What Do Workers Want? The Representation Gap at the EU Establishment as Perceived by Their Workplace Representatives

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Abstract
Using data from the 2013 European Company Survey, this paper operationalizes the representation gap as the desire for greater employee involvement in decision making expressed by the representative of the leading employee representative body at the workplace. According to this measure there is evidence of a substantial shortfall in employee involvement in the EU, not dissimilar to that reported for the United States. The paper proceeds to investigate how the size of this representation gap varies by type of representative structure, information provided by management, the resource base available to the representatives, and the status of trust between the parties. Perceived deficits are found to be smaller where workplace representation is via works councils rather than union bodies. Furthermore, the desire for greater involvement is reduced where information provided the employee representative on a range of establishment issues is judged satisfactory. A higher frequency of meetings with management also appears to mitigate the expressed desire for greater involvement. Each of these results is robust to estimation over different country clusters. However, unlike the other arguments, the conclusion that shortfalls in employee involvement representation are smaller under works councils than union bodies are nullified where trust in management is lacking.

1. Introduction

The widespread decline in unionism has prompted fears of a deficiency in worker voice. Although the alarm bell has been sounded on a number of occasions since the 1980s, the case was first formally articulated for the United States. In charting the gap between the type and extent of workplace representation wanted by workers and that currently obtaining, Freeman and Rogers (1999) found that a very large majority of American workers – in the range 85 to 90 percent – desired greater collective voice at the workplace than they currently enjoyed and that, overall, some 44 percent of workers favored union representation.[1] Updated research for the United States seemed to suggest that workers wanted as much or more of a voice in their workplace, and that more than before (now a majority) would vote for unions (Freeman and Rogers, 2006; Freeman, 2007). As we shall see, the most recent U.S. research essentially confirms these results while raising new issues (Kochan et al., 2019).

Evidence of a representation gap, albeit smaller in magnitude, has also been found for Australia, Canada, Ireland, New Zealand and the United Kingdom (Freeman, Boxall, and Haynes, 2007). For the U.K. in particular, surveys of worker perceptions of the problems they confront at the workplace and the effectiveness of unions (and management) in dealing with these problems offer a more nuanced view.[2] Thus, as reported by Bryson and Freeman (2007), although there is every indication that British workers value unions as sources of wage increases and protection against unfair treatment by management, a majority of them envisage no major workplace problems that would cause them to join unions. Bryson and Freeman further observe that workers want cooperation rather than confrontation, preferring bodies that cooperate with management to improve conditions than a more defensive organization offering protection against unfair treatment by management. Admittedly there is a certain tension in all of this because cooperation as an equal partner requires power that can be used in a destructive manner and harm industrial relations, while the adoption by management of a cooperative stance may find that unions interpret this as a sign of weakness to be exploited (see below).

And what of the expression of worker voice in the European Union, the subject of the present treatment? First of all, as a matter of principle, the European Union has long sought to promote worker participation in member states based on the twin notions of industrial democracy and economic competitiveness.[3] Indeed, Directive 2002 of the European Parliament and the Council of 11 March 2002 sets down a general framework for informing and consulting workers at national level, and not only through union bodies

(Official Journal, 2002). The Directive provides for a procedure of general, permanent, and effective information and consultation of workers in respect of recent and probable development in an undertaking's activities and economic situation, the structure of employment and decisions that might lead to material changes in work organization and contractual relations.[4] As a practical matter, and reflecting the fact that worker participation rights at establishment/undertaking level vary considerably between the nations of the EU, the legislation allows member states considerable freedom of maneuver in policy design. We are unaware of any planned alignment/simplification of these practices or consolidation of the EU directives on the information and consultation of workers in the wake of the Commission's subsequent consultation with the social partners on the issue (European Commission, 2015).[5] Second of all, however, apart from interesting descriptive information on the types of workplace representation (Fulton, 2015) and the facts of union decline inter al. charted in the ICTWSS,[6] there has been a near void concerning the perceived adequacy of employee voice in the EU. That is, there has been no examination of EU workplace representation directly analogous to the individual worker, largely union-oriented worker surveys noted earlier.

Fortunately, this void has been partly filled by information contained in the most recent European Company Survey (ECS). Specifically, the Employee Representative (ER) Questionnaire of the 2013 ECS solicits the views of the designated representative of the leading employee representation body at the workplace as to the involvement of employees and their representatives in the organization of work. The survey questions pertain to the characteristics of the ER body – works councils or kindred agencies on the one hand and union bodies on the other – including the manner of its functioning, the quality of the information provided it by management, its degree of involvement in decision making (as well as trust in management), and the work climate.

In the present paper we present the first formal analysis of the extent of the worker representation gap at the EU establishment.[7] We operationalize the representation gap as the expressed desire for greater involvement in decision making on the part of the representative of the leading employee representative body. A distinction is therefore drawn between prevalent work councils and prevalent union entities. It is predicted on the basis of theory and practice that perceived deficits will be smaller under works councils than union bodies. It is also anticipated that the desire for greater involvement will be reduced where the amount of information provided to the worker representation agency across a range of employment issues is judged satisfactory by the worker side. This may especially be the

case in circumstances of major human resource decisions where the worker representation body is asked to give its views or be involved in joint decision making with management. Certain aspects of the entity's resource base, such as a higher frequency of meetings with management, should also mitigate the desire for greater involvement. A penultimate issue is the vexed question of the trust place in management by the worker side, and the effect such confidence or otherwise has on other expected relationships. The robustness of these results to reestimation over different clusters of countries is another hallmark of our approach.

The plan of the paper is as follows. A theoretical backdrop to worker representation precedes a terse audit of the most recent ECS empirical literature on workplace representation to contextualize our analysis. There follows a description of the principal dataset used in this inquiry. Our modeling strategy is next addressed to establish the framework for the main hypotheses being tested. Our detailed findings are next reported. A discussion concludes.

2. Literature

Theoretical considerations

Prior to examining the relevant aspects of the empirical literature, we consider the economic factors that might be expected to underpin employee participation or representation gaps. Relatedly, what guidance does theory offer as to the relative efficacy of the two formal channels of workplace representation identified in the ECS (namely works councils and union bodies)? And, finally, what might be the contribution of other factors in the form of trust or the quality of the industrial relations climate to the effectiveness of workplace representation?

Market failure might be expected to produce suboptimal levels of employee representation and involvement. The imperfections in question would include externalities, prisoner's dilemma, adverse selection, opportunism, and principal-agent-problems (Kaufman, 2000).[8] For their part, externalities are spillover (i.e. third-party) benefits or costs not properly accounted for by decision makers. When such externalities are present (at the margin), social benefits or costs diverge from private benefits or costs. A case in point would be the public goods aspects of shared working conditions, resulting in the underprovision of valued benefits as workers underinvest in making their preferences known. Another example might be joint safety committees; to the extent that these yield benefits to third

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parties in reduced health care costs, employers will underinvest in them. Indeed, if the choice of work organization at one firm – for example, a participatory workplace with a compressed wage structure – benefits other employers by enabling them to hire its stars at a discount, the market may be said to be systematically biased against that form of work organization rendering such innovation unprofitable for the individual firm (Levine and Tyson, 1990).

Prisoner's dilemma is a special case of externalities and characterizes a situation in which individually rational behavior is nonetheless inefficient because it generates a result that is less preferred by all the parties to a cooperative albeit unstable outcome. Thus, employee representation may benefit firm performance by boosting worker morale and motivation but remain dormant because of an absence of trust and a lack of credible commitments.

Another source of market failure is adverse selection, typically associated with asymmetric information or an inability to distinguish among heterogeneous parties. Here, private contracting does not maximize the surplus because of the risks associated with worker/firm diversity. Thus, for example, a firm that voluntarily adopts a just cause dismissals policy as part and parcel of an employee participation exercise may be expected to attract a disproportionate share of workers who will shirk but yet be difficult to dismiss with cause (Levine, 1991).

Opportunism may also militate against employee involvement or limit its exercise. Although participation may increase output and profitability, the superior access to information provided by management may be used opportunistically by workers to capture a bigger share of a rising joint surplus while profits fall both relatively and absolutely. As a result, employers may be expected to forego employee involvement or invest too little in it from a socially optimal perspective.

Finally, the principal-agent problem arises from the informational edge of the employee agent over the employer principal stemming from asymmetric information. Employees are expected to leverage this private information for personal gain. Accordingly, attention has focused either on the use of financial incentives to de-risk the principal agent problem or the creation of an organization with shared values. The former route can be conceptualized as inducing the employee agent to undertake an action that is costly to that agent because it involves more effort than a second action. The nature of the problem is that the principal is unable to detect which course of action has been taken and, moreover, cannot infer that action from an observation of the employee's output (though the employer can

observe whether revenues are high or low). The issue becomes one of devising a payment contract that incentivizes the employee to select the action that is more costly to that agent. The conventional solution involves a contract that will optimally trade off the worker's wage against incentives for work. It is often thought that building a culture/creating shared values is a substitute strategy. However, if workers can be made to identify with the firm through firm investments in employee involvement and participation that transform workers from outsiders into insiders, such practices can actually lower the variation in compensation needed to motivate them to select the second route /action/. That is, increased worker commitment flattens the optimal wage schedule, such that monetary incentives and motivation can be complements (Akerlof and Kranton, 2005; Brown et al. 2011).

All of the above arguments are encountered to varying degrees in justifying the two institutions of formal workplace representation. The crucial theoretical construct here is the notion of *collective voice*, which is to be contrasted with individualistic market mechanisms. In the model developed by Freeman and Medoff (1984), collective voice dominates individual voice (or exits) in continuity markets. A key reason is the public goods aspect of many working conditions. One solution to the resulting problems of an underprovision of information (and effort as well where there are complementarities in worker effort inputs) is unionism. Unions collect and aggregate individual worker preferences (and jointly determine effort inputs). No less important a function of collective voice is *governance* which refers to the policing or monitoring of incomplete contracts and mechanisms for ensuring that the parties to a contract are motivated to follow its terms without recourse to constant bargaining. Freeman and Medoff view unions as a commitment device: not only do unions provide workers with more accurate information about the state of nature but also prevent employers from engaging in opportunistic behavior in the case of worker investments in firm specific training or reliance investments (see also Malcomson, 1983).

An integral part of governance is union bargaining power as there must be some threat of credible punishment by union of employer malfeasance. By the same token, rent seeking is the handmaiden of increased bargaining power. This threat of *union hold-up* was to stimulate interest in another form of collective voice. The next theoretical development was to argue that the institution of the works council offers improved prospects for an increase in the joint surplus of the enterprise by reason of its more thorough-going information exchange, consultation, and participation /codetermination powers than unions (Freeman and Lazear, 1995). In short, the works council has been portrayed as the potential exemplar of collective voice. Explicit recognition that changes in the distribution of the joint

surplus in favor of workers can be expected to accompany increases in that surplus, however, requires that some means of legal containment be sought in order to facilitate the optimal social provision of works councils. For example, changes in the labor code (e.g. a peace obligation and formal limitations on bargaining) offer the prospect of a decoupling the factors that determine the size of the surplus from those that determine its distribution.

A final issue, already addressed in part in our discussion of principal-agent considerations and prisoner's dilemma, is the role of trust. Our examination of the issue is perhaps best couched in terms of the dictum issued by the architects of collective voice themselves. Against the backdrop of disparate union productivity effects in underground U.S bituminous coal mining in the 1950s and 1960s, Freeman and Medoff (1984: 179) conclude: "The lesson is that unionism per se is neither a plus nor a minus to productivity. What matters is how unions and management interact at the workplace." Our approach to the question of trust will be to examine the sensitivity of the correlates of the representation gap to variations in the quality of industrial relations.

Studies with a focus on workplace representation and some links to extant ECS analyses

We preface a statement of links between the present study and the themes of past research using the ECS with some U.S. findings on *workplace committees* from the Worker Representation and Participation Survey (WRPS), augmented by surveys conducted by Peter D. Hart Associates and summarized by Freeman (2007). Freeman observes that workers desire a workplace-committee form of representation; that is, the suggestion from the WRPS is that, given a choice between a union and a joint management employee committee that would meet and discuss problems, a little over one-half (52%) of workers selected the workplace committee option, and a little under one-quarter (23%) chose unions, the balance of opinion either being in favor of increased legal protection or opposing any independent organization at all. That said, when the union alternative was reworded in the survey as "an employee organization that would negotiate with management" support for this option rose by 8 percentage points while that for the workplace committee option fell by 6 percentage points. Moreover, the subsequent poll data pointed to no less than 76 percent of workers being desirous of material institutional change that would grant them voice at the workplace, either in the form of a workplace committee or union representation or both. Specifically, 39% of workers would vote for an employee association and a union, 35% for an association but not a union, and 2% would vote for unions and not an association. Some

14% were satisfied with the status quo ante and hence favored neither form of collective voice, the residual 10% were undecided. Accordingly, it is concluded that the desire for workplace committees is to be seen as one component of general demand among U.S. workers for a greater say at their workplace and not conflictual with the finding that more workers than ever before express a demand for union representation.

The most recent U.S. study by Kochan et al. (2019) using the MIT 2017 Worker Choice Survey (2017) also considers the determinants of worker use of and satisfaction with joint employer-management committees and unions. The former entities are part of five 'internal' mechanisms (e.g. filing grievances), and the latter one of seven 'independent' mechanisms (that also include industrial action). It is reported that there is in practice considerable variation in the voice options open to workers. Moreover, there is also considerable variation in worker satisfaction with these mechanisms. Although the main takeaway from this study is the evidence of a large unmet demand for union representation, this phenomenon is shown to be accompanied by significant use of a variety of voice options (see also Section 6).

Turning to the ECS literature, emphasis has been upon the 2009 ECS. Force majeure, none of these studies examines the unmet demand for greater employee involvement at the workplace since that information is only contained in the 2013 ECS. The topics that have been investigated include the determinants of the incidence and type of workplace representation (Forth et al., 2017), the behavioral implications of the formal representative voice institutions (Forth et al., 2017, Addison and Teixeira, 2019a), workplace representation and strikes (Jansen, 2014; Addison and Teixeira, 2019b), and workplace representation and financial performance (van den Berg et al., 2013). The present study is able to draw on this seemingly unrelated literature in four main ways. First, it builds on the distinction between works councils and union bodies made most explicit by Forth et al. (2017). Second, in common with van den Berg et al. (2013) it exploits country clusters, albeit in *a posteriori* fashion to begin with. Third, it draws on the analysis of strikes, and the work of Jansen (2014) in particular, to address the issue of whether variations in union organization – as reflected in workplace union density – influence the representation gap. Finally, past research on behavioral outcomes using the ECS, and beginning with Forth et al.'s (2017) proxy indicator for industrial relations quality (viz. a 'quite strained' or 'very strained' work climate), again flags the potentially important role of trust in mediating perceptions of the representation gap.

3. The dataset

This study uses the Employee Representative (ER) Questionnaire of the 3rd European Company Survey (ECS) of 2013, sponsored by the European Foundation for the Improvement of Living and Working Conditions. The raw establishment-based inquiry was downloaded from the U.K. Data Service site at *https://www.ukdataservice.ac.uk/* and covers 32 European nations. The ER Questionnaire is the second component of the ECS Survey, the first being the Management Questionnaire (MM). The MM Questionnaire is a representative survey covering 27,019 establishments with at least 10 employees in virtually all sectors of industrial activity from the private and public sectors, with the major exception of agriculture. In each country, the number of units being interviewed in the MM Questionnaire is around 500, 1,000, and 1,500 in small, medium, and large countries, respectively. MM interviews were conducted with the most senior official responsible for human resources management, who identifies official structures for employee representation at the establishment. Based on the identification of the most important employee representation body 7,629 ER valid interviews were subsequently conducted, which constitute around 50 percent of all those establishments in which the human resource manager had flagged the presence of employee representation. By construction, the respondent to the ER Questionnaire (identified in the ER raw data set by the variable er_type_er) is the person who is entitled to represent the opinions of the leading employee representation body at the workplace (see the *3rd ECS Technical Report*, p. 16/82). As described in Appendix Table 1, the corresponding er_type_er national codes allow us therefore to fully allocate formal workplace employee representation by country.[9]

For the purposes of our analysis we focus on the 28 member countries of the European Union, for which we have 6,919 interviews (i.e. Iceland, Montenegro, Macedonia, and Turkey are not included in our selected sample). Recall that the key question (Q42a.A) used in the present inquiry – inquiring of the ER respondent whether he/she agreed or disagreed with the statement that *the employee representation body should be involved more in the decision making in this establishment* – is unique to the 2013 survey. That is, our dependent variable cannot therefore be observed in either of the two previous (2004 and 2009) ECS cross sections.

A second major aspect of our dataset construction concerns the resource base of worker representation and the method of management communication with that body. The resource base includes training provided for and time allotted to representation, while information provision focuses on the type of information provided and the manner of its

provision. These variables are either directly extracted from the raw ER Questionnaire or generated by our Stata coding combining two or more survey questions. In the case of the resource base, we selected the following four qualitative variables from the survey: *employee representative is elected*; *employee representative receives training*; *frequency of meetings with management*; and *time allocated to employee representation is sufficient*. The first variable indicates whether the representative was elected as opposed to being appointed; the second, whether the representative had received training related to his/her role; the third, the frequency of meetings (a 1 to 5 ordered variable such that the higher the value, the lower is the frequency); and the fourth indicates whether the time allocated to representation was adjudged sufficient by the respondent.

In order to form the variable denoting the quality of information provided by management to the employee representation body we used questions 21 and 25 of the ER Questionnaire to generate a dichotomous variable flagging whether the information provided to the ER body on five issues affecting the establishment was "satisfactory" (see Appendix Table 2). Where management was stated to have provided no information on this range of issues, we simply presumed that information provision was unsatisfactory (and coded the variable as zero).

For a subset of establishments, the ER Survey also gives information on situations in which major human resource (HR) decisions were taken by management in the preceding 12 months that affected the entire establishment (e.g. changes in working time arrangements and various restructuring measures). This reduced sample comprises a maximum of some 5,600 establishments for which it is possible to determine whether the employee representatives were informed by management, as well as assess the perceived influence or otherwise of the employee representative body in decision making on HR issues. In practice, this involved constructing the following two sets of variables: first, dummies for *the ER body was only informed by management* and *the ER body was informed by management and asked to give its views or involved in the joint decision* (in each case the omitted category being *the ER body was not informed at all by management*); and, second, a separate dummy indicating that *the ER body had some or a strong influence on the management decision.*

In addition, three establishment size dummies and six sector dummies are also included in the baseline model specifications given below, the formal regression analysis being solely based on the ER dataset (i.e. on the responses of the employee representative actually interviewed at the workplace). Note that the introduction of (a wider set of) variables based on management responses requires use of the MM dataset and the

corresponding MM-ER linked data. In Section 5, however, as part of our sensitivity analysis we do summarize results from an exercise that includes MM variables. In this case, the specification is expanded to include broad sector, single-establishment organization, workforce composition by skill and occupation, and type of collective bargaining agreement.

Finally, we also deploy a set of workplace climate and trust variables taken from the ER to determine the sensitivity of our results to different work settings. The four variables in question are introduced in the next section as they follow our major robustness check based upon different country configurations. Appendix Table 2 provides the full description of the ER variables included in the selected regression models, with the corresponding Stata coding being available upon request.

4. Modeling strategy

We test the determinants of the representation gap at the EU establishment by specifying a two-level mixed-effects logit model that controls for type of workplace representation, employee representation resources and functioning, provision of information, and, for a subset of establishments in which a major decision has been taken in the last 12 months, consultation and participation in decision making. In a compact manner, the corresponding logistic regression model can be specified as:

$$\Pr(y_{ij} = 1 \big| x_{ij}, u_j) = H(x_{ij}\beta + u_j), \qquad (1)$$

where $H(.)$ is the logistic cumulative distribution function and i and j are indices denoting establishment and country, respectively. y_{ij} is the dichotomous outcome variable indicating the shortfall in desired participation. It is extracted from responses to the question on whether the employee representation body should be more involved in decision making, taking the value of 1 where greater involvement is either strongly or very strongly desired, 0 otherwise. x_{ij} captures the set of included regressors, while u_j is the random intercept.

In this setting, the information at the first-level (i.e. the establishment) is therefore nested within countries or clusters (the second level). A model that ignores this hierarchy would treat the observables as independent information, with implications for the conventional statistical tests. In particular, it would fail to recognize that (a) observations within clusters are correlated because individual responses from establishments are influenced by the groups/countries to which they belong, and (b) the properties of countries are influenced by the set of establishments that make up the group. Ignoring these

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characteristics implies that the estimated standard errors are likely to be too small, thus generating spuriously significant results. Observe that in all the regressions reported in the next section, the log-likelihood ratio test comfortably rejects the null of an ordinary logit specification against the two-level mixed effects model. (Thus, the evidence rejects the hypothesis that the country (random) intercepts are not statistically different from one another.) Another advantage of our two-level mixed effects logistic model is that it allows us to test for the presence of random slopes; that is, whether, for example, the association between works council-type representation and the shortfall in desired participation varies by country. Other alternative non-linear regression models – namely the ordinary logistic model with country dummies and cluster-robust standard errors – were also implemented. These and other alternative approaches are documented in Section 5.

Hopefully, the set x_{ij} is rich enough to capture most establishment-level heterogeneity. Simplifying, if the underlying model is given by $Y = XB + U$, with (X, U) determining Y, taking the conditional expectation gives $E(Y|X = x, U = u) = xB + u$. In this case, all sources of variation are accounted for and we have Y conditional on both X and U. If, however, one only conditions on X, then $E(Y|X = x) = xB + E(U|X = x)$, which may not yield $y = xB + u$. In other words, running the hypothetical, deterministic model in (1) will not necessarily generate a U-constant (Y, X) relationship. The causal effect of X on Y will not be identified. But the richer is the set of RHS variables, the greater is the chance that the two approaches will be *ex post* equivalent (see Heckman, 2008).

Accordingly, if one suspects that workplace representation in particular might be adopted endogenously, the first-pass solution in the above framework is to include a wide range of observables. But we can also proceed in assessing the role workplace employee representative agencies by exploiting the national idiosyncrasies in our dataset; specifically, by using selected environment subsets as described below. In any event, although we have a considerable number of establishment-level characteristics in our data, it remains the case that all the experimentation is based on a single, cross-sectional data point. In this light, we cannot claim that an expansion of works council representation would close the representation gap. We do argue that such entities have the capacity to dissipate distributional struggles at the workplace and make management more willing to embrace them than union bodies, as a result of which council representatives may tend to express a reduced desire for greater involvement in decision making than their less endowed union counterparts. We therefore see our experimentation with the selected environmental subsets

and country clusters not as identifying a works council effect but only as a first-pass procedure. In other words, given sufficient stability of national environments, country grouping serves to strengthen the hypothesized correlational relationships specified in our baseline model.

We defined four groups of countries based on actual (i.e. observed) country practices regarding employee representation. These *a posteriori* country sets are denoted by S1, S2, S3 and S4, indicating, respectively, countries with a works council-type representation only, countries with a union-type representation only, countries with dual systems but in which works council-type representation dominates (in more than 70% of the establishment cases), and countries with dual systems but in which union-type representation is found in more than 70% of the cases. These country sets are given in Appendix Table 3. They share important commonalities; in particular, the presence of formal employee representation in S1 and S2 is high, while in S4 it is low. For its part, the mean shortage in desired participation is sizable across all four sets, ranging from 63 (in S1) to 76 percent (in S4).

For estimation purposes, we will combine the four country subsets in a particular manner. By way of illustration, consider S1 and S2. Clearly, it is not possible to predict what would be the shortfall in desired participation had an 'uncovered' establishment, say, in Germany or Sweden been covered by an ER body as all included units are by construction always 'covered' by some type of formal workplace representation. However, we are in a position to know whether a union entity in S2 and a works council in S1 express a similar desire to have more participation in decision making, other things being equal. If, for example, the quality and timeliness of information provision is about the same in the two sets, the determinants of the perceived shortage are not likely to be too different. From this perspective, one might conjecture that the particular type of workplace representation in place is of no importance, and that only 'coverage' and the provision of quality information matter. An analogous exercise can be conducted using different combinations of S1, S2, S3, and S4 (see below).

As mentioned earlier, robustness of the results based on the S1 through S4 *a posteriori* country classification is also discussed in the context of two alternatives based on *a priori* sets of country clusters suggested by the worker participation/collective bargaining literatures. The first alternative uses the same country clusters as employed by van den Berg et al. (2013); the second is based on Eurofound's analytical framework "Mapping Varieties of Industrial Relations" (Eurofound, 2017). The two exercises are presented in full and summary form, respectively, in Section 5.

We supplement the robustness analysis of the baseline model using variations in trust and cooperation between the parties, namely the quality of industrial relations in a broad sense as assessed by the employee representative (e.g. Brown et al., 2015). In this case, we deploy the following four variables: *management makes sincere efforts to involve the employee representation; the relationship between management and employee representation is hostile; management can be trusted;* and the presence of a *good or very good work climate at the establishment*. A description of each variable is given in Appendix Table 2. Our approach therefore will be to use different subsamples in order to uncover suggestive patterns in the data (see the discussion of Table 5, below). The corresponding results will then inform us about the possible role of the included factors in selected environments. We would anticipate that lack of management commitment, a hostile relationship between the two parties, an untrustworthy management, or a bad work climate will tend to be associated with a marked shortfall in desired participation, irrespective of the form of workplace representation as presumably in this scenario the type of information provision will be rather poor, especially against a backdrop of major HR decisions. Again, if for example the workplace environment is non-hostile, then one might expect a greater desire for involvement whenever the dialogue between the parties is less than effective, which in turn is a function of the quality of information provision and the actual level of influence in decision making.

Finally, to simplify the interpretation of the results, we will only report the corresponding marginal effects, obtained by fixing the random country effects at their theoretical mean (i.e. zero) and all included regressors at their sample mean. By design, the model allows us to establish statistically strong associations between the representation gap and the selected set of covariates.

5. Findings

Table 1 provides the establishment-level means of the key variables included in the baseline model by type of workplace representation, and by country clusters, both for the entire sample and for the reduced sample of establishments with a major HR decision in the last 12 months. There is a visible shortfall in participation; that is, respondents are on average desirous of greater involvement in more than 70 percent of the cases. There is also some suggestion that this perceived shortfall in workplace representation is higher among union than works council establishments (by a 10 percentage point margin) while this shortfall

ranges between 63 to 77 percent across the different country subsets. But the abiding impression is that the perceived deficit in workplace representation is across the board.

[Table 1 near here]

Regarding the other arguments in panel (a) of Table 1, those in the second block dealing with the resources and functioning of the ER body have means that are quite flat for establishments in the first three columns. That said, the variability across the country subsamples is clearly greater, especially with respect to the percentage of elected representatives and the likelihood that the representative received training. Here, elected members are more common in S1 and S4, while training is more common in S1 and S2. However, in no case for the country subsets does the difference exceed 20 percentage points.

Differences in the provision of information in the third block of panel (a) of the table seem to be even smaller across columns. Satisfaction with information provision is lower in union establishments (by a 10 percentage point margin) and it is also smaller in union-only and unions-rule countries (i.e. in S2 and S4). In establishments with major HR decisions – shown in panel (b) of the table – the differences across samples are clearly smaller than in panel (a), suggesting that in difficult times or in times of disruption communication tends to improve somewhat, while the desire for participation is elevated.

Although differences across columns in the table are never dramatic, they are in our view sufficiently tangible for us to anticipate that the observed variation can be helpful in designing strategies with a view to establishing robust correlational relationships in the data. Before turning to these, however, a digression worth pursuing at this point is whether the desire for more participation by the ER body is also shared by the employees at the establishment. In other words, is the ER representative a reliable source of the views of all employees at the workplace or is it the case that the respondent simply represents the views of the ER body? Our test is perforce indirect as only the opinion of the ER respondent is recorded in the ECS survey. To make the case as clearly as possible, we consider the subset of establishments with recent experience of a major HR decision. We then use the answers to questions Q20A and Q20B of the ER Questionnaire to search for any obvious contradiction in the respondent's assessment of the shortage in workplace representation. Our testing hypothesis can be stated as follows: if the respondent disagrees with the statement in question Q20A (that is, if he/she says that *employees do not value the work of the employee representation*), while at the same time also disagreeing with the statement that *employees rarely express interest in the outcome of consultations or negotiations*

(question Q20B), then the shortage in desired participation should be expected to be at its maximum because in this case the ER body is presumably not delivering the goods. If our prediction is correct, the conclusion would be that the ER respondent is probably reliable in expressing the overall view of employees. The diagnosis is given in Appendix Table 4. The mean of 84 percent in the first column of that table suggests that the representative is not an unreliable source of the opinion of the employees.[10]

Table 2 presents the results of the two-level mixed effects logistic regression for the baseline model specified in equation (1). Column (1) of the table uses the full sample of establishments with formal workplace representation, while column (2) restricts the sample to those units with a major HR decision taken in the last 12 months and for which we have additional information. The table thus provides the responses of the leading representatives of employee representation bodies at the establishment level as to their perceptions of the degree of involvement in decision making of their agencies, conditional on the set of observables. If, as hypothesized earlier, works councils are exemplary voice institutions, we might expect any perceived deficit in participation to be smaller in such establishments than among their counterparts with union workplace representation or subordinate union representation. Indeed, we obtain a highly statistically significant negatively signed works council coefficient estimate in the first block of regressors, with a corresponding marginal effect of 9 percentage points in column (1). The marginal effect in this case gives the change in the outcome variable associated with a change in works council dummy from 0 to 1, setting all the random country intercepts at zero (their theoretical mean). The statistical evidence on the relationship between an establishment's union density and the shortfall in participation is much weaker, with the respective marginal effect not being statistically different from zero. The results in column (2) confirm the works council result, while union density is now statistically different from zero at the 0.05 level, suggesting that the variable is somewhat more of a factor in the event of major changes in the organization.

[Table 2 near here]

The second block of regressors detail the scope of workplace representation, namely, its resource base and the method and manner of communication. For all four selected covariates the relationship with the shortfall in desired representation is highly statistically significant (at the 0.01 level): a positive correlation in the cases of an *elected employee representative* and a *trained employee representative*, and where there is low *frequency of meetings with management*; and a negative association in circumstances where the *time allotted to employee representation is adjudged sufficient*. Alternatively put, an adequate

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level of involvement requires some frequency of meetings with decision makers as well as a sufficient amount of time being allocated to the representation process. On the other hand, elected representatives and those who have received training express a heightened desire for greater involvement of workplace representation in decision making; across both columns (1) and (2) the marginal effects approximate 6 and 3 percentage points, respectively.

A key aspect is the role played by the provision of information in general, the hypothesis being that the higher the degree of satisfaction with the information provided by management, the less likely are employee representatives to press for greater involvement in decision making. Recall that the variable measures the extent to which the *information provided by management to the ER body* (covering areas such as the financial and employment situation of the establishment, the introduction of new products/services and processes, and even its strategic plans) is adjudged satisfactory by the employee representative. The well-determined negative sign of the coefficient estimate confirms this expectation (and the converse), with very large marginal effects of 27 and 22 percentage points in columns (1) and (2), respectively.

The major HR decision variable in column (1) suggests that, other things equal, threatened disruptions in establishment activities are associated with an increased desire for ER involvement. This relationship is captured by the positive coefficient of the variable, which is highly statistically significant and implies a marginal effect of approximately 10 percentage points.[11]

As was noted earlier, for the subset of establishments in column (2) – that is, establishments where a major decision was taken by management in the last 12 months – we have an extended number of arguments that pertain to the quality of information provision together with a single measure of the perceived influence of the ER body in the ensuing decision making process. In the former category, we have three qualitative information levels: no information at all (the omitted category); information provision but no substantive involvement of the ER body; and information provision complemented by discussion and joint decision making. In the case of the separate perceived influence variable, we deploy a dummy variable set equal to 1 if the ER body had some or a strong influence on the management decision, 0 otherwise. Our expectations are that a higher quality of information provision in respect of major decisions should be associated with a smaller shortfall in desired participation, and that greater influence of the workplace employee representative body in decision making should also be associated with a smaller representation gap. The direction of the marginal effects is as anticipated and each is again

quite substantial (at 13 percentage points in the former case and 6 percentage points in the latter). [12]

Note finally that model (1) assumes that country heterogeneity is captured by our mixed effects implementation. The model therefore gives an estimate of both the role of observables and the unobservable random country effects. The log-likelihood ratio diagnostic test at the base of the table indicates that the null of a zero random variation in the intercept is comfortably rejected.[13]

The results of fitting the model to country subsets are provided in Table 3. From a total of 12 (meaningful) cases containing one, two, and three sets of countries – that is, {S3}, {S4}, {S1, S2}, {S1, S3}, {S1, S4}, {S2, S3}, {S2, S4}, {S3, S4}, {S1, S2, S3}, {S1, S2, S4}, {S1, S3, S4}, {S2, S3, S4} – we focus on just six of them. These are: Case 1, which includes establishments in S1 and S2 countries; Case 2, with establishments in S3 and S4; Cases 3 and 4, respectively comprising S3 and S4 establishments; Case 5, with establishments in S1 and S4; and, finally, Case 6, with establishments in S1 and S3. Note that the {S1} and {S2} cases are necessarily excluded as they have no within-variation in union/works council status. Recall that the composition of subsets S1, S2, S3, and S4 is given in Appendix Table 3.)

[Table 3 near here]

For each of these six cases in Table 3, we again provide results for all establishments (columns (1)) and for those establishments with a major HR decision (columns (2)). This procedure is intended to make comparisons with the baseline model in Table 2 more straightforward. Case 1, for example, addresses the issue of whether perceived shortfalls in involvement are similar in 'works council only' and 'union only' countries, controlling for other covariates. Given the country subsets in question, our presumption in this case is that the works council and union workplace representation entities are unlikely to perform very dissimilar functions. In other words, once the resource base and the quality of information are taken into account, it is probable that the perceived shortfall in participation will be broadly similar across establishments in S1 and S2 nations. However, according to our estimates, for Case 1 in column (1), there is a statistically significant difference – at the 0.10 level – across the two types of representation in favor of works councils, although this result does not carry over to column (2). All the other marginal effects have the expected sign. Their statistical significance is generally smaller than in Table 2, a result that can be attributed to the corresponding reduction in sample size.

In Case 2, we compare establishments in 'works councils-rule' countries with those in 'unions-rule' countries, namely subsets S3 and S4, respectively. Both the minority establishments with union agencies in S3 and works councils in S4 are retained in the estimation sample. The goal here is to examine both the role of employee representation and the importance of the resource base and quality of information provision in countries that have a distinct 'majority' practice. The source of variation in this case arises from the comparison of works councils and unions entities, both present in S3 and S4 countries. We confirm in columns (1) and (2) that the marginal effect of the works council variable is again negative. Contrary to Case 1, the union density argument is now statistically significant (and positive). Given the increase in sample size, all the other arguments have the expected signs and in general a higher level of statistical significance.

Case 3 serves to test whether it is possible to distinguish works councils from union agencies, now exclusively based on the subset of works councils-rule countries. We obtain statistically significant negatively signed coefficient estimates for the works council dummy. The corresponding marginal effects in columns (1) and (2) fall within the 5 to 7 percentage point range. A similar exercise is conducted for Case 4, that is, for the unions-rule countries. Here, the less than 25 percent of establishments with works council representation are sufficient to confirm that establishments having works council representation are seemingly associated with lower perceived shortfalls in involvement. Finally, the role of employee representation is examined contrasting works councils in S1 and S4 with (majority) union agencies in S4 (Case 5), and works councils in S1 and S3 with minority (union) agencies in S3 (Case 6). In both cases, our priors are again confirmed.

We address the sensitivity of the results in Table 3 to alternative clusters based on an *a priori* classification of countries. In the first alternative we follow van den Berg et al. (2013), who define five country subsets: a *Germanic cluster*/S1_1 (containing Germany, Austria, Netherlands); a *Scandinavian cluster*/S2_1 (Denmark, Finland, and Sweden); a *French cluster*/S3_1 (Belgium, France, Luxembourg, Spain, Portugal, Italy, and Greece); an *Anglo-Saxon cluster*/S4_1 (Ireland and the United Kingdom); and a *Transition cluster*/S5_1 (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia). (Note that Malta, Cyprus, and Croatia are not included in any of these subsets.) In similar fashion to Table 3, these five subsets can generate a number of experiments. We illustrate just four of the possible cases in Appendix Table 5, namely those we judge to be more meaningful and more comparable with Table 3. Thus, in the first main column of the appendix table, we have a subsample comprising the Germanic

and Scandinavian clusters (Case 1). Note that in both columns (1) and (2) the works council variable is insignificant. As in Case 1 in Table 3 our interpretation is that the representation gap (or the shortfall in desired employee representation) in this grouping does not seem to vary much across the type of worker representation (i.e. either works council or union agency). The results for the French cluster are given in the second main column (Case 2). For this case we confirm that works councils are strongly associated with a smaller gap. The third main column in turn illustrates the situation in Eastern European/transition countries (Case 3), and the works council variable is again negative and highly significant. In the final main column of the table we select the Germanic and French clusters (Case 4) to effect a comparison between works council and union representation. Clearly, both the sign and statistical significance of the works council marginal effects fall within the expected range.

We also briefly summarize findings from an alternative classification based on a mapping suggested by Eurofound (2017). Five clusters are again identified, termed Centre-west, Nordic, South, West, and Centre-east.[14] Based on these five groups, we then carried out an exercise analogous to that presented in Appendix Table 5. On this occasion Case 1 was defined as containing countries from the Centre-west and the Nordic clusters, while Cases 2 through 4 comprise the South cluster (Case 2), Centre-east cluster (Case 3), and the Centre-west and South clusters (Case 4). The results from this experiment confirm that the marginal effect of the works council variable is insignificant in Case 1, while it remains negative and significant in Case 3. The negative marginal effect is also confirmed in Case 4. In Case 2, the works marginal effect is insignificant. The full results are available upon request.

In sum, the results in Table 3 and from the replication using two alternative country cluster configurations offer little reason to suspect that the associations earlier reported for our baseline model are specific to a specific cluster construct. That is, union representation and a less well-informed employee representation body alike are associated with heightened demands for greater involvement of the agency in decision making throughout.

We next examine the baseline model taking account of variations in the quality of industrial relations. We expect lack of engagement on the part of management, or an absence of trust between the parties, to be associated with widespread dissatisfaction among the cadre of employee representatives. It remains therefore to be seen whether a 'bad environment' is associated with a desire for more participation in decision making independent of the type of workplace representation. In turn, if the environment is more favorable one might expect the shortfall in participation to be dependent on the provision of

information. In these circumstances, might not one conclude that 'effective' ER-management interaction is more often found in works councils than in union workplace representation agencies, all else constant? We address this issue by separating the sample into relevant subsets of good and bad industrial relations quality.

[Table 4 near here]

To begin with, we present some descriptive statistics in Table 4. For illustrative purposes, we will focus on just one of four proxies that we will be using to control for the quality of industrial relations in our subsequent regression analysis. Specifically, we take the case of a question seeking to gauge the reaction of the employee representative to the statement: *management makes a sincere effort to involve the employee representation in solving joint problems* (question Q20D in the survey, variable q20_d_D). It can be seen from the cross tabulations in the table that there is a perceived lack of engagement by management in a minority of cases (viz. 20 percent of the representatives do not agree/strongly agree with the statement), and that this lack of cooperation is strongly associated with the reported shortfall in participation (in 92 percent of the cases). Observe also that union workplace representation tends to be associated with a greater shortfall in desired participation in the presence of a sincere effort by management to involve employee representation in solving joint problems. This pattern can be replicated in its entirety if we replace q20_d_D by either q20_c_D, q42a_c_D or q44_D as an alternative measure of industrial relations quality. These variables are described in Appendix Table 2 and the corresponding results are available upon request.

[Table 5 near here]

Table 5 provides the corresponding multivariate analysis for the example given in Table 4 and for the additional three proxies for the quality of industrial relations. The four examples are designated as Cases A through D. For each case, we have two separate samples in columns (1) and (2), comprising establishments in which according to the responses of the employee representative interviewed the 'quality' of industrial relations is adjudged to be 'high' and 'low,' respectively (or equivalently for one of the cases, 'by no means hostile' and 'hostile'). The dependent variable is again the perceived shortfall in workplace representation. In column (1) for Case A we confirm that the desire to be more involved is higher when representation is via a union entity rather than through a works council; and that the desire is an inverse function of the effectiveness of the interaction between the two parties (as proxied by adequate information provision and influence in decision making). Column (2) in turn indicates that there is insufficient variability across the two types of

representation. That is, lack of engagement on the part of management is associated throughout with insufficient information and influence.[15] These disparate results are also found for Cases B through D, and where the variation in statistical significance from column (1) to column (2) can be related to pronounced changes in sample size. Our conclusions are therefore as follows. A 'bad' industrial relations environment (characterized by a lack of engagement by management, or the presence of a hostile relationship, or a lack of trust in management, or an absence of a good/very good work climate) is associated with a greater shortfall in workplace representation and basically no role is played by the type of workplace representation. The corollary is that whenever the industrial relations environment is 'good' the presence of a works council is in general associated with a higher level of satisfaction regarding participation in critical decisions of the organization and manifested in a lessened desire for greater involvement.

6. Conclusions

Our overriding concern has been with the relative 'effectiveness' of one type of formal workplace representation over the other – either a prevailing works council or a prevailing union entity – based on the degree to which the designated representative of the relevant body expresses a desire for greater participation. Data from the Employee Representative Questionnaire of the 2013 European Company Survey was used to establish, firstly, the extent to which there was a perceived need for greater involvement of these bodies in decision making – our measure of the shortfall in this form of voice – and, secondly, to identify the correlates of differences in these magnitudes across establishments.

Our modeling strategy initially involved estimating a two-level mixed effects baseline model across all 28 EU nations for an all-establishments sample and for the subset containing only those establishments in which major HR decisions had been taken by management in the preceding 12 months. Next, we identified groups of *countries* according to four types of workplace representation: works councils alone; union bodies alone; dual systems in which work councils predominate; and dual systems in which union bodies predominate. These empirically derived sets were then used in different combinations to evaluate the sensitivity of the baseline model. As a further check we used two *a priori* sets of country clusters suggested by the worker participation/collective bargaining literatures. In a final application, and this time for the subset of establishments subject to management decisions likely to affect the entire workforce, we sought to uncover the mediating influence

of (several indicators of) the quality of industrial relations as perceived by worker representatives.

One result to emerge from our baseline model was that the desire for greater involvement in the organization of work is smaller in those circumstances where workplace representation is via a works council-type apparatus rather than through the agency of a union body. This result may be attributed to the enhanced voice and governance properties of the works council set within the framework of a more integrative (as opposed to distributive) bargaining process. There was no suggestion that this finding was driven by one or two dominant countries; in particular, Germany and the Netherlands with their more highly developed councils. Furthermore, there was little to indicate that this finding was more reflective of works council satisfaction than influence. Although concerns about endogeneity and causality inevitably arise in analyzing cross sectional data of this type, we sought to convince the reader that the conditional correlations found with respect to works councils were indeed informative and not noise. First, using the matched MM-ER dataset we were able to expand an already comprehensive array of right-hand-side variables (to include workforce composition and collective bargaining type) in the baseline model. Second, and as noted earlier, we were able to estimate the model over diverse country subsets or clusters. In both cases, we continued to find a negative association between works council presence and the perceived shortfall in representation.

Support was also adduced for the argument that where employee representatives are kept sufficiently (i.e. 'satisfactorily') informed on a number of establishment issues (e.g. the financial situation, the introduction of new products and processes, and strategic plans with respect to business targets and investments) the desire for greater involvement of the employee representative body in decision making is lessened, and that this is also the case in circumstances of major organizational change where the worker representation agency is informed by management and asked to give its views or is actually involved in joint decision-making. The resource base was also relevant. Thus, a higher frequency of meetings with management and the provision of sufficient time for fulfilling the representative function was associated with a diminution in the representation gap. On the other hand, elected as opposed to appointed representatives, as well as those who had recent training related to their role, voiced a greater desire for more involvement. Again, when we reran the equation(s) by country subsets, the correlations earlier reported for type of workplace representation, the resource base, and the provision of information were not specific to any particular national environment.

In a final exercise based on variations in the quality of the industrial relations climate, the employee representative typically revealed an overwhelming desire for greater participation whenever management was adjudged to be uncooperative and untrustworthy. Any favorable cet. par. association between works council presence and the perceived shortfall in desired representation was now confined to cooperative industrial relations regimes. Yet this was not generally the case for the provision of information to the employee representation body; for example, the negative correlation between satisfactory information exchange and the representation gap remained statistically significant across all measures of variations in the quality of industrial relations.

This brings us in conclusion to the vexed question of policy, given the finding of major deficits in their involvement in decision making reported by employees and their representatives, against the backdrop of the emergence of some positive effects of workplace representation – not least works councils – in separate studies of economic and industrial relations performance for a variety of datasets including the ECS. Unfortunately, as Kaufman (2000: 546) has noted, there is no indication in any of the representation studies of price, only preferences (added to which the causal links between participation and performance have often proved elusive). Providing the full amount of participation and presentation desired by workers and their representatives is likely to be costly. That said, our case for collective voice has been based on market imperfections and coordination failures. Abstracting from issues of social justice, these are the bases for policy.

Some observers have duly argued that the measure of reform should be predicated on the extent of market failure, seeking major inroads into the representation gap for those workforce groups that need the protection of independent labor unions, but favoring a mix of less powerful and independent entities where more competitive conditions prevail. More generally, the prerequisites for legal reforms in this area have been identified by Hirsch (2004: 439), who argues that they should be value enhancing to both the parties and the economy, involve a greater role for voice within nonunion as well as union workplaces, allow for variation in workplace governance across heterogeneous workplaces, permit flexibility within workplaces over time, and limit rent seeking on the part of worker organizations.[16]

This returns us to the issue of heterogeneity in voice mechanisms. Bryson et al. (2013) report for Britain that a major increase in 'nonunion direct voice' – team briefings, problem solving groups, and regular meeting with team managers – has accompanied the strong decline in union voice. The implication is that nonunion workers without

representation are not thereby necessarily deprived of voice. The caveat is of course that the growth in the former cannot causally be laid at the door of the operating inefficiency of the latter in the absence of data on the costs of the various voice types. Some amplification is offered by Kochan et al. (2019) in their wide-ranging study of worker representation in the U.S., earlier reviewed in section 2.[17] Having explored variation in the use of different voice options and worker satisfaction with those options, Kochan et al. (2019: 310) conclude that "today 'no one-sized 'shoe' fits all workers." Noting the fit between some workers and internal options (i.e. those provided by the firm) and that between other workers and independent options such as unions, and how these can vary by issues, they call for a policy that helps develop multi-option systems. That is a worthy basis for policy and arguably European legislation is moving in a more flexible direction even if the devil – for example, the mix between mandatory and waivable terms – resides in the detail (Thomsen, Rose, and Dorte, 2016).

Footnotes

1. The findings are based on the *Worker Representation and Participation Survey* 1994. For studies of earlier U.S. Department of Labor Surveys, see Quinn and Staines, 1979; Kochan, 1979.

2. See, respectively, the Workplace Employee Relations Survey 1998 and the British Worker Representation and Participation Survey 2001.

3. Thus, Article 27 of the Charter of Fundamental Rights of the EU states that "workers or their representatives must, at the appropriate level be guaranteed information and consultation in good time in the cases and under the conditions provided by Community law and national laws and practices."

4. The legislation complements the information and consultation provisions of extant law on collective dismissals (Directive 98/59/EC of 20 July 1998), transfers of undertakings (Directive 2001/23/EC of 12 March 2001) and, in the transnational context, on European Works Councils (Directive 94/45/EC of 22 September 1994).

5. For a recent assessment of the legal foundations of worker voice at the member state and EU levels, see Hassel et al. (2018: Chapter 7).

6. This database on *Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts* contains annual data for all OECD and EU member states on these four key elements. For the most recent version, see Visser (2019).

7. For an informative preliminary analysis of formal employee representation or *workplace social dialogue* at the EU workplace, see Eurofound (2015: Chapter 11).

8. Added to these economic reasons for a likely shortfall in participation (of indeterminate magnitude at this stage), are the non-economic criteria of social justice and industrial democracy. Such concepts are not examined here but they reflect limited opportunities for the expression of voice in certain parts of the job market (e.g. the gig economy; on which see Johnston and Land-Kazlauskas, 2019) and tendencies toward rising economic inequality.

9. Note that based on the er_type_er raw codes given in Appendix Table 1 we draw in practice a distinction between formal and informal workplace representation. By way of illustration, formal workplace representation in the United Kingdom requires the presence of some recognized shop floor trade union representation or of a joint consultative committee, any ad hoc form of worker representation being classified as informal. Purely occupational safety and health committees are also treated as informal representation throughout. Our analysis focuses exclusively on formal workplace representation.

10. At a significance level of 0.05 or better, the mean-comparison test always rejects the hypothesis that there is no difference in means between the first cell in Appendix Table 4 and the second, third, and fourth cells.

11. Table 2 is solely based on the ER dataset. An extended model with MM variables – that is, with observables extracted from management responses to the MM Questionnaire – provides no indication that their inclusion changes the nature or the magnitude of the estimated marginal effects. In the extended specification, the additional (MM) regressors,

adumbrated in Section 3, were generally not statistically significant. Given that the MM-ER linked data involve a substantial reduction in sample size, our analysis in this section will continue to be based on the ER dataset. The results with the selected MM variables are available upon request.

12. As suggested by one of the reviewers, we carried out several experiments in the context of Table 2. Specifically, we sequentially dropped Germany, the Netherlands, and both countries from the sample. All included variables maintained their sign, significance and magnitude in both columns (1) and (2). In addition, although not all representatives are elected, we re-estimated the baseline model excluding this variable. There was virtually no change in the results other than in the case of the union density coefficient estimate which became significant at the 0.10 level in the all-establishment case.

13. We used a cluster bootstrap procedure suggested by Cameron and Trivedi (2009) to evaluate the sensitivity of the standard errors reported in Table 2. Although clustering is expected to increase standard errors, especially if the regressors are highly correlated within the cluster, we found a tendency toward a slight decrease across-the-board. Similar results were reported for Tables 3 through 5. The standard errors obtained from using the variance-covariance matrix of the estimators (VCE), that is, the vce (cluster country) option in the melogit command line, were very similar to the cluster bootstrap case. We are grateful to one of our reviewers for suggesting this application. Finally, we note that the results also hold after running an ordinary logistic model with country dummies, and that the corresponding (cluster-robust) standard errors again exhibited a slight decreasing tendency in comparison with those reported in Table 2.

14. More formally these are a *Centre-west/social partnership cluster* (made up of Austria, Belgium, Germany, Luxembourg, the Netherlands, and Slovenia); a *Nordic/organized corporatism cluster* (Denmark, Finland, and Sweden); a *South/state-centered cluster* (Greece, France, Italy, Portugal, and Spain); a *West/liberal pluralism cluster* (Cyprus, Ireland, Malta, and the U.K.); and a *Centre-east /mixed model-transition economies cluster* (Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, and Slovakia).

15. To illustrate, observe that the lack of engagement by management in column (2) is strongly mirrored in a lower sample probability that the information provision is satisfactory, a higher probability that the ER body will not be informed by management in the event of a major HR decision, and a lower probability that the entity will have a strong influence on decision making, at 47, 31, and 45 percent, respectively. In column (1), the corresponding probabilities are 87, 9, and 75 percent.

16. Hirsch proceeds to identify two lines of approach that may be value enhancing for the United States. The first is conditional deregulation, which perhaps has most obvious appeal in the United States given the strictures of section 8 (a)(2) of the National Labor Relations Act. The second involves changes in the labor law default away from its setting of *non-unionized* to another standard that promotes the value-enhancing arrangements, while limiting the ability of works councils to appropriate rents. He concludes that the latter constraint is real so that the new default will have to tread a difficult path, although he deems it "worth a try" (Hirsch, 2004: 443).

17. For a very different perspective on worker voice than offered by the *direct voice* of Bryson et al. (2013), and the *independent voice mechanisms* in Kochan et al. (2019), see the distinctive analysis of Marsden (2013) of the effect of unions and works councils (and their job-level counterparts in the form of shop stewards and employee delegates) on the expression of individual voice in French workplaces. Marsden concludes that individual and collective voice are substitutes under unionism, whereas under works councils they are complements.

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TABLE 1

Establishment-Level Means of the Estimation Sample for the Baseline Model and Country Clusters Analysis (in percent)

	By type of workplace representation			By country subsets			
	All establish-ments	Works council	Union	S1	S2	S3	S4
(a) Establishments with and without a major HR decision taken in the last 12 months							
Shortage in workplace representation	70	66	76	63	70	71	77
ER resources and functioning:							
Elected employee representative	83	80	86	88	75	73	91
Employee representative receives training	47	45	49	59	61	44	42
Time allocated to employee representation is sufficient	88	89	86	87	95	90	84
Frequency of meeting with management	2.5	2.5	2.5	2.5	2.4	2.6	2.6
Provision of information to the ER body:							
Information provided by management to the ER body is satisfactory	79	84	73	84	75	81	73
Number of observations	5,531	2,958	2,573	924	639	1,903	1578
(b) Establishments with a major HR decision taken in the last 12 months							
Shortage in workplace representation	74	70	79	63	70	75	81
Provision of information to the ER body:							
The ER body was not informed at all by management	14	13	14	9	8	17	15
The ER body was only informed by management	19	20	18	16	13	21	20
The ER body was informed by management and asked to give their views or involved in joint decision	67	67	68	75	79	62	65
ER influence in the case of major HR decisions:							
The ER body had some or a strong influence on the decision making	69	69	70	80	81	65	69
Number of observations	4,178	2,210	1,968	672	542	1,484	1,201

Notes: The mean values are given in percentage points except in the case of the frequency of meetings with management, which is an ordered variable from 1 (the highest) to 5 (the lowest). Full definition of the variables is given in Appendix Table 2. Country subsets: S1 (Germany, Austria, the Netherlands, and Luxembourg); S2 (Sweden, Cyprus, and Malta); S3 (Belgium, Denmark, Estonia, Italy, Hungary, Romania, Slovenia, and Finland); S4 (Bulgaria, Czech Republic, Ireland, Spain, Greece, Croatia, Latvia, Lithuania, Poland, Portugal, and the United Kingdom).
Source: 2013 ECS survey, Employee Representative Questionnaire, unweighted data.

TABLE 2

Analysis of the Shortfall in Desired Employee Workplace Representation (ER),
Baseline Regressions for All Establishments and for Establishments with a Major HR
Decision Taken in the Last 12 Months, Marginal Effects

	All establishments (1)	Establishments with a major HR decision in the last 12 months. (2)
Type of workplace representation and labor organization:		
Works council (1/0 dummy)	-.088*** (.018)	-.071*** (.020)
Establishment union density (in percentage)	.0003 (.0002)	.0005** (.0002)
ER resources and functioning:		
Employee representative is elected (1/0 dummy)	.058*** (.017)	.059*** (.018)
Employee representative receives training (1/0 dummy)	.037*** (.012)	.031** (.013)
Time allocated to employee representation is sufficient (1/0 dummy)	-.087*** (.020)	-.090*** (.023)
Frequency of meetings with management (1-5 ordered variable; the higher the value, the lower the frequency)	.040*** (.006)	.035*** (.007)
Provision of information to the ER body:		
Information provided by management to the ER body is satisfactory (1/0 dummy)	-.267*** (.022)	-.217*** (.024)
A major decision has been taken in the last 12 months (1/0 dummy)	.105*** (.014)	
Provision of information to the ER body in the case of major HR decisions: **(Reference category: The ER body was not informed by management.)**		
The ER body was only informed by management (1/0 dummy)		.012 (.029)
The ER body was informed by management and asked to give their views or involved in joint decision (1/0 dummy)		-.126*** (.027)
ER influence in the case of major HR decisions:		
The ER body had some or a strong influence on the decision making (1/0 dummy)		-.063*** (.018)
Industry dummies	Yes	Yes
Establishment size dummies	Yes	Yes
Number of observations	5,531	4,178
LR test	272.76	195.42

Notes: The dependent variable is a 1/0 dummy, defined as 1 if the workplace employee representation body should be more involved in decision making, 0 otherwise. The coefficients of the multilevel, mixed effects model are estimated using the *melogit* command in Stata 13.1. The log-likelihood ratio tests the null of an ordinary logit specification versus the two-level mixed effects model. The null is always comfortably rejected in favor of the mixed effects specification. ***, ** and * denote statistical significance at the 0.01, 0.05, and 0.10 levels, respectively.

TABLE 3

Analysis of the Shortfall in Desired Employee Workplace Representation in Selected Subsamples, for all Establishments and for Establishments with a Major HR Decision Taken in the Last 12 Months, Marginal Effects

	Case 1 S1 and S2 countries		Case 2 S3 and S4 countries		Case 3 S3 countries		Case 4 S4 countries		Case 5 S1 and S4 countries		Case 6 S1 and S3 countries	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Type of workplace representation and labor organization:												
Works council (1/0 dummy)	-.156* (.093)	-.124 (.083)	-.072*** (.019)	-.058*** (.021)	-.067** (.029)	-.051* (.033)	-.076*** (.027)	-.063** (.029)	-.098*** (.028)	-.088*** (.030)	-.073** (.030)	-.056* (.035)
Establishment union density (in percentage)	.00002 (.0004)	.0002 (.0005)	.0005* (.0002)	.0007** (.0002)	.001*** (.0003)	.001*** (.0004)	-.0001 (.0003)	.0002 (.0003)	-.00001 (.0003)	.0002 (.0003)	.0008** (.0003)	.001*** (.0003)
ER resources and functioning:												
Employee representative is elected (1/0 dummy)	.067** (.032)	.101*** (.034)	.063*** (.020)	.045** (.022)	.043 (.027)	.034 (.028)	.095*** (.033)	.053 (.036)	.089*** (.028)	.069** (.029)	.054** (.024)	.054** (.025)
Employee representative receives training (1/0 dummy)	.043* (.024)	.035 (.026)	.026* (.015)	.023 (.016)	.014 (.022)	.010 (.023)	.035* (.020)	.037* (.022)	.048*** (.018)	.051** (.020)	.034* (.018)	.029 (.020)
Time allocated to employee representation is sufficient (1/0 dummy)	-.067* (.038)	-.097** (.045)	-.117*** (.027)	-.104*** (.031)	-.061 (.040)	-.053 (.046)	-.158*** (.037)	-.142*** (.041)	-.125*** (.027)	-.122*** (.031)	-.066** (.030)	-.078** (.035)
Frequency of meetings with management (1-5 ordered variable; the higher, the lower is the frequency)	.051*** (.013)	.029* (.015)	.030*** (.008)	.032*** (.009)	.028** (.011)	.023* (.013)	.029*** (.010)	.038*** (.012)	.039*** (.009)	.042*** (.011)	.038*** (.010)	.032*** (.011)
Provision of information to the ER body:												
Information provided by management to the ER body is satisfactory (1/0 dummy)	-.257*** (.039)	-.197*** (.041)	-.252*** (.027)	-.216*** (.032)	-.327*** (.043)	-.261*** (.052)	-.181*** (.032)	-.172*** (.039)	-.236*** (.029)	-.198*** (.033)	-.331*** (.034)	-.249*** (.038)
A major HR decision has been taken in the last 12 months (1/0 dummy)	.067** (.031)		.126*** (.018)		.131*** (.025)		.112*** (.024)		.107*** (.021)		.119*** (.021)	
Provision of information to the ER body in the case of major HR decisions: (Reference category: The ER body was not informed by management.)												

The ER body was only informed by management (1/0 dummy)		-.030 (.072)		.034 (.032)		-.005 (.046)		.076* (.044)		.042 (.042)		-.020 (.043)
The ER body was informed by management and asked to give their views or involved in joint decision (1/0 dummy)		-.209*** (.066)		-.097*** (.029)		-.157*** (.044)		-.033 (.036)		-.104*** (.037)		-.186*** (.040)
ER influence in the case of major HR decisions:												
The ER body had some or a strong influence on the decision making (1/0 dummy)		-.102** (.044)		-.042** (.021)		-.053* (.030)		-.016 (.028)		-.039 (.027)		-.059** (.027)
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Establishment size dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	1,563	1,214	3,481	2,685	1,903	1,484	1,578	1,201	2,502	1,873	2,827	2,156
LR test	26.73	20.28	156.21	126.22	91.69	94.01	61.64	26.10	96.62	59.34	133.88	121.50

Notes: See notes to Table 2. Country subsamples are defined in Appendix Table 3. Column (1) denotes all establishments, while column (2) refers to establishments with a major HR decision in the last 12 months. To clarify the modeling strategy: in Case 1 the works council agency in S1 countries is compared with union representation in S2 countries; in Case 2 'works council rule' is compared with 'union rule' (minority unions in S3 and minority works councils in S4 are retained in the sample); in Case 3 the 'majority works council' is compared with the 'minority union'; in Case 4 the 'majority union' is compared with the 'minority works council'; in Case 5 the works council is compared with the 'majority union' in S4 (minority works councils are retained in S4); and, finally, in Case 6 the works council is compared with the 'minority union' in S3 (majority works councils are retained in S3). ***, ** and * denote statistical significance at the 0.01, 0.05, and 0.10 levels, respectively.

TABLE 4
Cross Tabulations of the Perceived Quality of Industrial Relations, Workplace Employee Representation, and the Shortfall in Desired Participation, All Establishments (in percent)

		Workplace representation		
		Union	Works council	Row total
Management makes sincere efforts to involve the employee representation in the solving of joint problems	NO (q20_d_D=0)	25 [92]	17 [92]	20
	YES q20_d_D=1	75 [70]	83 [61]	80
	Column total	100	100	

Notes: The shortfall in participation is given in brackets. Accordingly, the top left cell in panel (a) gives the sample conditional probability Pr (q42a_a_D =1 | q20_d_D =0, union=1) or the probability of a shortfall in participation given that management fails to make a sincere effort to involve the employee representation agency in solving joint problems *and* the union entity is the workplace representation type. The variables q20_d_D and q42a_a_D are described in Appendix Table 2; they are based on survey questions Q20D and Q42a (item A), respectively. q42a_a_D is the outcome variable *ER body should be more involved in decision making* (i.e. a shortfall in desired participation). A similar exercise with identical results was conducted using the variables q20_c_D, q42a_c_D, and q44_D. These variables are based on survey questions Q20C, Q42c (item C), and Q44, respectively, and are described in Appendix Table 2.

TABLE 5

The Shortfall in Desired Participation Controlling for Variation in the Quality of Industrial Relations, Establishments with a Major HR Decision Taken in the Last 12 Months, Marginal Effects

	Variation in the quality of industrial relations							
	Case A Management makes sincere efforts to involve the employee representation		Case B The relationship between management and employee representation is hostile		Case C Management can be trusted		Case D Good or very good work climate at the establishment	
	Yes (1)	No (2)	No (1)	Yes (2)	Yes (1)	No (2)	Yes (1)	No (2)
Type of workplace representation and labor organization:								
Works council (1/0 dummy)	-.071*** (.024)	.0004 (.0003)	-.072*** (.022)	-.013 (.034)	-.082*** (.024)	.008 (.023)	-.097*** (.027)	-.024 (.023)
Establishment union density (percent)	.0005* (.0003)	-.011 (.019)	.0005** (.0002)	.000008 (.0005)	.0005* (.0003)	.0003 (.0003)	.0003 (.0003)	.0006** (.0003)
ER resources and functioning:								
Employee representative is elected (1/0 dummy)	.066*** (.022)	.029 (.019)	.066*** (.019)	-.009 (.044)	.056** (.022)	.043* (.024)	.064** (.025)	.038 (.023)
Employee representative receives training (1/0 dummy)	.031* (.017)	.013 (.014)	.035** (.015)	-.026 (.036)	.041** (.016)	-.017 (.019)	.038** (.019)	.014 (.017)
Time allocated to employee representation is sufficient (1/0 dummy)	-.100*** (.029)	.0008 (.0170)	-.088*** (.026)	-.013 (.043)	-.096*** (.030)	-.034 (.025)	-.091*** (.033)	-.067** (.028)
Frequency of meetings with management (1-5 ordered variable; the higher, the lower is the frequency)	.036*** (.009)	.013* (.007)	.037*** (.008)	.002 (.017)	.042*** (.009)	.006 (.010)	.035*** (.010)	.030*** (.010)
Provision of information to the ER body:								
Information provided by management to the ER body is satisfactory (1/0 dummy)	-.226*** (.032)	-.037** (.017)	-.214*** (.026)	-.177*** (.048)	-.230*** (.033)	-.052** (.020)	-.217*** (.036)	-.112*** (.025)
Provision of information to the ER body in the case of major HR decisions:								
The ER body was only informed by management (1/0 dummy)	.040 (.038)	-.001 (.020)	.012 (.032)	.053 (.058)	-.013 (.037)	.051 (.034)	.011 (.043)	.018 (.033)
The ER body was informed by management and asked to give their views or involved in joint decision (1/0 dummy)	-.111*** (.034)	-.023 (.020)	-.134*** (.029)	.010 (.051)	-.168*** (.034)	-.016 (.027)	-.135*** (.038)	-.073** (.030)
ER influence in the case of major HR decisions:								
The ER body had some or a strong influence on the decision making (1/0 dummy)	-.070*** (.023)	.004 (.015)	-.064*** (.020)	-.029 (.038)	-.051** (.022)	-.029 (.022)	-.061** (.027)	-.031 (.020)

Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Establishment size dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	3,272	862	3,783	339	3,248	818	2,622	1,553
LR test	172.48	11.12	182.55	0.04	171.31	5.96	113.52	37.93

Note: See notes to Table 2.

APPENDIX TABLE 1

Mapping Formal Workplace Employee Representation to Establishments and Countries

Country	Trade union representation	Works council-type representation
1 Belgium BE	Délégation syndicale (111, 112)	Conseil d'entreprises, Comité pour la prevention et de la protection au travail (121, 122, 151, 152)
2 Bulgaria	Синдикална организация (2611)	Представители на работниците и служителите~ (2641)
3 Czech Republic	Odborová organizasse (211)	Rada zaměstnanců (221)
4 Denmark	Tillidsrepræsentant (311)	Samarbejdsudvalg (321)
5 Germany	No trade union representation (421)	Betriebsrat, Personalrat (461)
6 Estonia	Ametiühing, Ametiühingu (511, 512)	Töötajate usaldusisik (541, 542)
7 Ireland	Workplace trade union representative (911)	Statutory employee representative, Joint consultative committee (921, 931)
8 Greece	Επιχειρησιακό σωματείο (611)	Συμβούλιο εργαζομένων (621)
9 Spain	Sección syndical (711, 712)	Comité de empresa (721, 722)
10 France	Délégué syndical (811)	Comité d'entreprise, Délégué du personnel (821, 841)
11 Croatia	Sindikat (2711)	Radnicko vijece (2721)
12 Italy	Rappresentanza sindicale aziendale (1011)	Rappresentanza sindacale unitária (RSU) (1021)
13 Cyprus	Συνδικαλιστική Εκπροσώπηση (1111)	No works council-type representation
14 Latvia	Arodbiedrības (1211, 1212)	Darbinieku pilnvarotie pārstāvji (1241, 1242)
15 Lituania	Profesinė sąjunga (1311)	Darbo taryba (1321)
16 Luxembourg	No trade union representation	Comité mixte, Délégation du personnel (1422, 1423, 1452, 1453)
17 Hungary	Szakszervezet (bizalmi) (1511)	Üzemi tanács, Üzemi megbízott (1521, 1551)
18 Malta	Shop steward (recognized union representative) (1611, 1612)	No works council-type representation
19 Netherlands	No trade union representation	Ondernemingsraad, Personeelsvertegenwoordiging (1721, 1751)
20 Austria	No trade union representation	Betriebsrat (1821)
21 Poland	Zakladowa organizacja zwiazkowa (1911)	Rada pracowników (1921)
22 Portugal	Comissão sindical, Comissão intersindical (2011)	Comissão de trabalhadores (2021)
23 Romania	Sindicat (2811)	Reprezentanţii salariaţilor (2851)
24 Slovenia	Sindikalni zaupnik (2111)	Svet delavcev, Delavski zaupnik (2121, 2141)

25 Slovakia	Odborová organizácia (2211)	Zamestnaneckárada, Zamestnanecky dôvernik (2221, 2241)
26 Finland	Ammattiosasto (2311)	YT-toimikunta, Henkilöstön edustaja (2321, 2351)
27 Sweden	Facklig förtroendeman (2411)	No works council representation
28 United Kingdom	Recognised shopfloor trade union representation (2511)	Joint consultative committee (2531)

Notes: The mapping is based on the raw ER Questionnaire variable *er_type_er*. The corresponding code indicates the type of workplace employee representation agency to which the respondent belongs. See text and Appendix Table 2.

Source: The 2013 ECS survey, Employee Representative (ER) Questionnaire.

APPENDIX TABLE 2

Variable Definition and Means of Selected Variables, All-Establishment Sample

Variables	Survey variable in the raw dataset	Mean (percent)	Definition
Shortfall in workplace representation:			
ER body should be more involved in decision making	q42a_a	71	1/0 dummy: 1 if ER body should be more involved in decision making (strongly agrees/agrees)
Labor organization and workplace representation:			
Establishment union density	q4_rec	47	Union density at the establishment
Employee representative is elected	q7	82	1/0 dummy: 1 if the ER interviewee was elected, 0 if appointed
Works council		54	1/0 dummy: 1 if the respondent (i.e. the ER interviewee) is from the works council; 0 if the respondent is from the union. Note that if there is a unique works council (union) agency at the workplace, then the respondent is necessarily from the works council (union). If the works council and the union agencies coexist at the workplace and the employee representative respondent is from the works council (union), then the works council (union) is adjudged to be more influential and correspondingly the works council (union) status is allocated. This interpretation is based on the fact that the interviews are always conducted with the "highest-ranking employee representative of the workplace employee representation body that represents the highest proportion of employees at the establishment."
Workplace representation resources and functioning:			
Trained employee representative	q14	46	1/0 dummy: 1 if the ER representative has received training related to his/her role in the last 12 months
Time allocated to employee representation is sufficient		88	1/0 dummy: 1 if time allocated to employee representation is sufficient (i.e. either the ER representative has some number of hours per week that he/she considers sufficient or he/she can use as much time as is necessary or he/she is a full-time employee representative. This variable is generated using the raw variables q11 to q13.
Frequency of meetings with Management	q19	2.5	The variable indicates how often the ER body meets with management: 1 if meetings with management are at least once a week; 2 if at least once a month; 3 if at least once every quarter; 4 if at least once a year; 5 if less than once a year.
Provision of information:			In the last 12 months, has management provided the ER-body with any information on the following issues?
Information provided by management to the ER body is satisfactory	q21 and q25	78	1/0 dummy: 1 if the information provided by management in the last 12 months to the ER body was in general satisfactory; 0 if management provided the ER body no information at all or it was considered unsatisfactory. The assessment by the employee representative is based on the information provided on the following issues: The financial situation of the establishment; The employment situation of the establishment; The introduction of new or significantly changed products or services in the establishment (new); The introduction of new or significantly changed processes to produce goods or provide services in the

			establishment; Strategic plans with regard to the establishment (e.g. business targets, plans for investments and plans to expand activities). The variable is generated using the raw variables q21 and q25. The corresponding Stata coding is available upon request.
Assessment of employees' and management attitude:			
Employees value the work of the employee representation	q20_a_D	86	1/0 dummy: 1 if employees value the work of the employee representation (strongly agrees or agrees)
Employees rarely express interest in the outcome of consultations or negotiations	q20_b_D	37	1/0 dummy: 1 if employees rarely express interest in the outcome of consultations or negotiations (strongly agrees or agrees)
The relationship between management and employee representation is hostile	q20_c_D	8	1/0 dummy: 1 if the relationship between management and employee representation can best be described as hostile (strongly agrees or agrees)
Management makes sincere efforts to involve the employee representation	q20_d_D	80	1/0 dummy: 1 if management makes sincere efforts to involve the employee representation in the solving of joint problems (strongly agrees or agrees)
Management can be trusted	q42a_c_D	82	1/0 dummy: 1 if management can be trusted (strongly agrees/agrees)
Good or very good work climate at the establishment	q44_D	64	1/0 dummy: 1 if the current general work climate in this establishment is very good or good
Sample: Establishments in which a major HR decision has been taken in the last 12 months	q27		This sample comprises all the establishments for which we have the variable major decision=1. This 1/0 dummy is defined as 1 if any major decision has been taken in the last 12 months, 0 otherwise. The interviewee was asked whether in the last 12 months any major decisions (i.e. decisions that affect the entire establishment or a large part of it) were taken by the management in the following areas: organization of work processes; recruitment and dismissals; occupational health and safety; training and career development; working time arrangements; and restructuring measures
Information and involvement in major decisions:	q28_a q28_b q28_c		
The ER body was not informed by management		14	1/0 dummy: 1 if the ER body was not informed by management, not asked to give their views ahead of the decision nor involved in joint decision making with management.
The ER body was only informed by management		19	1/0 dummy: 1 if the ER body was informed by management, but not asked to give their views ahead of the decision nor involved in joint decision making with management.
The ER body was informed by management and asked to give their views or involved in joint decision		67	1/0 dummy: 1 if the ER body was informed by management and asked to give their views ahead of the decision or involved in joint decision making with management.
Influence in major decisions:			
The ER body had some or strong influence on the decision making	q38	69	1/0 dummy: 1 if the ER body had some or a strong influence on the management decision.

Notes: The sample is restricted to establishments with a formal employee workplace representation in 28 European countries. The Online Appendix provides the full list of countries and the text defines formal representation at the workplace. The sample includes a maximum of 6,429 observations, 76% of which had taken a major HR decision taken in the last 12 months. The variables for the subset of establishments with a major decision are based on questions 26 to 41; and the corresponding coding for the generated variables is available upon request.
Source: The 2013 ECS survey, Employee Representative (ER) Questionnaire.

APPENDIX TABLE 3

Country Subsets by Workplace Representation Type

	Country subsets			
	S1: Countries with a works council-type representation only	S2: Countries with a union-type representation only	S3: Countries with dual systems but in which works council-type representation is found in more than 70% of the cases ('works councils rule')	S4: Countries with dual systems but in which union-type representation is found in more than 70% of the cases ('unions rule')
Countries	Germany, Austria, Netherlands and Luxembourg	Sweden, Cyprus, and Malta	Belgium, Denmark, Estonia, Italy, Hungary, Romania, Slovenia, and Finland	Bulgaria, Czech Republic, Ireland, Spain, Greece, Croatia, Latvia, Lithuania, Poland, Portugal, and the United Kingdom
Variable: Mean incidence of formal workplace representation (in percent)	55	43	60	35
Variable: Mean shortfall in participation/involvement in decision making (in percent)	63	79	66	76

Notes: For a given country mean incidence is defined as the share of establishments with a formal workplace representation in the entire set of establishments. The mean shortfall in worker participation is given by the share of establishments in which greater involvement of the ER body is desired (strongly or very strongly). The reported means are computed as means of means and were obtained using the 2013 Management and Employee Representative Questionnaires, respectively. France and Slovakia do not meet our inclusion requirements and do not populate any country subset.

APPENDIX TABLE 4

How Employees Value the Work of the Employee Representation, Their Interest in the Outcome of Consultations or Negotiations, and the Shortfall in Workplace Representation (percent)

	Employees Do Not value the work of the employee representation (q20_a_D = 0)		Employees Value the work of the employee representation (q20_a_D = 1)	
	Employees rarely express interest in the outcome of consultations or negotiations? NO (q20_b_D = 0)	Employees rarely express interest in the outcome of consultations or negotiations? YES (q20_b_D = 1)	Employees rarely express interest in the outcome of consultations or negotiations? NO (q20_b_D = 0)	Employees rarely express interest in the outcome of consultations or negotiations? YES (q20_b _D= 1)
Percentage of cases in which the respondent agrees or strongly agrees that the ER body should be more involved in decision making (q42a_a_D=1)	84	78	72	75

Notes: The variables q20_a_D, q20_b_D, and q42a_a_D are described in Appendix Table 1; they are based on survey questions Q20A, Q20B, and Q42a (item A), respectively. The sample is comprised of all establishments with a major HR decision taken in the last 12 months.
Source: 2013 ECS survey, Employee Representative Questionnaire, unweighted data.

Replication of Table 3 Using Alternative Country Subsets, Marginal Effects

	Case 1 S1_1 and S2_1		Case 2 S3_1		Case 3 S5_1		Case 4 S1_1 and S3_1	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Type of workplace representation and labor organization:								
Works council (1/0 dummy)	.0289 (.0448)	.0467 (.0479)	-0.0834*** (0.0292)	-0.0894*** (0.0322)	-0.1476*** (0.0308)	-0.1224*** (0.0365)	-0.1049*** (0.0311)	-0.1066*** (0.0345)
Establishment union density (in percentage)	-.0002 (.0004)	.0000 (.0005)	0.0007 (0.0005)	0.0008* (0.0005)	0.0004 (0.0004)	0.0005 (0.0005)	0.0003 (0.0004)	0.0005 (0.0004)
ER resources and functioning:								0.0834*** (0.0307)
Employee representative is elected (1/0 dummy)	.0511* (.0283)	.0563* (.0294)	0.1032*** (0.0325)	0.0913*** (0.0344)	0.0366 (0.0389)	0.0322 (0.0454)	0.0846*** (0.0298)	
Employee representative receives training (1/0 dummy)	.0495** (.0214)	.0388* (.0229)	0.0441* (0.0261)	0.0426 (0.0271)	0.0015 (0.0249)	0.0043 (0.0279)	0.0555*** (0.0212)	0.0554** (0.0234)
Time allocated to employee representation is sufficient (1/0 dummy)	-.0282 (.0386)	-.0356 (.0432)	-.0914** (.0370)	-.0834** (.0390)	-.1300*** (.0358)	-.1429*** (.0461)	-.0690** (.0298)	-.0750** (.0327)
Frequency of meetings with management (1-5 ordered variable; the higher, the lower is the frequency)	.0352*** (.0124)	.0149 (.0135)	.0334** (.0138)	.0571*** (.0156)	.0385*** (.0120)	.0450*** (.0148)	.0420*** (.0123)	.0534*** (.0140)
Provision of information to the ER body:								-.1899*** (.0358)
Information provided by management to the ER body is satisfactory (1/0 dummy)	-.2870*** (.0425)	-.2260*** (.0415)	-.2070*** (.0352)	-.1883*** (.0440)	-.3315*** (.0424)	-.2534*** (.0548)	-.2404*** (.0313)	.0032 (.0517)
A major HR decision has been taken in the last 12 months (1/0 dummy)	.0788*** (.0291)		.1136*** (.0296)		.1437*** (.0248)		.1011*** (.0243)	.1797*** (.0477)
Provision of information to the ER body in the case of major HR decisions: **(Reference category: The ER body was not informed by management.)**								
The ER body was only informed by management (1/0 dummy)		-.0327 (.0516)		.0512 (.0550)		.0405 (.0568)		.0032 (.0517)
The ER body was informed by management and asked to give their views or involved in joint decision (1/0 dummy)		-.1731*** (.0495)		-.1101** (.0502)		-.0719 (.0481)		-.1797*** (.0477)

ER influence in the case of major HR decisions:								
The ER body had some or a strong influence on the decision making (1/0 dummy)		-.0698** (.0331)		-.0500 (.0328)		-.0556 (.0364)		-.0461 (.0305)
Industry dummies	Yes							
Establishment size dummies	Yes							
Number of observations	2,121	1,724	1,299	1,042	1,604	1,127	2,064	1,562
LR test	99.35	83.57	22.35	21.44	52.39	37.52	46.01	42.72

Notes: See notes to Table 3. Country subsets classification follows van den Berg et al. (2013). Country subsets: S1_1/Germanic cluster (Germany, Austria, and the Netherlands); S2_1/Scandinavian cluster (Denmark, Finland, and Sweden); S3_1/French cluster (Belgium, France, Luxembourg, Spain, Portugal, Italy, and Greece); S4_1/Anglo-Saxon cluster (Ireland and the United Kingdom); and S5_1/Transition cluster (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia). Malta, Cyprus and Croatia are not included in any of these five subsets.