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Working Paper

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Working Paper Series in Economics, No. 12

Provided in Cooperation with:
Institute of Economics, Leuphana Universität Lüneburg

Suggested Citation: Schnabel, Claus; Wagner, Joachim (2005) : Who are the workers who never joined a union?: Empirical evidence from Germany, Working Paper Series in Economics, No. 12, Universität Lüneburg, Institut für Volkswirtschaftslehre, Lüneburg

This Version is available at:
https://hdl.handle.net/10419/28142

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University of Lüneburg
Working Paper Series in Economics

No. 12

July 2005

www.uni-lueneburg.de/vwl/papers
ISSN 1860 - 5508

Who are the workers who never joined a union? Empirical evidence from Germany*

Claus Schnabel[a] and Joachim Wagner[b]

ABSTRACT: Using representative data from the German social survey ALLBUS 2002 and the European Social Survey 2002/03, this paper provides the first empirical analysis of trade union never-membership in Germany. We show that between 54 and 59 percent of all employees in Germany have never been members of a trade union. Individuals' probability of never-membership is significantly affected by their personal characteristics (in particular age, education and status at work), their political orientation and (to a lesser degree) their family background, and by broad location. In addition, occupational and workplace characteristics play a significant role. Most important in this regard is the presence of a union at the workplace.

ZUSAMMENFASSUNG: Unter Verwendung von Daten des ALLBUS 2002 und des European Social Survey 2002/03 analysiert diese Arbeit erstmalig die Nie-Mitgliedschaft in deutschen Gewerkschaften. Wir zeigen, dass 54 bis 59 Prozent aller Beschäftigten in Deutschland niemals Mitglied einer Gewerkschaft waren. Die individuelle Wahrscheinlichkeit einer Nie-Mitgliedschaft hängt signifikant mit persönlichen Merkmalen (insbesondere Alter, Ausbildung und Arbeitsplatzstatus), der politischen Ausrichtung und (in geringerem Maße) dem familiären Hintergrund sowie mit dem Wohnsitz zusammen. Darüber hinaus spielen Charakteristika der Beschäftigung und des Arbeitsplatzes eine signifikante Rolle; besonders wichtig ist hierbei das Vorhandensein einer Gewerkschaft am Arbeitsplatz.

KEYWORDS: union membership, never-membership, Germany

JEL-CLASSIFICATION: J 51

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* This paper uses data from the ALLBUS survey (provided by the Zentralarchiv für Empirische Sozialforschung in Cologne) and the European Social Survey. The authors alone are responsible for the use and interpretation of the data in this study. Details regarding data access are discussed in section 2 below. The authors would like to thank John Addison for helpful comments on a previous version.

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1. INTRODUCTION

Trade unions in Germany find it more and more difficult to attract and to retain members. Union density, defined as the percentage of union members among all employees, fell from 32.7 percent in 1980 to 23.8 percent in 2002 in western Germany, and was as low as 20.4 percent in eastern Germany in 2002 (see Schnabel and Wagner 2005, Schnabel 2005). Although there still exist traditional union strongholds in the public and the manufacturing sectors, union recruitment efforts seem to have been not successful in the growing private service sector, among white-collar workers, among young employees and among workers in atypical employment. In short: "German trade unions have remained strong in those areas where they have been traditionally strong, but are not gaining members in those areas where they have been traditionally weak." (Hassel 1999: 501).

While no serious attempt has been made in Germany to analyze the group of employees that have resisted union recruitment efforts, there is a fair amount of research on unionization and its development over time (for descriptive analyses see Fichter 1997, and Ebbinghaus 2003). Aggregate time-series analyses in the business cycle tradition have shown that economic variables such as wage and price inflation, employment growth and unemployment influence union membership growth. In addition, the composition of the labour force plays a significant role, especially in explaining long-run trends in unionization in West Germany (see Armingeon 1989, Carruth and Schnabel 1990). Cross-sectional analyses at the level of individuals have identified a number of personal, occupational and firm characteristics as well as attitudinal and social variables that are associated with union membership. All studies find establishment size to be a significant determinant of unionization, but the significance of other covariates differs between studies depending on the data set and year analyzed and on the econometric specification used (see Windolf and Haas 1989, Lorenz and Wagner 1991, Fitzenberger et al. 1999, Goerke and Pannenberg 2004, Schnabel and Wagner 2005). There is also some evidence that the factors influencing individuals' probability of union membership have converged over time between western and eastern Germany (Schnabel and Wagner 2003).

In this paper, research on union membership will be complemented by the first analysis of never-membership in Germany, that is of those employees who have

never joined a union.[1] In contrast to existing cross-sectional studies that analyze data indicating whether or not an employee is a union member at a certain point in time, our new survey data contain information as to whether employees have ever joined a union or not in their working life. Since according to anecdotal evidence the latter group of never-members seems to be growing, it may be interesting to estimate the extent of never-membership and to analyze the characteristics of this group. This core of "abstainers" and their characteristics might enable us to draw some conclusions on the likely future of the union movement in Germany.

The structure of the paper is as follows. Section 2 introduces the two sources of survey data we use and presents some descriptive evidence. The factors associated with never-membership are analyzed econometrically in section 3. Section 4 concludes with some remarks on union prospects and recruitment strategies.

2. Data on Never-Membership

The representative data used in this study are taken from two sources: The first is the 2002 wave of the ALLBUS, the German social survey, which has been conducted biannually since 1980. Unfortunately the ALLBUS data sets are not part of a panel study; for each wave an independent random sample is drawn covering individuals aged 18 years or more. In 2002, the ALLBUS for the first time not only contained a question on current membership in a union but also on membership in the past. Our second data source is the first round of the European Social Survey (ESS) fielded in 2002/03. This cross-section survey is based on strict random probability sampling and covers all persons aged 15 years and above in 22 countries. In question F28 the interviewees were asked: "Are you or have you ever been a member of a trade union or similar organisation?"[2]

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[1] The only study of never-membership of which we are aware was conducted by Bryson and Gomez (2005) for Britain. They were able to use repeated cross-sectional data and showed that over half the rise in never-membership since the 1980s is due to compositional changes in the workforce that have resulted in an increasing proportion of employment going to the types of workers who have traditionally been less inclined to unionise. In their analyses the biggest single factor determining the probability of never-membership is whether or not an individual is employed in a workplace with a recognised union.

[2] For additional information on the ALLBUS, whose data are available for scientific research after paying a nominal fee, see Terwey (2000). The ESS is explained in detail by Jowell et al. (2003), the data and some information are available from the ESS home site located at NSD – Norwegian Social Science Data Services (http://ess.nsd.uib.no); for our study we use version ESS1 edition 05.0 released June 17, 2004. To facilitate replication and extensions of our results the Stata do-files used are available on request from the second author.

Table 1 presents information on never-membership available from both data sets, using weighted data. Our samples include all persons who were born in Germany (ESS) or who hold a German citizenship (ALLBUS). The samples are also restricted to those persons in dependent employment at the date of the interview or in the past. As can be seen from Table 1, there is little difference in outcome between current employees and retired employees.

Table 1: Percentage of never union members in Germany (2002/03)

Source	ALLBUS Survey 2002		European Social Survey 2002/03	
	Paid employees at date of interview; < 65 years old	Paid employees at date of inter-view or in the past; all age groups	Paid employees at date of interview; < 65 years old	Paid employees at date of inter-view or in the past; all age groups
All	54.3 [51.4 , 57.3] (N = 1,158)	53.9 [51.9 , 56.0] (N = 2,170)	58.8 [56.0 , 61.6] (N = 1,202)	58.5 [56.4 , 60.5] (N = 2,255)
Male	50.9 [47.1 , 54.7] (N = 667)	46.9 [43.9 , 49.9] (N = 1,062)	51.9 [47.9 , 55.9] (N = 610)	50.6 [47.6 , 53.6] (N = 1,065)
Female	58.9 [54.6 , 63.3] (N = 491)	60.7 [57.8 , 63.6] (N = 1,108)	65.8 [62.0 , 69.6] (N = 592)	65.5 [62.8 , 68.2] (N = 1,190)
Male West Germany	55.4 [50.9 , 60.0] (N = 462)	51.8 [48.1 , 55.5] (N = 697)	55.3 [50.3 , 60.3] (N = 378)	55.5 [51.6 , 59.4] (N = 620)
Female West Germany	67.6 [62.5 , 72.7] (N = 321)	69.4 [66.1 , 72.8] (N = 733)	72.1 [67.5 , 76.6] (N = 383)	75.1 [71.9 , 78.3] (N = 719)
Male East Germany	30.7 [24.4 , 37.1] (N = 205)	28.2 [23.6 , 32.9] (N = 365)	39.7 [33.3 , 46.0] (N = 232)	35.6 [31.1 , 40.0] (N = 445)
Female East Germany	26.5 [19.8 , 33.2] (N = 170)	26.9 [22.4 , 31.4] (N = 375)	40.4 [33.7 , 47.1] (N = 209)	33.1 [28.8 , 37.3] (N = 471)

Note: Own computations using weighted data; 95 % confidence intervals are reported in square brackets.

Interpreting the two data sources and the two groups of interviewees as lower and upper bounds, the point estimates in Table 1 indicate that between 54 and 59 percent of all employees in Germany have never been members of a trade union. In western Germany, the figures are much higher for women than for men whereas this is not the case in eastern Germany. Compared with their colleagues in the west, there are fewer people living in eastern Germany (at the time of the interview) who have never joined a union. This probably reflects the fact that until 1989 most employees in communist East Germany were more or less obliged to become a member of the Confederation of Free German Trade Unions (*Freier Deutscher Gewerkschaftsbund*, or FDGB), a state-controlled mass organization for labour that lacked most of the characteristics of free trade unions (including bargaining autonomy, right to strike, etc.). Finally, the point estimates for never-membership derived from the ALLBUS survey are (with one exception) always lower than those from the ESS. That said, the 95 percent confidence intervals are quite large and overlap in most cases.

3. Factors associated with Never-Membership

Union membership and its determinants have been studied by economists, sociologists, psychologists and political scientists (see Schnabel 2003 for a recent survey). Theoretical analyses of unionization range from traditional economic supply-demand analyses (e.g. Pencavel 1971) through social custom models (see Booth 1985, Naylor 1990) to various psychological and socio-political theories (see Klandermans 1986, Frege 1996). Empirical studies of the determinants of union membership (surveyed by Riley 1997 and Schnabel 2003) usually take an eclectic approach and combine economic with socio-political hypotheses and explanations. Although a number of factors associated with union membership and growth (such as personal, occupational and firm characteristics, the business cycle and structural developments in the economy) have been identified in such studies, it has proved difficult or even impossible to establish a standard model of unionization.

The same can be said for non-unionization which has received almost no attention in theoretical and empirical work (with the notable exception of Bryson and Gomez 2005). Although it might be argued that non-unionization is just the reverse of unionization so that all attempts to model the individual's decision to unionize apply also to non-membership, in empirical work with cross-sectional data there is some difference between identifying the factors associated with union membership at a certain point in time and the factors that may have influenced individuals'

propensity not to join a union over the past ten or twenty years. For instance, while in most empirical studies characteristics of an employee's current workplace (such as plant size) are found to be significant determinants of membership, employees may have changed workplaces over their working life so that the current workplace (at the time of the interview) may not have such a good explanatory power for the (past) never-membership decision.

In this context, we refrain from setting up a tailor-made theory of never-membership and concentrate on the more modest attempt of empirically investigating the factors associated with never-membership. We make use of the ALLBUS and ESS data described in section 2 and confine our analysis to those interviewees who were paid employees at the date of the interview and aged less than 65 years.[3] In order to determine which factors are associated with never-membership, we perform probit analyses (estimating the probability of never-membership) and use a dichotomous variable indicating whether an employee ever was a union member or not as the dependent variable.

The ALLBUS and ESS data used include information on a number of potential covariates such as personal and occupational characteristics, attitudes, and family background. The variables employed are listed and grouped in Table 2 according to their variation over an employee's working life. This grouping of variables is not based on theoretical considerations but rather seeks to reflect the statistical fact that interviewees report both information that refers to their entire working life (such as "ever unemployed") and information about their current workplace (e.g. the presence of a union). The first group of variables contains a number of characteristics such as gender, year of birth, or parents' educational achievements that are fixed in the sense that they can not have changed over an employee's working life. Characteristics that reflect the present situation of employees but can be presumed not to have changed much over their working life (such as being a blue-collar worker or having a university degree) are put in the second category. The third group contains factors that relate to the current status and workplace of an employee. These include the sector of employment, firm size, and union presence, factors that may well have been different in the past. Inevitably, this grouping is arbitrary, but it may be helpful in assessing how reliable are the findings concerning individual variables and how they should be interpreted.

[3] This restriction of the sample enables us to use information on the current status of the employees and their workplace characteristics that are not available for retired employees. Furthermore, since the differences in never-membership between both groups seem to be relatively small (see the results in Table 1), such a restriction may be acceptable.

Table 2: Probit estimations of never union membership

(dependent variable: employee has never been a union member: 1 = yes)

Explanatory variables	ALLBUS Survey 2002	European Social Survey 2002/03
Fixed characteristics:		
gender	-0.039	-0.152
(1=male, 0=female)	(0.36)	(1.34)
age	-0.182***	-0.140***
(in years; restricted to 15-64)	(4.99)	(4.70)
age squared	0.002***	0.001***
	(3.86)	(3.77)
ever unemployed	-0.133	-0.192*
(1=yes, 0=no)	(1.15)	(1.72)
low level of education *(Hauptschule/ max. lower secondary education=1)*	0.149	0.132
	(1.13)	(0.57)
university degree	0.210*	0.177*
(1=yes, 0=no)	(1.74)	(1.65)
father's education: low	0.176	0.053
(1=yes, see above)	(1.36)	(0.32)
mother's education: low	0.046	0.001
(1=yes, see above)	(0.35)	(0.01)
father was a blue-collar worker	-0.248**	–
(1=yes, 0=no)	(2.27)	
parents were self-employed	–	0.184
(father or mother were self-employed when respondent was 14: 1=yes)		(1.31)
Presumably fixed characteristics:		
Blue-collar worker	-0.317**	-0.209*
(1=yes, 0=no)	(2.52)	(1.76)
living in eastern Germany	-0.892***	-0.703***
(1=yes, at time of interview, 0=no)	(8.28)	(7.11)
political orientation	0.101***	0.061**
(index, 1/0=left to 10=right)	(3.75)	(2.18)
Variable characteristics:		
full-time employee	-0.301**	-0.131
(1=yes, 0=no)	(2.04)	(1.12)
public sector employee	-0.296***	–
(1=yes, 0=no)	(2.68)	
manufacturing employee	–	-0.109
(1=yes, 0=no)		(0.91)
union at the workplace	–	-0.686***
(1=yes, 0=no)		(6.39)
establishment size	–	yes
(5 dummies)		
satisfaction with the way things are handled at work *(index, 0=extremely dissatisfied, 10=extremely satisfied)*	–	0.004 (0.21)
Constant	4.583***	4.111***
	(6.01)	(6.37)
Number of cases N	889	966

Notes: Robust absolute z statistics in brackets. */**/*** denote statistical significance at the 10/5/1 percent level.

The first group of fixed characteristics contains a number of personal factors such as gender, age, and education that have been found to be systematically related to union membership in cross-sectional studies for many countries (see the surveys by Riley 1997 and Schnabel 2003) and that can be expected to influence the decision never to join a union as well. Table 1 has shown that in (western) Germany women exhibit a higher percentage of never-membership than men. This difference has traditionally been interpreted as a reflection of women's lower degree of attachment to the labour force which would decrease the benefits of unionization to employees and unions alike.[4] Accordingly, we include a dummy variable for gender in the analysis.

The age of an employee may negatively influence the probability of never-membership for at least two reasons. First, younger workers may be less likely to become union members due to their different socialization, resulting in lower identification with unions. Second, older employees can be assumed to have been exposed to more union recruitment attempts over their working life and are therefore more likely to have joined a union than younger employees. Since the relationship between age and unionization might be non-linear, we include both age and its square in our estimations. Another (dummy) variable of interest and one that should decrease the probability of never-membership is whether or not an employee has experienced unemployment during his working life. Although there is no union-managed unemployment insurance in Germany, unemployment experience may have induced individuals to join a union either to make use of the legal advice and representation offered by unions (e.g. in opposing unfair dismissals) or to enjoy the higher degree of job protection that unions (and their affiliated works councillors) provide to union members (e.g. in the case of mass layoffs).

We further employ two dummy variables that assume the value of 1 if employees' highest completed level of education is lower secondary education or a university degree, respectively. For both groups of lowly- and highly-educated employees, we expect a higher probability of never-membership than for our reference group with medium-level education because recruitment costs should be higher for these groups than for the (rather homogeneous) group of skilled workers traditionally represented by the trade unions. Furthermore, employees with a university degree

[4] This argument is of lesser relevance for eastern Germany where in the communist regime up to 1989 women more or less had the same labour force attachment as men and where even now the female labour force participation rate is higher than in western Germany. Furthermore, Visser (2003: 397) notes that "since the early 1980s, nearly all of the growth in membership in EU unions has come from women" and that "the gender gap in unionization is narrowing", so that the traditional hypothesis sketched above may not hold anymore.

usually have greater individual bargaining power (and thus a lesser need for collective voice), and sometimes they identify more with management than with the labour movement. Lowly skilled workers may be more union-friendly, but since they often experience higher employment instability, neither they nor the unions might be very much interested in their membership.

There is also some information in both data sets on the educational and occupational background of the interviewees' parents, although we do not know whether the latter are or were union members. Several theories of social psychology (e.g. the interactionist approach and social identity theory; see Klandermans 1986 and Tajfel 1982, respectively) point to the influence of reference groups such as parents on the decision maker, and starting with Booth (1985) this line of reasoning has also been incorporated into social custom models of union membership. We construct two dummy variables taking the value of 1 if the father or the mother has a low level of education. Following the argumentation above this should have resulted in a lower probability of parental union membership that might in turn have spilled over to the interviewee. A further dummy variable (available in the ALLBUS only) indicates whether or not the father was a blue-collar worker, which may be expected to decrease the probability of never-membership due to a union-friendly socialization process in the family. The opposite might be the case, however, if the employee's parents were self-employed when he or she was 14 years old (a piece of information that is only available in the ESS).

Moving on to the second group of characteristics that reflect the present situation of employees at the time of the interview but can be presumed not to have changed much over their working life, we expect blue-collar workers to have a lower probability of never-membership. Apart from considerations of union tradition, the individual's socialization and class consciousness, economic and rational-choice considerations suggest that the rather homogeneous preferences and working conditions of blue-collar workers make them easier to organize than white-collar workers. Employees living in eastern Germany can also be expected to have a lower probability of never-membership since most of them already worked under the communist regime in East Germany where being a member of the state-controlled labour organization (FDGB) was an integral part of working life and a prerequisite for gaining access to union-delivered services such as holiday accommodation. Although we only know whether the interview was conducted in eastern or western Germany, due to the low labour mobility in Germany it is fairly

save to assume that employees living in the east now have been living there over their entire working life.[5]

Political attitudes of individual employees have been found to be significant determinants of union membership in many studies. For Germany, Windolf and Haas (1989), Lorenz and Wagner (1991) and Fitzenberger et al. (1999) report that Social-Democrat (SPD) voters have a higher probability of being union members, which is not surprising given the historically close relationship between the SPD and the labour movement. In our data sets there is some information on the political orientation of respondents measured on a ten-point (ALLBUS) or eleven-point (ESS) scale, ranging from 1 or 0 for extreme left to 10 for extreme right. Since left-wing views should be associated with a lower probability of never-membership we expect a positive coefficient estimate for this variable.

The third group of explanatory variables contains factors that relate to the current status and workplace of an employee but which may well have been different in the past. Consider first the case of broad employment status: full-time employees can be expected to have a lower probability of never-membership because both from their own point of view and that of unions, the cost-benefit ratio of organization should be lower than for part-time workers. Further, since union recruitment tends to be easier and less costly in large, homogeneous organizations with a bureaucratic nature and a low turnover rate, never-membership is expected to be lower in the public sector than in the private market sector. Also in the public sector as well as in manufacturing, which are traditional union strongholds, there may exist higher peer pressure to conform to a social custom of union membership, so that the probability of never-membership should be lower in both sectors.

Although it is not unlikely that employees have moved between firms of different size during their working life, we include four dummy variables for establishment size intervals where our reference group is establishments with less than ten employees. We expect the probability of never-membership to fall with establishment size because union costs of recruiting and organizing should be lower in larger units. In addition, union services may be valued most highly in large, bureaucratic organizations where workers are likely to be treated

[5] This assessment is underscored by additional information about the place of birth available in the ALLBUS alone. Just 1 percent of the employees in our sample were interviewed in the east but born in the west whereas 5 percent were born in the east and interviewed in the west. For the vast majority of 94 percent, therefore, the places of birth and interview do not differ.

impersonally and feel a greater need for representation and protection. In the ESS, we also have information on whether there is a trade union at the workplace. If this is the case, it can be expected to decrease an employee's likelihood of not being a union member for a number of reasons: First, union representatives at the workplace have direct access to the employees, which facilitates recruiting efforts. Second, and related, union membership may be an experience good (Bryson and Gomez 2003). Third, there may be higher peer pressure to conform to a social custom of union membership.

Finally, employees in the ESS were also asked to express their satisfaction with the way things have been handled at the workplace in the last 12 months on an 11-point scale ranging from 0 for extremely dissatisfied to 10 for extremely satisfied. Assuming that dissatisfied employees have a stronger desire for unionization and may be more likely to unionize, we should expect a positive coefficient of this variable. That said, in his discussion of frustration-aggression theory, Klandermans (1986: 199) argues that dissatisfaction "is neither a necessary nor a sufficient condition for participation".

Table 2 presents the results of our probit estimations of never-membership with the explanatory variables and the two data sets described above. It can be seen that the signs of most explanatory variables are in accordance with our priors, even if not all of them are statistically significant. Although results differ slightly between the two data sets, there is no contradictory evidence in terms of opposite signs of significant coefficients.

Table 2 shows that personal characteristics of employees play a significant role in explaining never-membership. The probability of never-membership decreases with the age of an employee (in a non-linear way), and it is lower for blue-collar workers and full-time workers (the latter effect being significant only in the ALLBUS data set). Employees with a university degree are more likely and employees in eastern Germany are less likely to never have joined a union. A personal experience of unemployment, however, is only marginally significant in the ESS data, while gender and a low level of education do affect never-membership in both data sets.

The individual's political orientation plays a significant role in that moving to the right of the political spectrum is associated with a rising probability of never-membership. Among the four covariates reflecting family background and socialization, only one proves to be statistically significant: an individual's

probability of never-membership is substantially lower if his or her father was a blue-collar worker.

Although occupational and workplace characteristics in our data only refer to the situation in the current job and not in the past, some of them are found to be significant determinants of never-membership. Public sector employees are less likely than others to have never joined a union, whereas employment in manufacturing proves to be an insignificant covariate (exact information on these two variable is only available in the ALLBUS and the ESS, respectively). A very important variable is the presence of a trade union at the workplace (available in the ESS only), which should make it easier to recruit and serve members. The probability of never-membership is substantially lower if there is a union at the workplace. At first sight, the size of an establishment does not seem to play a role for never-membership, which result would be in contrast to previous evidence on union membership. However, it can be assumed (and is found in the data) that due to scale effects in recruiting and organizing the presence of a union is not independent of establishment size. When our model is re-estimated excluding union presence at the workplace, the results (not reported here but available on request) show that now establishment size is highly significant and negatively associated with never-membership.

4. Concluding remarks

Using representative data from the German social survey ALLBUS 2002 and the European Social Survey ESS 2002/03, this paper has provided the first empirical evidence on never-membership in German trade unions. We show that between 54 and 59 percent of all employees in Germany have never been members of a trade union. Individuals' probability of never-membership is significantly affected by their personal characteristics (in particular age, education and status at work), their political orientation and (to a lesser degree) their family background, as well as by their living in eastern or western Germany. In addition, occupational and workplace characteristics play a significant role, most notably the presence of a union at the workplace. These results for Germany partly resemble those obtained for Britain by Bryson and Gomez (2005), who find that young employees are more likely and manual workers and employees in workplaces with union recognition are less likely to never have joined a union.

Unlike Bryson and Gomez (2005) we have cross-sectional data for one point in time only, so that we cannot analyze the change in never-membership over time. We are aware of the problem that cross-sectional analysis can only detect correlations between variables and is not able to answer questions of causality. Nevertheless, our results should enable us to draw some cautious conclusions concerning the future of the union movement in Germany.

Besides age, region and political attitudes (which might be difficult to influence by union actions), educational, occupational and workplace characteristics as well as family background were found to be significantly associated with never-membership. As the employment share of blue-collar and full-time workers as well as of the public sector is falling (and fewer employees are socialized by fathers who are blue-collar workers) while more and more employees have a university degree, never-membership can be expected to rise. This seemingly paints a bleak picture for the German unions since there is little they can do to influence compositional changes in the workforce. However, our results imply that unions can reduce the hard core of never-members and thus dampen their membership losses by increasing their presence at the workplace. While this is costly and might be opposed by employers, it may be the unions' most promising way to combat obsolescence.

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