that created Ver.di. By contrast, we would expect little change or even some decline in support for redistribution among former ÖTV and IG Medien members. Of course, many other things happened between 2002/06 and 2012/16, notably the Harz reforms and the Great Recession, and there are good reasons to suppose that these also affected preferences for redistribution. As our expectations concern the specific effects of the Ver.di merger, they are expectations about deviations from

trends captured by support for redistribution among ESS respondents who were not directly affected by the merger, that is, members of other unions and non-union respondents.

The standard ESS redistribution question, recurring across all ESS modules, asks respondents to react to the proposition that "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." As in our earlier analyses of British and Swedish survey data (and also Mosimann and Pontusson 2017), we dichotomize these responses, 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. With support for redistribution operationalized in this manner, Table 12 shows our estimates of levels of redistribution support among former members of unions that were more low-income inclusive than Ver.di (ÖTV and IG Medien) and former members of unions that were less low-income inclusive than Ver.di (DAG and HBV) as well as members of other unions and non-union respondents in 2002/06 and 2012/16, with the last column reporting separate estimates for respondents in the upper half of the income distribution.[33]

[Table 12]

The first thing to be noted about Table 12 is that support for redistribution increased among all categories of working-age Germans over this period.[34] Among non-union respondents, the percentage of redistribution supporters increased by 18 points. The corresponding figure for respondents who belonged to some union other than Ver.di was 14 percentage points. In other words, the general shift towards support for redistribution appears to have been most pronounced among non-union members. For present purposes, the more interesting feature of Table 12 concern the divergent trajectories of respondents who we have identified, albeit very tentatively, as former members of either ÖTV and IG Medien or DAG and HBV (and also as current members of Ver.di). Consistent with our expectations, we find that former ÖTV and IG Medien members

(Ver.di members coming from unions that were more low-income inclusive than Ver.di) moved less in the direction of redistribution than non-unionized respondents. The shift among these respondents is of the same magnitude as the shift among other unionized respondents. By contrast, we observe bigger increases in the percentage of redistribution supporters among former members of DAG and HBV (Ver.di members coming from unions that were less low-income inclusive than Ver.di) than among union members who were not implicated in the Ver.di merger. Support for redistribution among these Ver.di members appears to have caught up with support for redistribution among Ver.di members who came from the ÖTV or IG Medien.

Given the small number of observations that we rely on for these estimates of support for redistribution, it is almost certainly the case that some (if not all) of the between-group differences shown in Table 12 fail to clear conventional thresholds of statistical significance. Keeping this caveat in mind, the preceding analysis of the Ver.di merger still provides, we think, suggestive evidence in support of the thesis that people who belong to more low-income-inclusive unions tend to be more supportive of redistribution and that this holds whether or not the members themselves stand to gain from redistribution.

Conclusion

As we have noted repeatedly, some of the empirical results presented above are suggestive but fail to clear conventional thresholds of statistical significance. In our view, it is equally important to note, in closing, that the results are quite consistent across our three "case studies." All three analyses yield evidence in support of the proposition that individuals who belong to unions that organize more low-income workers are more likely to support redistributive government policies than individuals who belong to unions that primarily organize high-income workers and professionals. This finding seems to hold for individuals in white-collar as well as blue-collar jobs and

for white-collar unions (Sweden) as well as unions that primarily organize blue-collar workers (British unions in the early 1970s) and unions that cross the blue-collar/white-collar divide (German unions at the time of the Ver.di merger).

While the British evidence suggests that the solidarity effect of belonging to more inclusive unions is stronger than the enlightenment effect of belonging to more inclusive unions, the Swedish points in the opposite direction: the difference-in-difference between belonging to a TCO union and a SACO union is larger and statistically more significant for survey respondents in the lower half of the income distribution than for respondents in the upper half of the distribution. In the German case, the positive of effects the Ver.di merger on support for redistribution among former members of high-wage unions (DAG and HBV) appears to have been roughly the same in the lower and upper halves of the income distribution. We conclude that there are important enlightenment and solidarity effects of union membership and that both effects are conditioned by union inclusiveness.

As noted at the outset, union membership has declined dramatically in many countries since the 1980s and it is primarily low-wage workers that have dropped out of unions (or failed to join unions at previous rates). An implication of our analyses is that the salience of redistributive issues for low-income citizens may have declined as a result of these developments. Perhaps more importantly, our analyses suggest that changes in the composition of union membership has eroded support for redistribution among unionized workers and professionals in the middle and the upper half of the income distribution. At the same time, our Ver.di case study suggests that union mergers may have offset some of the consequences of unequal union decline.

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Endnotes

[1] Yet a third channel is identified by Becher and Stegmueller (2019), who convincingly demonstrate that representatives of more unionized congressional districts are more responsive to the preferences of low-income constituents.

[2] Focusing on enlightenment effects, MacDonald (2019b) wisely posits that direct provision of political information by unions and unionization-induced workplace discussions of politics both matter. There is no obvious reason why we most choose between these two mechanisms. For the US, MacDonald (2019b) shows that union members are more likely to discuss politics at work than non-union members and that they are more knowledgeable about political affairs.

[3] Introducing insurance motives for supporting redistribution adds some complexity. To keep things simple, we assume that income and risk are closely correlated.

[4] An alternative line of argument focuses on political traditions and the political orientation of union leaders (Ahlquist and Levi 2013).

[5] As reported in Mosimann and Pontusson (2017), estimating a four-way interaction between union membership, relative income, overall unionization, and union inclusiveness yields results similar to those reported in Table 1. Note that the results reported in Table 1 are based on models that control for Left-Right self-placement of individuals. Without controlling for ideology, union effects are bigger and statistically more significant, but the pattern of variation across types of unionism is the same. Scrimger (2019) provides indirect macro-level evidence in support of the proposition that low-income unionization generates public support for redistribution. Pooling data for Canadian provinces over the period 1991-2011, he shows that low-income union inclusiveness is a strong predictor of redistribution (both measured at the province level). By contrast, the association between union density and redistribution is negative (and less reliably significant).

[6] Ghent systems are based on public subsidization of union-administered unemployment insurance funds. While it is possible to join a union-administered unemployment insurance fund without joining the union, many people do not seem fully cognizant of this option and other may look upon union membership as a means to secure access to full unemployment benefits (that is, be approved for full benefits by people working for the fund). An extensive literature demonstrates that countries with Ghent systems (specifically, Belgium, Denmark, Finland, and Sweden) have higher union density than countries with state-administered unemployment insurance. See Rasmussen and Pontusson (2018) for references and further discussion.

[7] In a similar vein, MacDonald (2019a, 2019b) as well as Kim and Margalit (2016) leverage the distinction between Right-To-Work (RTW) states and non-RTW states to address the self-selection issue with US data. By the logic of self-selection, ideological predispositions should be a more important determinant of policy preferences in non-RTW states and union members effects should therefore be smaller. This does not appear to be the case. Kim and Margalit (2016) also use changes in the policy stance of unions to identify union membership effects.

[8] This also serves as a way to parse between the results presented in Mosimann and Pontusson (2017) and those presented in Yang and Kwon (2019). Analyzing ISSP data, the latter article shows

that union members are significantly more supportive of redistribution in countries with national-level bargaining than in countries with company-level bargaining. Measured at the country level, low-income inclusiveness of unions is clearly correlated with national-level bargaining.

[9] According to Bornstein and Gourevitch (1984: 75), the TGWU was the largest TUC-affiliated union in 1981 (1.9 million members), followed by the Amalgamated Union of Engineering Workers (1.2 million) and then the NUGMW (900,000). The NUGMW adopted the name GMB (General, Municipal, Boilermakers) following a merger in the 1980s and the TGWU became Unite The Union as it merged with another union in 2007.

[10] Union members appear to have been seriously under-sampled by the October 1974 Election Study. According to Visser (2019), British union density stood at 47.8% in 1974.

[11] The four sectoral unions are the Amalgamated Engineering Union (AEU), the National Union of Mineworkers (NUM), the National Union of Railwaymen (NUR) and the Union of Shop, Distributive and Allied Workers (USDAW).

[12] As described below (see endnotes 15 and 16), we drop respondents in the 5th income decile from our analysis. This reduces the number of members of general unions to 79, the number of members of sectoral unions to 84, and the numbers of members of occupational unions to 187.

[13] Note that the category "occupational unions" also includes the Electrical Trades Union (ETU) and that we dropped 70 respondents from the sample because their answers were unclassifiable or they did not know to which union they belonged.

[14] 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.

[15] Some 44% of respondents stated that they were thinking of their income before taxes while about 36% stated that they were thinking of their income after taxes and 20% stated that they had either paid no taxes or were not sure what they were thinking.

[16] We drop 230 respondents in the 5th income decile.

[17] In line with this finding, Appendix A shows that the share of members of general unions feeling close to other trade union members or being interested in how trade union members are getting along in Great Britain is bigger than the share of members of other types of unions stating the same.

[18] While age is a linear variable ranging from 15 to 65, education refers to the age at which somebody left school. Religiosity separates those belonging to no religion (coded as 0), from those belonging to a religion and self-classifying as either not really being a practicing member (coded as 1), being a practicing member to some extent (2) or very much being a practicing member (3). The British Election Study of October 1974 contains information on establishment size and public sector employment, but we have left these variables out of our models on account of the large number of missing observations.

[19] The question asks respondents if they think of themselves as Conservative, Labour, Liberal, SNP, Plaid Cymru or none of these. Note that there are only 4 respondents who identify with Plaid Cymru and that this category gets dropped in our logistic regressions.
[20] The official English name is the Swedish Confederation of Professional Associations. Currently, there are 14 unions affiliated with TCO and 23 associations affiliated with SACO (see https://www. tco.se/om-tco/This-is-TCO/ and https://www.saco.se/en/).

[21] See Appendix C for an overview of unionization patterns over the period 1986-2011.

[22] From 2011 onwards, SOM surveys asks unionized respondents to identify the union or confederation to which they belong in an open-ended manner, but responses to this question no longer feature in the cumulative files.

[23] Replicating our analysis with 2011 data included produces results that are very similar to those presented below.

[24] For reference, almost 70% of the members of LO-affiliated unions fall into the lower half of the income distribution estimated in this manner. See Appendix D for a more fine-grained and comprehensive picture of the distribution of white-collar union members (and unorganized white-collar employees) by income group.

[25] Arndt (2018) reports similar findings.

[26] See Appendix E for results based on income groups.

[27] The reform of unemployment insurance introduced by the new "bourgeois" government of 2006 entailed important changes in financing as well as cuts in benefits generosity (see Kjellberg and Lyhne Ibsen 2016). For blue-collar workers, the costs and benefits of union membership were dramatically altered, resulting in a further decline of unionization. However, both TCO and SACO unions were able to offset the effects of the reform on their members by negotiating supplementary unemployment benefits with employers. For white-collar employees, the selective incentives to join a union arguably increased as a result of the 2007 reform. Note that the effects of the reform have no bearing on the analysis presented here (based on 1986-2001 data).

[28] The corresponding figures for 2017 are 33% (Ver.di) and 38% (IG Metall). Source: http://www.dgb.de/uber-uns/dgb-heute/mitgliederzahlen/2010. Background on the Ver.di merger and the merger process is provided by Waddington, Kahmann and Hoffmann (2005), who also present a convenient introduction to the comparative literature on union mergers.

[29] Sverke, Chaison and Sjöberg (2004) exemplify the "ideal research design" that we have in mind. Their study explores the effects of a 1993 Swedish union merger on membership satisfaction and participation, based on a custom-made survey of treated union members before the merger and two surveys following the merger, with members of a third union as a comparison group. Note, however, that the second post-merger survey was carried out only two years after the merger.

[30] The small number of German unions and the fact that these unions tend to organize quite distinct occupational categories facilitate this exercise. Nevertheless, we end up with overlaps on 13 occupations when matching Ver.di's founding unions with ISCO occupations at the 4-digit level.

To link occupations with only one of Ver.di's founding unions, we drop respondents in occupations that could have been organized by two or more unions. See Appendix H for further details.

[31] According to the DGB website, Ver.di membership fell from 2.81 million in 2001 to 2.14 million in 2009 and 2.01 million in 2016 (https://www.dgb.de/uber-uns/dgb-heute/mitgliederzahlen). Overall, union density in Germany fell from 24.6% in 2000 to 17.7% in 2013 (Visser 2016).

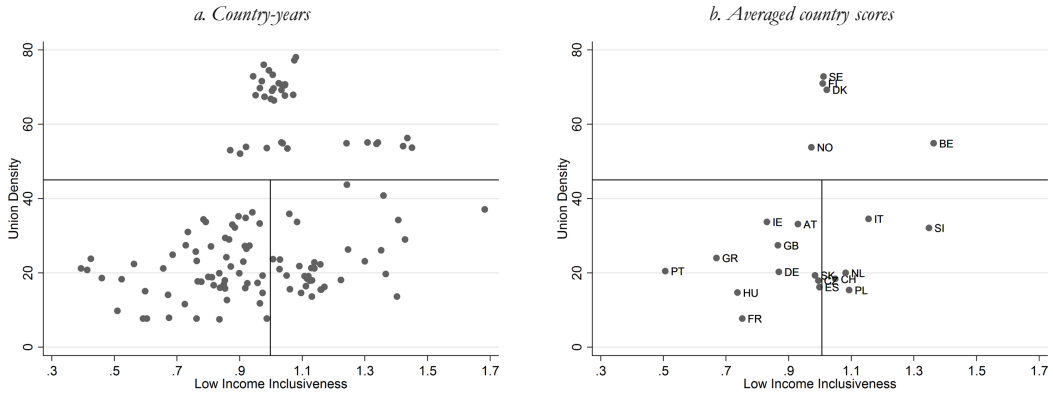
[32] In other words, the sample drawn from the 2002 survey is restricted to respondents between the ages of 25 and 65, the 2004 sample to respondents between the ages of 27 and 65, the 2006 sample to respondents between 29 and 65, the 2012 sample to respondents between 35 and 65, the 2014 sample to respondents between 37 and 65, and the 2016 sample to respondents between 39 and 65.

[33] Grouping the less low-income inclusive unions, HBV and DAG, together allows us to recover respondents in ten occupational categories, mainly in finance, which were possibly organized by either of these unions while there were no overlaps between ÖTV and IG Medien. The cross-group differences that we obtain with support for redistribution measured as the average response on a five-point scale are very similar to those shown in Table 13: see Appendix G.

[34] Germany stands out as one of the few ESS countries in which support for redistribution increased significantly prior to the economic crisis of 2008-10 (see Rosset and Pontusson 2014).

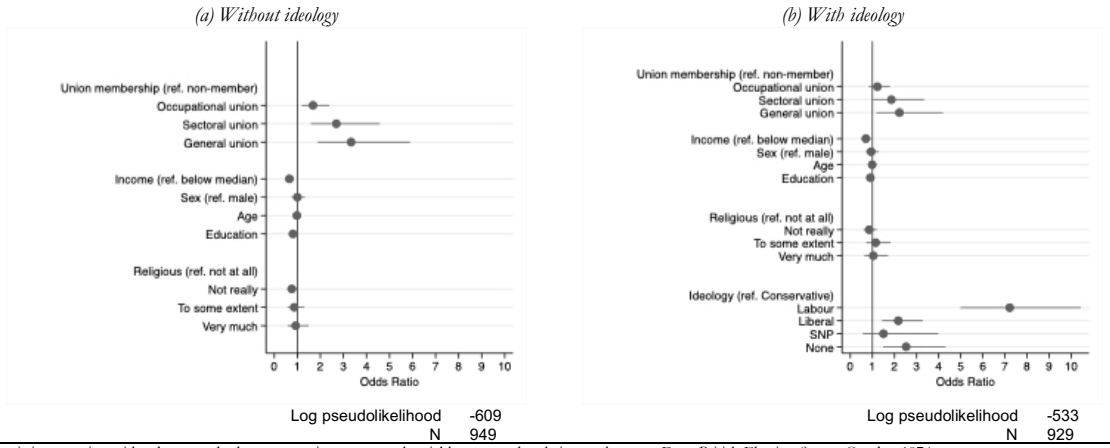
Figures

Figure 1. Unions' encompassment and inclusiveness, ESS 2002-14 data



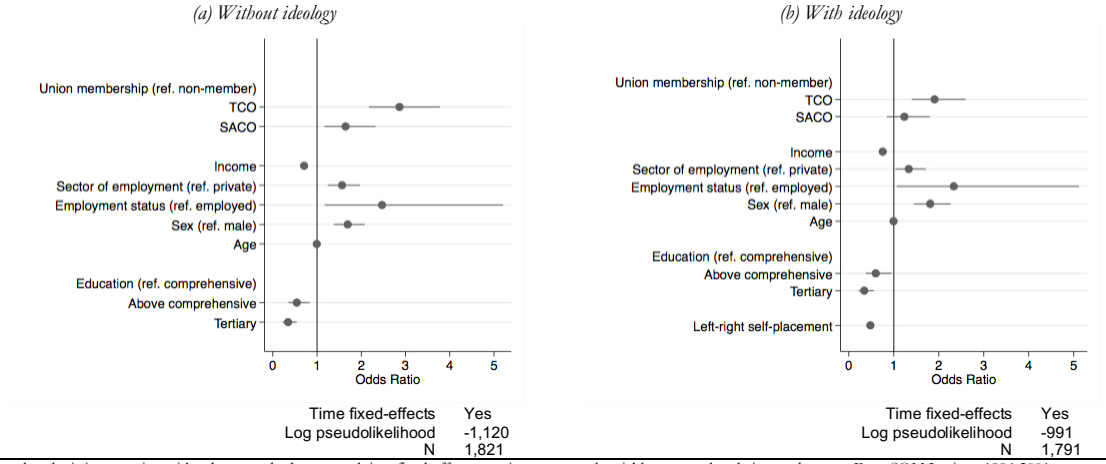
From Mosimann and Pontusson 2017, Figure 1. Data: ESS 2002-14, Visser 2016.

Figure 2. Determinants of support for redistribution, odds ratios with 95% confidence intervals, British 1974 data



Logistic regression with robust standard errors, continuous control variables centered at their sample mean. Data: British Election Survey October 1974.

Figure 3. Determinants of support for redistribution, odds ratios with 95% confidence intervals, Swedish 1986-2001 data



Based on logistic regression with robust standard errors and time fixed-effects, continuous control variables centered at their sample mean. Data: SOM Institute 1986-2001.

Tables

Table 1. Differences in predicted probabilities of support for redistribution between union members and non-members by type of unionism, 2002-14 ESS data

	Income decile	
	2nd	9th
Comprehensive unionism	.060***	.068***
Low-wage unionism	.028***	.097***
High-wage unionism	.023***	.059***

From Mosimann and Pontusson 2017, Table 4 - *** significant at .01%, ** significant at 1%, * significant at 5%, † significant at 10%; t test of equality hypothesis for differences. Based on two-level linear probability models estimated with separate samples for each type of unionism and time-varying macro control variables. Data: ESS 2002-14.

Table 2. Percentage of respondents with incomes below the median, British 1974 data

Members of general unions	67
Members of sectoral unions	57
Not union members	57
Members of occupational unions	48

Data: British Election Survey October 1974.

Table 3. Average predicted probabilities of redistribution support conditional on union membership and income, British 1974 data

	Income		
	Below median	Above median	*Differences*
Probabilities			
General union members	.773	.796	*.023*
			(.814)
Sectoral union members	.782	.670	*.113*
			(.255)
Occupational union members	.673	.584	*.089*
			(.202)
Non-members	.562	.450	*.112***
			(.008)
Differences			
(1) General vs None	*.211****	*.346****	
	(.001)	*(.000)*	
(2) Sectoral vs None	*.220****	*.220***	
	(.001)	*(.010)*	
(3) Occupational vs None	*.111†*	*.123**	
	(.053)	*(.020)*	
(4) General vs Occupational	*.100*	*.212**	
	(.188)	*(.023)*	
(5) Sectoral vs Occupational	*.109*	*.086*	
	(.165)	*(.360)*	
(6) General vs Sectoral	*.009*	*.126*	
	(.911)	*(.255)*	

P-values in parentheses; *** significant at .01%, ** significant at 1%, * significant at 5%, † significant at 10%.; t-test of equality hypothesis for differences. Based on model reported in Appendix B. Data: British Election Survey October 1974.

Table 4. Percentage of white-collar union members with incomes below the median, Swedish 1986-2001 data

TCO-public	44
TCO-private	38
SACO-public	37
SACO-private	29

Data: SOM Institute 1986-2001.

Table 5. Average predicted probabilities of redistribution support conditional on union membership, sector of employment, and income, Swedish 1986-2001 data

	a. Public			b. Private		
	Income			Income		
	Below median	Above median	*Differences*	Below median	Above median	*Differences*
Probabilities						
TCO members	.691	.565	*.126***	.570	.476	*.094**
			(.003)			*(.032)*
SACO members	.535	.467	*.068*	.330	.342	*.012*
			(.316)			*(.890)*
Non-members	.444	.298	*.146*	.387	.218	*.169***
			(.268)			*(.002)*
Differences						
TCO vs. none	*.247**	*.267***		*.183***	*.258****	
	(.013)	*(.006)*		*(.002)*	*(.000)*	
SACO vs. none	*.091*	*.169†*		*-.057*	*.124**	
	(.404)	*(.096)*		*(.527)*	*(.028)*	
TCO vs. SACO	*.156**	*.098**		*.240***	*.134**	
	(.016)	*(.042)*		*(.006)*	*(.023)*	

P-values in parentheses; *** significant at .01%, ** significant at 1%, * significant at 5%, † significant at 10%.; t-test of equality hypothesis for differences. Based on logistic regression with robust standard errors, continuous control variables centered at their sample mean. Based on model reported in Appendix F. Data: SOM Institute 1986-2001.

Table 6. Effects of belonging to different white-collar unions, Swedish 1986-2001 data

	Enlightenment effects	Solidarity effects
TCO-public	.247*	.267**
TCO-private	.183**	.258***
SACO-public	.091	.169†
SACO-private	-.057	.124*

See Table 5.

Table 7. Share of public-sector white-collar employees by educational attainment, Swedish 1986-2001 data

	Level of education	
	Secondary or less	Tertiary
TCO union members	47	53
SACO union members	10	90
Non-members	37	63

Data: SOM Institute 1986-2001.

Table 8. Average predicted probabilities of redistribution support among white-collar public-sector workers conditional on membership in a TCO union and education, Swedish 1986-2001 data

	Level of education		
	Secondary or less	Tertiary degree	*Differences*
Probabilities			
TCO members	.682	.627	*.055*
			(.160)
Non-members	.407	.356	*.051*
			(.498)
Differences	*.275***	*.271***	*)*
	(.001)	*(.000)*	

P-values in parentheses; *** significant at .01%, ** significant at 1%, * significant at 5%, † significant at 10%.; t-test of equality hypothesis for differences. Model controls for SACO membership, full results presented in Appendix F. Data: SOM Institute 1986-2001.

Table 9. Average predicted probabilities of redistribution support among white-collar public-sector workers conditional on membership in a TCO union, income, and education, Swedish 1986-2001 data

	Income			
	Below median		Above median	
Level of education	Secondary or less	Tertiary	Secondary or less	Tertiary
Probabilities				
TCO members	.748	.711	.651	.573
Non-members	.567	.369	.278	.330
Differences	*.181*	*.342****	*.373****	*.243***
	(.132)	*(.000)*	*(.001)*	*(.003)*
Differences-in-differences	*.161*		*.130*	
	(.217)		*(.253)*	

P-values in parentheses; *** significant at .01%, ** significant at 1%, * significant at 5%, † significant at 10%.; t-test of equality hypothesis for differences. Model controls for SACO membership, full results in Appendix F. Data: SOM Institute 1986-2001.

Table 10. Number of respondents identified as members of one of Ver.di's founding unions, German ESS 2002-2016 data

	2002-06	2012-16
DAG	102	69
OETV	80	89
HBV	31	38
Medien	6	19
DPG	0	3

Data: European Social Survey 2002-16

Table 11. Percentage of respondents with incomes below the median, German ESS 2002-06 data

Medien	60
ÖTV	57
HBV	48
DAG	45
Ver.di	50
Other unions	48
No union	52

Data: European Social Survey 2002-06.

Table 12. Support for redistribution across time, German ESS data 2002-16

	All respondents			Above median income
	2002-06	2012-16	*Change*	*Change*
ÖTV /IG Medien	64	78	*+14*	*+20*
DAG/HBV	54	80	*+26*	*+26*
Ver.di	58	79	*+21*	*+24*
Other unions	60	74	*+14*	*+13*
No union	49	68	*+18*	*+17*

Data: European Social Survey 2002-16. Redistribution support as percent that agree or agree strongly that government should reduce differences in income levels.

Appendices

Appendix A. Working-class solidarity among trade union members, British 1963 data

	Feeling close to other union members (%)[a]	Interest in union members getting along in country (%)[b]
Members of general unions	50	42
Members of sectoral unions	42	29
Members of occupational unions	43	39

Data: British Election Survey 1963.

[a] Question: Some members of trade unions feel that they have a lot in common with other members, but others don't feel this way so much. How about (member), would you say that (member) feels pretty close to trade union members in general or that (member) doesn't feel much closer to them than to other kinds of people? Answers: (1) Pretty close, (2) Not much closer. Response (1) coded as working-class solidarity.

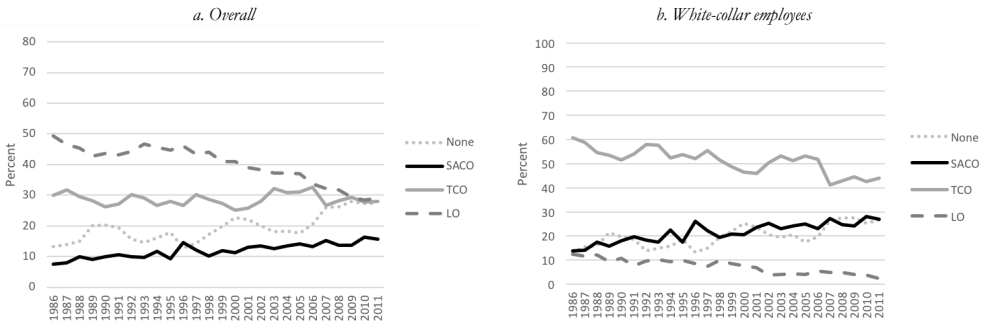
[b] Question: How much interest would you say (member) has in how trade union people are getting along in this country. Does (member) have a good deal of interest in it, some interest, or not much interest. Answers: (1) Good deal, (2) Some, (3) Not much. Response (1) coded as working-class solidarity.

Appendix B. Determinants of support for redistribution support, British 1974 data

Variables	Model 1
Constant	1.453*
	(.231)
Union membership (ref. non-member)	
General union	2.710**
	(.949)
Sectoral union	2.861**
	(1.090)
Occupational union	1.623†
	(.421)
Income (ref. below median)	.629**
	(.109)
Sex (ref. male)	1.002
	(.145)
Age	.981***
	(.006)
Education	.808***
	(.049)
Religiosity (ref. not at all)	
Not really	.760†
	(.122)
To some extent	.863
	(.180)
Very much	.931
	(.224)
Interactions	
Above median income * general union	1.824
	(1.128)
Above median income * sectoral union	.885
	(.480)
Above median income * occupational union	1.071
	(.379)
Pseudo R-squared	.058
Wald chi-squared	68***
Log pseudolikelihood	-609
N	949

Odds ratios. Logistic regressions with robust standard errors, standard errors in brackets - *** significant at .01%, ** significant at 1%, * significant at 5%, † significant at 10% - continuous variables centered at their sample mean. Data: British Election Survey October 1974.

Appendix C. Unionization patterns, Swedish 1986-2011data



Data: SOM Institute 1986-2011.

Appendix D. Distribution of white-collar employees by income and sector in percent, Swedish 1986-2001 data

		Income quartile				
		1st	2nd	3rd	4th	*Total*
None	Public sector	2.9	3.2	2.3	2.6	*11.0*
	Private sector	18.2	22.5	22.1	26.2	*89.0*
	Total	*21.1*	*25.7*	*24.4*	*28.8*	*100.0*
TCO	Public sector	8.6	13.1	15.8	12.1	*49.6*
	Private sector	5.9	13.3	16.8	14.4	*50.4*
	Total	*14.5*	*26.4*	*32.6*	*26.5*	*100.0*
SACO	Public sector	7.6	17.2	17.9	25.1	*67.8*
	Private sector	2.9	6.4	7.3	15.6	*32.2*
	Total	*10.5*	*23.6*	*25.2*	*40.7*	*100.0*

Data: SOM Institute 1986-2001.

Appendix E. Average predicted probabilities of redistribution support conditional on union membership, sector of employment, and income, Swedish 1986-2001 data

	a. Public				b. Private			
	Income quartile				Income quartile			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Probabilities								
TCO	.733	.664	.588	.509	.638	.573	.505	.438
SACO	.646	.566	.482	.400	.379	.379	.380	.380
No union	.566	.448	.336	.239	.467	.370	.281	.207
Differences								
TCO vs. none	*.167*	*.216***	*.252****	*.270***	*.171***	*.203****	*.224****	*.231****
	(.112)	*(.002)*	*(.000)*	*(.004)*	*(.002)*	*(.000)*	*(.000)*	*(.000)*
SACO vs. none	*.080*	*.118*	*.146**	*.161*	*.088*	*.009*	*.099**	*.173***
	(.489)	*(.128)*	*(.049)*	*(.103)*	*(.376)*	*(.876)*	*(.033)*	*(.007)*
TCO vs. SACO	*.087*	*.098**	*.106***	*.109†*	*.259**	*.194***	*.125***	*.058*
	(.225)	*(.040)*	*(.008)*	*(.074)*	*(.011)*	*(.003)*	*(.010)*	*(.404)*

P-values in parentheses; *** significant at .01%, ** significant at 1%, * significant at 5%, † significant at 10%, t-test of equality hypothesis for differences. Based on logistic regression with robust standard errors, continuous control variables centered at their sample mean (full results available upon request). Data: SOM Institute 1986-2001.

Appendix F. Determinants of support for redistribution support, Swedish 1986-2001 data

Variables	Model 1	Model 2	Model 3
Constant	1.748†	.400*	.783
	(.518)	(.157)	(.393)
Union membership (ref. non-member)			
TCO	2.207**	.	.
	(.584)		
SACO	.767	.	.
	(.327)		
TCO membership (ref. non-member)	.	3.401**	2.343
		(1.379)	(1.276)
SACO membership (ref. non-member)	.	1.873†	1.815†
		(.649)	(.638)
Income (ref. below median)	.419***	.	.276†
	(.111)		(.182)
Income quartiles	.	.720***	.
		(.054)	
Sector of employment (ref. private sector)	1.288	.	.
	(.581)		
Employment status (ref. employed)	2.712**	3.279†	3.624†
	(1.011)	(2.193)	(2.398)
Sex (ref. male)	1.731***	1.205	1.224
	(.181)	(.183)	(.186)
Age	.990*	.975***	.973***
	(.005)	(.007)	(.007)
Education (ref. comprehensive)			
Above comprehensive	.512**	.	.
	(.113)		
Tertiary	.316***	.	.
	(.073)		
Education (ref. below tertiary)			
Tertiary	.	.791	.428†
		(.271)	(.216)
Interactions			
Above median income * TCO	1.593	.	2.243
	(.520)		(1.606)
Above median income * SACO	2.533†	.	.
	(1.288)		
Public sector * TCO	1.346	.	.
	(.676)		
Public sector * SACO	1.920	.	.
	(1.210)		
Above median income * public sector	1.212	.	.
	(.818)		
Above median income * public sector * TCO	.698	.	.
	(.508)		
Above median income * public sector * SACO	.581	.	.
	(.497)		
Tertiary education * TCO	.	.974	1.923
		(.378)	(1.141)
Above median income * tertiary education	.	.	3.026
			(2.154)
Above median income * tertiary education * TCO	.	.	.284
			(.230)
Time dummies	Yes	Yes	Yes
Pseudo R-squared	.106	.070	.065
Wald chi-squared	220***	69***	63***
Log pseudolikelihood	-1,128	-528	-530
N	1,821	826	826

Odds ratios. Logistic regressions with robust standard errors, standard errors in brackets - *** significant at .01%, ** significant at 1%, * significant at 5%, † significant at 10% - continuous variables centered at their sample mean. Data: SOM Institute 1986-2001.

Appendix G. Support for redistribution (alternative measure) across time, German ESS data 2002-16

	2002-04	2012-16	*Change*
ÖTV/IG Medien	3.523	3.944	*+ 0.421*
DAG/HBV	3.372	3.962	*+ 0.590*
Ver.di	3.429	3.964	*+ 0.535*
Other unions	3.514	3.858	*+ 0.344*
No union	3.238	3.696	*+ 0.458*

Data: European Social Survey 2002-16.
1= disagree strongly that government should reduce differences in income levels
5= agree strongly that government should reduce difference in income levels

Appendix H. Matching of German ESS respondents and Ver.di's founding unions

We have coded German ESS respondents as members of Ver.di's founding unions based on four-digit ISCO codes and the following five-step procedure. First, respondents in occupations clearly not organized by any of Ver.di's founding unions (e.g., miners or construction workers) were excluded from the matching process. Second, occupational codes not appearing in our ESS sample (that is, in the sample of those currently employed aged 25-65 in 2002, 27-65 in 2004, 29-65 in 2006, 35-65 in 2012, 37-65 in 2014, and 39-65 in 2016) were excluded from the matching process. Third, occupations clearly organized by one of the founding unions were matched (e.g., printers with IG Medien, train conductors with ÖTV). Fourth, each of the remaining occupational codes was matched with the founding union most likely to have organized them based on the strength of these unions in that specific occupational group (e.g. matching of occupations in banking with HBV but not DPG even though the latter organized employees of Postbank due to the small numbers of DPG members in these jobs according to Ver.di's homepage). Fifth, match the remaining occupations twice (e.g. medical personnel with DAG and ÖTV).

The occupations organized by Ver.di's founding unions are defined as follows:

- DAG organized the following occupations:
    - Commercial clerks in industry (*Kaufmännische Angestellte in der Industrie*)
    - Technicians and civil servants (*Technische Angestellte und Beamte*)
    - Master craftsmen (*Meister*)
    - White-collar occupations in mining
    - White-collar occupations in trade
    - White-collar occupations in aviation
    - White-collar occupations in shipping
    - White-collar occupations in banking (*Banken und Sparkassen*)
    - White-collar occupations in insurance
    - White-collar occupations in public service
    - White-collar occupations in art and media
- ÖTV organized the following occupations:
    - Occupations in public services
    - Occupations in transport and traffic
    - Occupations in utility services and waste disposal industries including energy supply
    - Occupations in health and social services
    - Occupations in infrastructure, research, and development facilities
    - Occupations in environmental protection services
- HBV organized the following occupations:
    - Occupations in trade including retail and wholesale trade
    - Occupations in banking (*Bank-, Geld und Börsenwesen*)

- Occupations in insurance
- Occupations in substitute and working funds (*Ersatz- und Betriebskassen*)
- Occupations in other services, that is, data processing, organization, administration and education facilities including their associations, housing sector, urban planning and real estate activities, book trade and publishing, public lending institutions, organizational consulting, secretarial and translation pools, parties, trade and professional associations, tax, business, and legal counseling, trust management, credit agencies and debt collection, travel agencies and travel operators, market and opinion research

- IG Medien organized the following occupations:

  - Occupations in print
  - Occupations in publishing
  - Occupations in news agencies
  - Occupations in advertising agencies
  - Occupations in processing of paper and synthetic material
  - Occupations in radio
  - Occupations in TV
  - Occupations in public media
  - Occupations in film and audio-visual media
  - Occupations in journalism
  - Occupations in literature
  - Occupations in visual and performing arts
  - Occupations in music
  - Occupations in the entertainment industry

- DPG organized the following occupations:

  - Occupations in telecommunication
  - Occupations in postal services
  - Occupations in post bank