Works Councils and Organizational Performance

The Role of Top Managers' and Works Councils' Attitudes in Bad Vis-à-vis Good Times

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Abstract Most studies on the effects of works councils simply analyze whether their mere presence contributes to firm performance. This study seeks to offer a contribution to the literature by adding, to date, largely unexplored potential contingencies: the attitudes of Dutch top managers and works councils as to the functioning of the latter, in bad vis-à-vis good times. The overall conclusion from our probit analyses is that the way in which management and works councils interact, and hence the way in which codetermination is implemented, makes all the difference to the firm's economic position. Our most compelling finding relates to the role of management: a positive attitude of managers toward the works council is positively associated with organizational performance, both in the private and the public sector. In the private sector, this result is even reinforced in times of reorganization.

Keywords Works councils · Codetermination · Reorganization · Organizational performance · Interaction · Managerial response

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Introduction

The effect of works councils on organizational performance received ample attention in the industrial relations literature. Empirical studies come up with mixed evidence, however. For example, using (self-reported) profitability as the yardstick, most studies report negative effects (e.g. Addison et al. 2001; Dilger 2002), while recently Mueller (2010) establishes the opposite, which he attributes to his use of an objective profit measure. A second example is the estimated impact of works councils on employment, which is predominantly negative (e.g. Addison and Teixeira 2006), but recently Jirjahn (2009) has demonstrated the reverse effect, which is attributed to the use of a different methodology. Mixed results are found as well when using other performance measures such as productivity, innovation, wages and labor turnover (see the overview studies by Addison et al. 2004 and Addison 2009). This implies that further work is needed to explore the underlying contingencies that can explain the nature of the works council—organizational performance linkage. The reason for further work on this relationship follows from a few biases that dominate the extant literature.

First, by far the majority of all studies focus on Germany. One notable exception is the recent article by Fairris and Askenazy (2010), who report on the impact of French works councils on productivity. Our paper concentrates on another country with a long-standing works council tradition: the Netherlands. Second, apart from a few exceptions, most existing studies introduce rather course-grained measures of works council-related independent variables, usually simply their mere absence or presence. But the plain existence of a works council in a firm does not guarantee a successful outcome. We argue, instead, that it is more revealing to analyze how works council members and top managers interact, and consequently how this interaction impacts company performance. By focusing on top managers' and works councils' attitudes, we add more fine-grained measures of the perceived nature of works council functioning. We find support for this approach in Bryson et al. (2006), who conclude from a British sample that a constructive managerial response to (any kind of) worker participation strongly improves productivity. Third, as a rule, existing research only comprises organizations in the private sector, whereas works councils are (often) also present in the public sector. Therefore, we explore a public sector subsample, and compare the results carefully with those from the private sector analyses, albeit with a few necessary adjustments to our model. Fourth, what we will ultimately focus on is how codetermination affects the economic position of the organization during an external shock that reflects bad times—i.e. in the form of a downsizing reorganization. The rationale for this is that workers' participation might work fine in good times, but is really put to the test when an organization is restructured.

Our data are collected through a nation-wide and sector-wide survey administered in 1998 among 656 Dutch organizations with a works council. The compilers of this dataset have published their main findings with the aid of descriptive statistics only (Looise and Drucker 2003; Van het Kaar and Looise 1999). Recently, the data have been released for other researchers in order to perform multivariate regression analysis. So far, this has resulted in one study, in which the perceived effects of works councils on efficiency and innovation have been estimated in the Dutch private and public sector (Van den Berg et al. 2009).



The present study analyzes the effect of the attitude of Dutch works council members and top managers toward each other on organizational performance. In so doing, we do not focus so much on the effect of the mere presence of a works council, as is done in the majority of earlier studies and as all the sampled organization have installed a works council anyway, but rather on the impact of the different ways in which a works council can be perceived to function in practice. Specifically, we will verify what determinants are most decisive in explaining the economic position of organizations. Through the questionnaire, respondents were asked to rank the economic position of their establishment from weak to strong. Empirically, we first test a comprehensive organizational performance model that incorporates standard economic explanatory variables, particularly firm and workforce characteristics. Subsequently, we include attitudinal variables of the management teams and the works councils with respect to their internal dealings. In the final round of analyses, we zoom in on the effect of the functioning of works councils on the organization's economic position when reorganization occurs by adding interaction terms. So, our statistical analyses have a hierarchical set-up, moving from baseline to main effects before adding interaction terms. In so doing, we hope to unravel the subtle contingency-specific drivers of the impact of works council functioning on organizational performance.

We will start with a brief sketch of the relevant theories in "Theory", which results in the formulation of a set of five testable conjectures, relating to four main effects and one set of interaction effects. Next, the data and research method are elaborated upon in "Methodology". The main findings of our estimations will be presented in "Evidence". In the conclusion, we will further reflect upon our key finding—that the way in which management teams and works councils treat each other plays a very important role in determining the overall performance of organizations, especially in times of reorganization.

Theory

Background

In the Netherlands, works councils are mandatory in each organization that employs fifty or more workers. Dutch works councils have far-reaching legal rights (Bakels 2003; Looise and Drucker 2003). These concern the right to receive sufficient and timely information, the right to give advice (on specified financial and business matters) and the right to give consent (on social matters). In addition, they have the possibility to call upon external expert advice, at the organization's expense, and they have the option to go to court if they believe that their rights are somehow violated.

Theoretically, Freeman and Lazear (1995) show that each of these rights can be used to the benefit of all stakeholders, leading to a win-win outcome. Firstly, communication between the organization's executive board members and workers' representatives can enhance trust, because a works council is able to judge whether the information from the management team is reliable. The works council is then able to submit management's decisions to the personnel in a credible way, which in



turn may foster acceptance. This proves to be especially relevant in bad times by preventing industrial unrest, and hence avoiding a decline in labor productivity. Secondly, advisory rights may allow workers to come up with suggestions that have an excess value. Consultation of the works council by management may help in solving problems. And thirdly, codetermination rights give the employees more control over their own working conditions and work security, which prompts them to stay loyal to the firm in the longer run. In that way, the interests of workers and shareholders will be better aligned.

As a counter-force, Freeman and Lazear (1995) also discuss the possibility that an influential labor force will try to raise wages and maintain employment even if this ultimately endangers the economic position of the firm. As for the Netherlands, the risk of this kind of rent-seeking behavior by works councils is very much curtailed by the law, which gives the prerogative of wage negotiations to the trade unions. Moreover, works council members are legally obliged to fulfill a dual task: they should protect the interests of the organization's personnel, but not at all costs, since they are also required to act in the interests of the firm at large (Bakels 2003).

However, works councils could have an adverse effect on the functioning of the firm due to a possible lack of know-how and because they may slow down decision-making processes if they think that this is to their own benefit. Kaufman and Levine (2000) refer to these downsides as indirect costs of employee representation. As direct costs they mention expenses in the form of lost working hours due to meetings and schooling of the works council members, the costs of the facilities they use, and disbursements related to the hiring of outside professional consultants. In the context of the Dutch arrangement, we could add that very large costs will arise when works councils exercise their right to go to court.

Influenced by Freeman and Medoff (1984), Bryson et al. (2006) point to the importance of managerial responses to any form of worker voice. They argue that the functioning of this 'voice mechanism' depends on the attitude of management toward worker participation, and that consequently the performance of the firm greatly depends on the degree in which management is inclined to give (representatives of) employees a say in company policies. In their empirical analysis with respect to private sector companies in the United Kingdom, they differentiate between managerial attitude toward union representatives and non-union representatives (such as consultative committees, which can be regarded as voluntary works councils), respectively. They find that only in non-union workplaces there is indeed a significant positive effect from a sympathetic managerial attitude toward employee representatives on labor productivity.

Testable Conjectures

From the above, we infer that the presence of codetermination is an important but not a sufficient condition to enhance an organization's performance, in whatever way this is measured. It ultimately depends on the degree in which workers' representatives are taken seriously by their management and, in turn, on the degree in which workers are willing and able to cooperate with management to overcome problems. Only then, a fruitful collaboration may contribute to the economic position or development of the organization. From the outset, however, it is hard to



formulate very precise hypotheses, especially if these should hold both in the private sector and in the public sector. As a recent study (Van den Berg et al. 2009) argues and shows, the mutual relations between management teams and works councils significantly differs when comparing the private with the public sector, which leads to different perceived effects of works councils on efficiency and innovation in these two sub-sectors of the economy. So our strategy in this paper will be to formulate a series of assumed benchmark relationships, referred to as conjectures, of which the effect on the economic position of an organization is not always clear-cut, but which can be tested empirically.

First, the more management is inclined to adopt an open, sympathetic attitude toward the works council, the more the latter is willing to communicate, to give advice and to collaborate. Second, the more timely the management team involves the works council in organizational decision-making, the more the latter will feel entrusted. Hence, this will increase the works council's willingness to collaborate constructively. Third, the more the works council is inclined to adopt an open, considerate attitude toward the management team, the more fruitful their consultation meetings will be. Finally, if the works council is not inclined to slacken the speed of decision-making for its own sake, this will positively affect mutual understanding, which will have a favorable impact on the organization's economic position.

Still, the impact of the works council on the economic position of the organization is not unconditionally negative or positive, but depends on the circumstances. In the current study, we focus on bad versus good times. Specifically, we will explore the connection between the effects of codetermination and the economic position of the organization in case of 'bad weather', as reflected in downsizing or reorganization programs. On its own accord, the relationship between downsizing—or reorganization, more broadly—and firm performance is most often found to be negative for a variety of economic, psychological and sociological reasons (Sorge and van Witteloostuijn 2004). Moreover, downsizing studies revealed that the performance impact of downsizing can be expected to be even more negative if the reorganization coincides with compulsory redundancies and forced layoffs (Cascio and Wynn 2004).

Specifically, we are interested in the issue as to what participation rights are worth when the organization experiences such difficulties, and needs to reorganize. In other words, what will happen with codetermination effects on economic performance in bad times, when the organization has to restructure? Cascio and Wynn (2004) argue that downsizing needs to be accompanied by worker participation, in order to manage a reorganization process effectively. If employees are not involved in this process, passiveness and discouragement will dominate, making the organization worse off. They refer to four conditions for successful employee participation. These are timely involvement, a knowledgeable workforce, consultation about issues that really matter to the workers, and a company's culture that is favorable to employee input. If these conditions hold, workers will stay committed, and will be motivated to dedicate themselves to reviving their firm. This logic leads to the following conjectured set of interaction effects: if the organization is going through a reorganization program, the positive effect of a well-functioning management team—works council relationship (as conjectured above) on the firm's economic position will be reinforced.



Methodology

In 1998, a survey was conducted nation-wide among Dutch private and public sector organizations that operated with a works council. In that year approximately 13,500 organizations employing over fifty employees were estimated to actually have a works council, of which slightly over 30% could be found in the public sector. On average, around the turn of the century councils had actually been set up in about 73% of all 50+ organizations, but that percentage concealed some remarkable differences, both between private and public sector and between large and small establishments. While the public sector accounted for a density rate of about 96%, the private sector covered about 61% of all eligible firms. In addition, whereas around 94% of the large organizations (200+) had a works council, the small ones (between 50 and 100) only made up 58% (Engelen et al. 2001).

A long list of questions was sent to both management teams (board of directors) and works councils of 3,500 randomly chosen firms with a works council, of whom 731 (21%) responded; 475 directors (14%) and 407 works councils (12%), respectively. For the analyses in this paper, we use the directors' survey for two reasons. First, only the directors have been asked to give an indication of the organizational performance of their establishments. Second, the sub-sample with two completed questionnaires, by representatives from the management team and the works council of the same organization, is too small for the type of econometric analyses we wish to apply here.

Due to the survey's sampling design, organizations with more than 200 employees are overrepresented compared to the national population, and so are public sector organizations. The latter can probably be attributed to a then recent change in the law, stipulating that 50-plus public sector establishments had to install a works council (Van het Kaar and Looise 1999). Looking in more detail at the representativeness by industrial sector, comparing official statistics (CBS 1998) with our sample, we find that both for manufacturing and the public sector the percentages in the sample are in line with the actual population of Dutch organizations with more than 50 employees. Construction and banking & insurance are underrepresented, whereas transport & catering and public health & welfare are overrepresented. Overall, the sample based on the director's survey represents the Dutch organizations with a works council reasonably well. The final dataset consists of 183 private firms and 168 public organizations for which all relevant information is available. Contrary to the various analyses for Germany, our dataset consists of organizations in which a works council is always present. However, compared to most German analyses, we have more detailed information on the way in which the management teams and the works councils interact.

Dependent Variable: Economic Position of the Organization

The question about the organization's economic position has three possible answer categories: healthy/strong, somewhat worrisome, and worrisome/weak. Based on the distribution over the three categories, we decided to combine the latter two categories. For private firms, 85% of the managers reported that the firm had a



healthy/strong economic position. Van het Kaar and Looise (1999: 40) state that in the public sector this classification is more difficult to apply because here economic position often does not have a clear meaning. Although this is probably true for the public administration part of the public sector, this does not necessarily hold for other parts of the public sector such as in education, public health and welfare, where economic position can be interpreted in a meaningful way. Indeed, respondents in these latter parts of the public sector make up for two thirds of the total number of public sector observations. And indeed, they did answer the economic position question. Over a prolonged period of time, the organizations in these segments of the Dutch public sector have been confronted with a cutback in expenditures by the government, which probably explains why only 65% reported a healthy economic position.

Control Variables: Economic Measures

Following the existing literature on the effect of works councils on firm performance, our baseline model explaining the economic position of organizations includes characteristics concerning industry, firm, workforce, and personnel policy. The model with respect to private sector establishments contains all of the variables we will introduce below, while the model with respect to the public sector deliberately omits the ones that are not appropriate because of lack of applicability in the specific context of public sector organizations, as we will explain below.

First, the industry and firm characteristics refer to the main industrial sectors and the size of the establishment (six categories, ranging from below 50 workers to over 1,000 workers). From the latter, we can deduct that the average size in both the private sector and the public sector amounts to 3.25–3.45, implying about 125–145 workers per establishment. Further, this category contains two more variables: whether or not the (private) firm has international collaborations (strategic alliances, mergers or acquisitions), and whether or not the (private) firm has a parent company (i.e., is legally dependent or not). Second, the workforce features comprise of factual information concerning the percentage employed with tenure, the percentage of unskilled labor, and the experience of the works council (measured on a three-point scale: an incipient, a fairly experienced or a professional council). It can be seen for all these three characteristics that there is hardly any difference in the personnel composition between the private and the public sector: between 86% and 87% has a tenured job, 21%-24% has unskilled work and 57%-60% of all works councils are considered to be reasonably experienced. Third, for the personnel policy characteristics, we use information about human resource management (HRM), and financial participation schemes for higher staff (in the private sector only). A total of twelve measures of HRM (each on a three-point scale: has been given hardly any, some, or much attention) were distinguished, running from performance interviews and team

¹ This variable is deliberately included under workforce features and not under codetermination characteristics, because the latter category contains only attitudinal variables, which does not refer to works council experience as an objective measure.



building to training possibilities and career prospects. The dominant factor's sum score is, on average, about 27 in both the private and the public sector sub-sample, indicating that most organizations pay at least some attention to different HRM practices. The financial participation items relate to four different types of financial reward instruments (profit sharing, options, shares, and bonds). Here, again, we constructed composite measures by summing up the individual item scores, which resulted in an average score of 1.1, indicating that most private firms offer only one out of the four financial reward alternatives.

Because part of our study's focus is on the impact of codetermination in bad times, in the baseline analyses we distinguish between past reorganizations with and without involuntary layoffs. The relation between economic performance and reorganization is complex. Since the information on reorganization stems from 1 to 2 years before the questionnaire was held, the causality runs from reorganization to performance (see also "Estimation Strategy" about reverse causality). That means that the expected negative impact of a reorganization on the economic performance will prevail; the economic position after the reorganization will not have changed that quickly. In the third step of our estimations, for the sake of parsimony, we only take into account whether or not there has been any kind of reorganization. When comparing the private sector with the public sector sub-sample, it catches the eye that, on average, the latter have been hit more often by an overall reorganization (in no less than 52% of all cases), but that the former more often had to deal with forced lay-offs (in 18% of all cases). In all likelihood, this last finding can be attributed to the fact that public sector workers are more difficult to dismiss.

Independent Variables: Codetermination Measures

We distinguish four different aspects in connection with codetermination: both the management teams' and works councils' attitude toward each other, whether or not works councils exercise control by being timely involved in organizational decision-making, and whether or not works councils slow down the decisionmaking process.

The managers' evaluation of their own attitude is classified as either being prepared to accept compromises or search for new ways to find solutions, on the one hand, or as formal and following rules or emphasizing an uneven balance of power, on the other hand. The managers' perception of the attitude of the works council is classified in the same way. The phase in which the works council gets involved in the organization's decision-making processes is measured on a three-point scale: the council monitors only the implementation of policies decided upon by management, the council has a say in the last phase of decision-making processes, or the council is involved in decision-making processes right from the start. The slackening effect of works councils is incorporated through a binary dummy: does the manager perceive the works council as slowing down decision-making processes or not?

Although the sub-sample for which two completed questionnaires per establishment are available is too small to be analyzed statistically, a quick look at the differences between the managers' and the works council's evaluation of each



other's attitude reveals the following. Both managers and works councils evaluate each other's attitude in the same way in almost 80% of the cases in this small subsample. If they diverge, the works council classifies its own attitude as more openminded than the managers do, while the classification of the managers is exactly the other way around. So, the subjective information of managers on both their own attitude and the attitude of works councils seems to be in line with the classification by works councils.

Analyzing the effect of codetermination in times of reorganization is done by including interaction terms, which are generated by multiplying the undifferentiated reorganization variable by the four respective codetermination variables. Because the reorganization referred to in the questionnaire has occurred in the past 2 years, which is not that long ago, the interaction effect can still capture the impact of codetermination on the economic position in bad times. Interpreting the results is now somewhat more complicated. With product terms included, the effect of one of the codetermination variables on the economic position is a combination of both the main effect of this particular variable and the effect of the interaction variable on the organization's economic position. This will be clarified when we discuss the estimation results in the next section. In Table 1, the descriptives are presented.

Estimation Strategy

Due to the design of the survey, almost all measures reflect perceptual data from individual respondents. A first potential problem using this dataset therefore may be common-method variance, which can be examined by applying Harman's singlefactor test (see Podsakoff et al. 2003). For the private firms in our data, the test on economic position and its explanatory variables reveals four to five factors with an Eigenvalue greater than 1, and no single factor explaining most of the variance. A factor analysis for the public sector shows a slightly different pattern. Although for the most extensive analysis also five factors with an Eigenvalue larger than 1 emerge, for the basic analyses just three factors are found. Therefore, we conclude that common-method variance does not seem a potential problem, for neither the private nor the public sector. Comparing the more limited model specifications with the extended ones, the literature clearly reveals that the likelihood of a commonmethod bias sharply declines if non-linear and interaction terms are included in the model (Chang et al. 2010). We will only report noteworthy results for the public sector from the comprehensive analyses. Given the perhaps problematic interpretation of the economic position for the public sector, though, the results should still be interpreted with caution.

A second problem might be multicollinearity. We therefore calculated the variance inflation factors (VIF) for the extensive model to check whether introducing interaction terms leads to problematic multicollinearity (see O'Brien 2007). For both the private and public sector, it turned out that two of the four interaction terms have a VIF higher than 10. One remedy is to measure both the main and interaction variable differently by using mean-centering—i.e., with the main variable as it is and the interaction variable in deviations from the mean(s). Then, the VIF scores all are below 4, implying that multicollinearity is removed, as can be expected. As the



Table 1 Descriptives: Private (n=183) and public sector establishments (n=168)

Private sector variables	Mean	Std. Dev.	Min	Max	χ^2
Economic position (1=healthy/strong)	0.85		0	1	
Industry and firm characteristics					
Industry:					
- Manufacturing	0.42		0	1	χ^2 (1)=0.26 Pr=0.61
- Construction and housing	0.13		0	1	χ^2 (1)=0.89 Pr=0.35
- Transport, trade, services, hotels & catering	0.33		0	1	χ^2 (1)=1.35 Pr=0.25
- Banking and insurance	0.12		0	1	χ^2 (1)=2.23 Pr=0.14
Establishment size:	3.25	1.48	1	6	χ^2 (5)=1.78 Pr=0.88
1: 0-50 employees (in %)	9.69				
2: 50-100 employees (in %)	27.87				
3: 100-200 employees (in %)	22.95				
4: 200-500 employees (in %)	19.67				
5: 500-1,000 employees (in %)	8.74				
6: more than 1,000 employees (in %)	11.48				
International collaboration	0.41		0	1	χ^2 (1)=3.49 Pr=0.06
Parent company	0.56		0	1	χ^2 (1)=4.97 Pr=0.03
Workforce characteristics					
Tenured personnel (in %)	87.41	8.59	60	100	
Unskilled personnel (in %)	23.96	24.82	0	90	
Experience of the works council:	1.86	0.62	1	3	χ^2 (2)=6.55 Pr=0.04
1: starting (in %)	26.78				
2: experienced (in %)	60.11				
3: professional (in %)	13.12				
Personnel policy characteristics					
HRM practices combined (sum)	27.40	3.76	12	34	χ^2 (16)=29.46 Pr=0.02
Financial participation schemes for higher personnel (sum)	1.10	1.26	0	4	χ^2 (4)=5.46 Pr=0.24
Downsizing					
Reorganization overall	0.42		0	1	χ^2 (1)=11.69 Pr=0.00
Reorganization without forced lay-offs	0.25		0	1	
Reorganization with forced lay-offs	0.18		0	1	
Codetermination characteristics					
Manager's attitude	0.93		0	1	χ^2 (1)=10.28 Pr=0.00
Timing of involvement works council	2.06	0.83	1	3	χ^2 (1)=5.80 Pr=0.06
Works council's attitude	0.73		0	1	χ^2 (1)=18.56 Pr=0.00
Non-delaying works council	0.57		0	1	χ^2 (1)=0.63 Pr=0.43
Public sector variables					
Economic position (1 = healthy/strong)	0.65		0	1	
Industry and firm characteristics					
Industry:					
- Public health sector and welfare	0.67		0	1	χ^2 (1)=0.05 Pr=0.82
- Public administration and other non-profit	0.33		0	1	χ^2 (1)=0.05 Pr=0.82



Table 1 (continued)

Establishment size:	3.46	1.40	1	6	χ^2 (5)=4.91 Pr=0.43
1: 0-50 employees (in %)	4.76				
2: 50-100 employees (in %)	25.60				
3: 100-200 employees (in %)	22.62				
4: 200-500 employees (in %)	23.81				
5: 500-1,000 employees (in %)	12.50				
6: more than 1,000 employees (in %)	10.71				
Workforce characteristics					
Tenured personnel (in %)	86.06	13.36	0	100	
Unskilled personnel (in %)	20.59	20.94	0	90	
Experience of the works council:	1.76	0.61	1	3	χ^2 (1)=2.31 Pr=0.32
1: starting (in %)	33.33				
2: experienced (in %)	57.14				
3: professional (in %)	9.52				
Personnel policy characteristics					
HRM practices combined (sum)	26.70	3.07	17	35	χ^2 (18)=15.90 Pr=0.60
Downsizing					
Reorganization overall	0.52		0	1	χ^2 (1)=0.09 Pr=0.77
Reorganization without forced lay-offs	0.45		0	1	
Reorganization with forced lay-offs	0.07		0	1	
Codetermination characteristics					
Manager's attitude	0.89		0	1	χ^2 (1)=5.98 Pr=0.01
Timing of involvement works council	2.48	0.71	1	3	χ^2 (1)=3.40 Pr=0.18
Works council's attitude	0.71		0	1	χ^2 (1)=0.59 Pr=0.44
Non-delaying works council	0.40		0	1	χ^2 (1)=2.24 Pr=0.14

pattern of results (i.e., the sign of the interaction effects) is not affected by meancentering, we have incorporated the results without using this VIF-reducing method, for the sake of ease of interpretation.²

Three final issues remain. One, we have checked whether or not the relatively high mean value of the dependent variable causes any identification problems. This could be the case if a particular combination of the explanatory variables explains a large proportion of either the success or the failure option of the dependent variable. It turned out that this was not the case. Two, in

² After mean-centering, the coefficients of the main effects in the extensive model cannot be compared directly with the coefficients in the codetermination model. The coefficient of the main effect in the extended model including the VIF-reducing method is equal to the coefficient in the codetermination model plus the coefficient for the interaction term (in deviations from the mean(s)) times the mean. Moreover, in the extended model the effect of a change in the main effect on the economic position is equal to the coefficient of the main effect plus the coefficient for the interaction term times the interaction effect in deviations from the mean.



principle, we acknowledge that estimating a simultaneous model explaining the organization's economic position and codetermination characteristics in conjunction would perhaps have been more appropriate. However, we were unable to find specifications of both equations with adequate instruments in a 2SLS system, leaving the identification issue unsolved. Three, causality may run the other way around, from economic position to reorganization: underperforming organizations may be more likely to engage in reorganization programs. However, in our survey, the economic position item relates to 1998, and the reorganization questions to 1996–1997. Hence, reversed causality is not an issue.

Given the classification of the economic position as a dummy, probit analysis is the appropriate econometric method. The drawback of applying such a limited dependent variable analysis, however, is that the size of the estimated coefficients cannot be interpreted straightforwardly. Then, it is common practice to report the marginal effects instead, despite the drawback of the difficulty of calculation and interpretation of the marginal effects when combining main and interaction terms.

Before turning to the findings from the multivariate analyses, some revealing bivariate results are presented with regard to the private sector in Table 2 below. Due to the small size of the dataset, extra attention needs to be paid to the distribution of the variables used. Looking at one of the main codetermination variables—the managers' attitude toward the works council—the bivariate analyses reveal that the distribution of the managers' attitude measure does differ by the organization's economic position ($\chi^2(1)=10.28$, with p-value=0.001). This indicates that we can expect a positive influence of managers' attitude on the organization's economic position, *ceteris paribus*.

Additionally, the χ^2 statistic (and its *p*-value) for the respective cross table of the economic position dummy and all the independent variables are given in the last column of Table 1. These statistics indicate that there is a base for the analyses in the next section despite the relatively small numbers.

Table 2 Correlation between economic position and manager's attitude in the private sector	Table 2	Correlation between	economic position	and manager's attitude	in the private sector
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Manager's attitude (=X)	Economic position (=Y)				
	Somewhat worrisome, and worrisome/weak (=0)	Healthy/strong (=1)	Total		
Formal (=0)	6	7	13		
	21.43%	4.52%	7.10%		
Open-minded (=1)	22	148	170		
	78.57%	95.48%	92.90%		
Total	28	155	183		
	100%	100%	100%		



Evidence

The Private Sector

Table 3 shows the results for the different specifications regarding the private sector sub-sample. Our aim is to show that the explanation of the economic position of a firm cannot just be found in purely economic determinants, but is also influenced by the specific way in which codetermination has been designed and is perceived. Hence, we start with a baseline model that includes only economic control variables, the results of which we discuss only briefly. Subsequently, we add our codetermination measures, enabling us to test our first four main-effect conjectures. In the last step of the analysis, we test whether or not (and if so, to what degree) the effects of these codetermination variables are different in bad (reorganization) versus good times.

The Baseline Model

In Column 1 of Table 3, the results of the baseline model are presented, explaining the economic position by means of industry, firm and workforce characteristics, as well as personnel policy features.³ It firstly shows that internationally oriented enterprises perform better, while subsidiaries perform less well. Secondly, both personnel holding permanent jobs and unskilled workers contribute positively to the economic position of their firm. The former result is usually explained by pointing at the supposedly higher commitment to the organization by tenured workers, but the latter result comes somewhat as a surprise. An interpretation may be that an unskilled labor force is associated with low cost—and hence higher profit, *ceteris paribus*. Thirdly, we see that introducing HRM policies and financial incentives does pay off, whereas reorganizing has a negative influence on the economic position. However, there is a clear distinction between reorganization with and without compulsory downsizing. In the former case, the adverse effect on the economic position is much stronger. We find no effect of experienced versus less and non-experienced works councils.

The Codetermination Model with Main Effects Only

In Column 2 of Table 3, the codetermination characteristics are added. In addition to the baseline model, we now also find that larger enterprises report a better economic position. Moreover, on top of the positive effect of having a higher percentage of tenured and unskilled personnel, the more experienced a works council is, the more this weakens the firm's economic position. This might indicate that, in practice, these works council members do not exert their experience to the benefit of the firm, but instead tend to get bogged down in counterproductive group behavior that obstructs

³ Compared to the usual independent variables in the literature, we have excluded a measure of collective bargaining agreements. In initial analyses, we added such a measure, but it did not turn significant in any of our analyses, nor did it affect the pattern of results in any way.



Table 3 Marginal effects explaining the healthy economic position for the private sector

Variable	(1)	(2)	(3)
	Marginal effects		
Industry and firm characteristics			
Industry dummies ^a	Included	Included	Included
Establishment size ^a	Included	Included*	Included*
International collaboration	0.083**	0.023**	0.014**
	(2.04)	(2.20)	(2.31)
Parent company	-0.084**	-0.023**	-0.016***
	(2.07)	(2.13)	(2.86)
Workforce characteristics			
Tenured personnel (in %)	0.005**	0.002***	0.001***
	(2.16)	(2.68)	(2.62)
Unskilled personnel (in %)	0.002*	0.0004**	0.0002**
	(1.82)	(1.98)	(2.01)
Experience of the works council	0.024	-0.019**	-0.008*
	(0.80)	(2.25)	(1.95)
Personnel policy characteristics			
HRM practices combined (sum)	0.012**	0.002*	0.001*
	(2.33)	(1.73)	(1.86)
Financial participation schemes for	0.037**	0.010**	0.004**
higher personnel (sum)	(1.98)	(2.14)	(2.05)
Reorganizations			
Reorganization without forced lay-offs	-0.138*	-0.043	
	(1.91)	(1.62)	
Reorganization with forced lay-offs	-0.337***	-0.285***	
	(3.98)	(3.95)	
Reorganization overall			-0.047
			(0.87)
Codetermination characteristics ^c			
Manager's attitude		0.168**	0.272**
		(2.00)	(2.02)
Reorganization x manager's attitude			-0.003
			(0.18)
Timing of involvement works council		0.019***	0.008*
		(2.74)	(1.86)
Reorganization x timing involvement			0.002
-			(0.41)
Works council's attitude		0.169***	0.383***
		(3.32)	(3.20)
Reorganization x council's attitude			-0.166**
•			(2.41)
Non-delaying works council		-0.008	-0.018*
		(0.90)	(1.90)



Table 3 (continued)

Variable	(1) Marginal effe	(3)	
Reorganization x non-delaying council			0.008*
			(1.92)
Observations	183	183	183
Mean value of the dependent variable	0.85	0.85	0.85
LR	57.80	89.63	93.70
P-value(LR)	0.000	0.000	0.000
Pseudo ^d R ²	0.369	0.572	0.598

^a The complete (probit) estimation results are available upon request

rather than stimulates constructive consultation.⁴ This relates to group selection and sorting theories that emphasize that (clusters within) organizations evolve toward increasing group composition homogeneity because group members are inclined to stay in those (entities within) organizations that suit their attitudes, beliefs, personalities and preferences (e.g. Boone et al. 2004). Being part of a congenial group reinforces people to be convinced of being right, hence sticking to their point of view. High group-level tenure is associated with groupthink and inertia.

A second observation is that we may conclude that the way in which codetermination is implemented does matter indeed. Overall, codetermination seems to have a positive effect on the economic position of Dutch private enterprises. First, we find a positive relationship between the open-mindedness of management and economic position. If the board of executive directors' attitude toward worker participation is favorable, this is likely to increase the quality of consultation, so indirectly improving firm performance. Second, if the works council is involved in the firm's decision-making processes in an early phase, this tends to enhance trust, enabling the works council to provide a valuable contribution to company policies that translate into a better economic position. Third, a strong positive effect stems from a works council that adopts a constructive stance toward the executive team. This positive attitude probably reflects that the

⁵ The results do not change if instead of a three-valued variable (only involved when discussing the effects for the personnel, involved in the last stage of the decision-making process, or involved in all stages of the decision making process), two separate dummy variable were taken into account.



b *** p < 0.01, ** p < 0.05, and * p < 0.1

^c The main and interaction effects of reorganization are jointly significant as are the pairs of the main and interaction effects of the four codetermination characteristics (with the exception of the non-delaying characteristic): manager's attitude (χ^2 (2)=6.79; p-value=0.034), timing of involvement (χ^2 (2)=4.01; p-value=0.134), works council's attitude (χ^2 (2)=10.27; p-value=0.006), and non-delaying works council (χ^2 (2)=9.54; p-value=0.009)

^d The pseudo R^2 cannot be interpreted as the adjusted R^2 . A higher value indicates a better fit

⁴ This finding suggests that an experienced works council might normally be non-delaying and cooperative, but once these two attitudinal traits have been controlled for explicitly, the effect of an experienced works council turns negative for reasons put forward in the main text above.

work floor supports their representatives to communicate and cooperate with the management team on company matters, making the firm better off.

A third observation relates to an unexpected result. The assumed positive effect of a works council that does not use delaying tactics turns out to be negative and insignificant. We return to this issue below, as the findings change after adjusting the model in order to distinguish between bad vis-à-vis good times.

The Extensive Codetermination Model with Interaction Terms

Finally, Column 3 of Table 3 reveals mixed effects of codetermination in times of reorganization. We infer this from the results for the interaction terms of the codetermination characteristics with the overall reorganization dummy. As an aside, we notice that by incorporating these interaction variables the impact of none of the characteristics included in the baseline model on the economic position changes. Moreover, this proves the robustness of the results stemming from the baseline and codetermination models. Next, the effect of reorganization on the economic position does not change either (χ^2 (5)=14.47, with a p-value of 0.013). The combined effect of a reorganization when (a) both the managers' and works councils' attitudes are open-minded, (b) the works council's involvement is timely and (c) the works council does not delay remains significantly negative. The main effect of (each of the four characteristics of) codetermination now reveals the impact in good times, ceteris paribus, and the interaction effect shows the change in this main effect in bad times.⁶ Looking at the signs of both the main and interaction effects, we observe that in two out of four characteristics, the effect of codetermination on economic position changes in times of downsizing.

The positive effect of an open-minded management on the economic position is not reinforced in times of reorganization. Although both the main and the interaction effect are jointly significant, and the interaction effect has the opposite sign, the size of the interaction effect is rather small compared to the main effect. The main and the interaction effect for the timing variable are not jointly significant. So the positive effect of a timely involved works council is not reinforced in times of reorganization. Contrary to the positive influence of an open-minded works council during good times, this unexpectedly seems to have a less positive impact on economic position during periods of reorganization; the main and the interaction effect are jointly significant. Apparently, it is essential that in bad times a works council pays more attention to the formal settlement of reorganization than to just being a pleasant discussion partner of the management team. The fourth characteristic of codetermination, a works council's tendency to slow down decision-making processes, shows a mixed pattern. The main effect now becomes significantly negative, but in bad times a non-delaying works council significantly attenuates this negative impact on economic position. So it seems that it does make a difference at what moment a works council slows down decision-making processes. Hence, contrary to what we assumed, not delaying the decision-making processes in good

⁶ For reasons of parsimony, we here take reorganizations with and without forced lay-offs together. Otherwise, we would have ended up with eight instead of four interaction terms. We have established from estimations not shown here that doing so does not change the main findings.



times turns out to be harmful for firm performance. This indicates that a works council sometimes delays the decision-making process not out of selfish considerations, but because it wants to follow a more careful procedure for the benefit of the organization. In bad times, however, management wants to act more quickly. Then, the slackening approach of the works council hampers the speed of decision-making, which negatively affects the organization's economic position.

Interpreting the findings of the extensive codetermination model in good and bad times in more detail, it shows that the probability of having a positive economic position increases with 27%, *ceteris paribus*, if the management is open-minded and increases with 0.8%, *ceteris paribus*, if the works council is informed in time regardless of a reorganization. The probability of having a positive economic position increases with 38% if the works council cooperates with the management team in good times, but this probability decreases with 17% in bad times. With respect to slowing down the decision-making process, in good times the probability of having a positive economic position decreases with 1.8%, whereas in bad times this probability increases with 0.8%. So, the impact of codetermination on the economic position, in both good and bad times, can be quite large.

Overlooking the pattern of findings across all three private sector models, we reach the following conclusion. The baseline model provides evidence for the expected relationships between economic characteristics and economic position. From the codetermination model, we can infer that the way codetermination is implemented has a significant and positive effect on economic performance. Extending the codetermination model to estimate whether worker participation improves or deteriorates the firm's economic position during times of reorganization, we find a remarkable result. On the one hand, if management is willing to take workers' representatives seriously, captured by managers' positive attitude and early timing of involvement, the contribution of codetermination to firm performance does not change in times of downsizing. On the other hand, if workers are willing to cooperate constructively with management, captured by the works council's positive attitude, this surprisingly contributes negatively to firm performance in times of downsizing. Moreover, contrary to our expectations, we find that a non-delaying works council is damaging for the organization during good times.

The Public Sector

In Table 4, the relevant results are presented for both the private and the public sector sub-samples, by way of comparison, with respect to the influence of codetermination on the organization's economic position. As indicated in "Dependent Variable: Economic Position of the Organization", due to the possible reading of the questions answered by managers in specifically the public administration sub-sector, the results for the public sector have to be interpreted with some care. Nevertheless, the findings reveal a striking difference between both sectors with respect to the influence of codetermination practices, which represents a puzzle that may inspire further work in the future. Below, we will briefly discuss both codetermination models without and with interaction terms.

We confine ourselves to describing the impact of codetermination on the organization's economic position, to examine the differences between the private



Table 4 Comparison of the explanation of the healthy economic position in the private and public sector: marginal effects with respect to codetermination effects

Variable	Private ^a	Private ^a	Public ^c	Public ^c	
	Marginal effect (t-value) ^b				
Control variables ^{c,d}	Included	Included	Included	Included	
Reorganization without forced lay-offs	-0.043		0.035		
	(1.62)		(0.40)		
Reorganization with forced	-0.285***		-0.11		
lay-offs	(3.95)		(0.67)		
Reorganization overall		-0.047		-0.271	
		(0.87)		(-0.742)	
Codetermination characteristics ^e					
Manager's attitude	0.168**	0.272**	0.371**	0.337*	
	(2.00)	(2.02)	(2.54)	(1.83)	
Reorganization x manager's attitude		-0.003		0.001	
		(0.18)		(0.00)	
Timing of involvement works council	0.019***	0.008*	-0.159***	-0.157*	
	(2.74)	(1.86)	(2.68)	(1.92)	
Reorganization x timing involvement		0.002		0.022	
		(0.41)		(0.18)	
Works council's attitude	0.169***	0.383***	-0.019	-0.082	
	(3.32)	(3.20)	(0.20)	(0.66)	
Reorganization x council's attitude		-0.166**		0.137	
		(2.41)		(0.75)	
Non-delaying works council	-0.008	-0.018*	0.145*	-0.016	
	(0.90)	(1.90)	(1.74)	(0.13)	
Reorganization x non-delaying council		0.008*		0.287**	
		(1.92)		(2.08)	
Observations	183	183	168	168	
Mean value of the dependent variable	0.85	0.85	0.65	0.65	

^a Column 2 and 3 from Table 3

and the public sector. We did run a baseline economic model first with only those variables that are applicable to the public sector. So, we left out 'International collaboration', 'Parent company' and 'Profit sharing', since these all relate exclusively to private sector establishments. All managers, whether in the private



^b *** p < 0.01, ** p < 0.05, and * p < 0.1

^c The complete probit estimation results are available upon request

^d The control variables included were: industry, establishment size, tenured personnel, unskilled personnel, experience of the works council, and HRM practices

^e See for joint significance for the private sector Table 3. For the public sector, the main and interaction effects of reorganization are not jointly significant, whereas the pairs of the main and interaction effect of the four codetermination characteristics are (with the exception of the works council's attitude)

or public sector, were asked to fill in exactly the same questionnaire. Of course, the public sector managers left open questions referring to issues such as 'parent company' or 'international collaboration'. From the data, we inferred that of the 168 public sector respondents, no less than 163 indicated that they do not provide profit sharing. The estimation gives just one significant coefficient: the percentage of unskilled labor has a significantly negative effect on the economic position of public organizations. An explanation for this could be that working in the public sector might generally require more skilled labor.

With respect to the influence of an open-minded management, there appears to be no disparity between the private and public sector. In both cases, a favorable attitude of the management team has a positive effect on the economic position. This effect does not change in times of downsizing, for neither private nor public sector organizations. For the timing of involving the works councils, the picture becomes rather different. Whereas calling in the works council in an early phase has a positive effect on the economic position of private firms, this very same aspect of codetermination negatively influences the economic position of organizations in the public sector. An explanation might be that the public sector can be regarded as a rather safe working environment, where job security is not really threatened by any competitive pressures from the outside world. In such circumstances, calling in works councils at an early stage gives workers' representatives the opportunity to meddle in everything. Moreover, this effect does not change in times of downsizing.

For the private sector sub-sample, we found that putting the brake on decision-making processes seems to reflect meticulous decision-making. Works councils take their time to consult with the managers, in order to create a favorable platform for new measures and policies. This has a positive impact on the economic position in good times. Yet, looking at the public sector, delaying decision-making processes affects the economic position adversely. Hence, this does not seem to reflect a careful decision-making process, especially not in bad times. This is more in line with our original conjecture that a delaying works council does so out of selfish reasons. The positive effect of an open-minded works council on firm performance in the private sector does not show up in the public sector, neither in good times nor in bad times. Overall, it seems that the process of codetermination in terms of timing of involvement and slowing down decision-making has a different impact in private versus public sector organizations. Whether this really is a matter of different views on what careful decision-making does imply, needs to be analyzed further in future work.

Conclusion

In their seminal work on the economics of codetermination, Freeman and Lazear (1995) argue that several participation rights may induce employees to cooperate with management for the benefit of the entire firm, but they also point to the possible downsides of employee representation as this may lead to all kinds of extra costs, including rent-seeking behavior. Extending Freeman and Lazear (1995), Bryson et al. (2006) argue that worker voice can only function effectively if encouraged by managers. We build on these combined insights to formulate conjectures as to the



effect of codetermination on economic performance, which we tested with a Dutch dataset. In so doing, our study offers a number of contributions to the codetermination literature. First, availability of data for the first time offered the opportunity to study the effects of codetermination on firm performance in the Netherlands by means of multivariate regression analyses. This adds insights from an understudied institutional context. Second, because of the availability of specific variables in this Dutch dataset, we could estimate a much more intricate model. We do not simply test whether the mere presence of a works council has any impact on the economic position of an establishment, but instead we can determine to what degree several codetermination characteristics influence an organization's performance. Third, the estimation results allowed, albeit tentatively, to compare the functioning of works councils within the private and public sector, respectively. Fourth and finally, we could zoom in on the role that worker participation plays in times of downsizing, exploring differential effects in bad vis-à-vis good times by incorporating interaction effects.

The overall conclusion from our probit analyses is that the way in which management teams and works councils interact, and hence the way in which codetermination is implemented, makes all the difference to the organization's economic position. First of all, the 'British finding' by Bryson et al. (2006) is confirmed in the Dutch context: a positive attitude of managers toward the works council is positively associated with performance, in both the private and the public sector. Moreover, we find that when management of private enterprises involves the works council in the decision-making processes at an early stage, this also has a positive impact on the economic position. The role of the worker representatives' attitude is important as well. With regard to the private sector, we find a large difference between their impact in bad vis-à-vis good times. In bad times, an open-minded works council is negatively associated with the economic position; in good times, in contrast, this association is positive. In addition, a delaying council is beneficial in good times, probably because such a works council pays attention to careful decision-making, but this characteristic harms the organization in bad times.

Finally, when contrasting the significant results for the public sector with those for the private sector, we can carefully infer that especially with respect to the timing of involvement and slowing down of decision-making variables, the results differ remarkably. Contrary to the private sector, works councils in the public sector that are either involved early or that tend to slow down decision-making, have an adverse effect on the organization's economic position. This remarkable difference suggests that, apparently, works councils in the private sector primarily focus on the firm's overall interest, whereas works councils in the public sector tend to be more oriented toward selfish rent-seeking behavior.

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References

- Addison JT (2009) The economics of codetermination. Palgrave Macmillan, New York
- Addison JT, Teixeira P (2006) The effect of works councils on employment change. Ind Relat 45:1-25
- Addison JT, Schnabel C, Wagner J (2001) Works councils in Germany: their effects on establishment performance. Oxf Econ Pap 53:659–694
- Addison JT, Schnabel C, Wagner J (2004) The course of research into the economic consequences of German works councils. Br J Ind Relat 42:255–281
- Bakels HL (2003) Schets van het Nederlands Arbeidsrecht. Kluwer, Deventer
- Boone C, Van Olffen W, Van Witteloostuijn A, De Brabander B (2004) The genesis of top management team diversity: selective turnover among top management teams in the Dutch Newspaper Publishing, 1970–94. Acad Manage J 47:633–656
- Bryson A, Charlwood A, Forth J (2006) Worker voice, managerial response and labour productivity: an empirical investigation. Ind Relat J 37:438–455
- Cascio WF, Wynn P (2004) Managing a downsizing process. Hum Resour Manage 43:425-436
- CBS (Statistics Netherlands, 1998). StatLine.cbs.nl
- Chang SJ, Van Witteloostuijn A, Eden L (2010) Common-method variance in international business research. J Int Bus Stud 41:178–184
- Dilger A (2002) Ökonomik betrieblicher Mitbestimmung. Die wirtschaftlichen Folgen von Betriebsräten. Reiner Hampp Verlag, München und Mering
- Engelen M, Van der Aalst M, Hornstra E (2001) Naleving van de Wet op de Ondernemingsraden (Report for the Ministry of Social Affairs and Employment). Elsevier, Doetinchem
- Fairris D, Askenazy P (2010) Works councils and firm productivity in France. J Labor Res 31:209–229
 Freeman RB, Lazear EP (1995) An econometric analysis of works councils. In: Rogers J, Streeck W (eds)
 Works councils—consultation, representation and cooperation in industrial relations. University Press,
 Chicago, pp 27–52
- Freeman RB, Medoff JL (1984) What do unions do? Basic Books, New York
- Jirjahn U (2009) Works councils and employment growth in German establishments. Camb J Econ 34:475-500
- Kaufman BE, Levine DI (2000) An economic analysis of employee representation. In: Kaufman BE, Taras DG (eds) Nonunion employee representation—history, contemporary practice, and policy. M.E. Sharpe, Armonk, pp 149–175
- Looise JC, Drucker M (2003) Dutch works councils in times of transition: the effects of changes in society, organizations and work on the position of works councils. Econ Ind Democr 24:379–409
- Mueller S (2010) Works councils and firm profits revisited. Br J Ind Relat 49:forthcoming
- O'Brien R (2007) A caution regarding rules of thumb for variance inflation factors. Qual Quant 41:673-690
- Podsakoff PM, MacKenzie SB, Lee J-Y, Podsakoff NP (2003) Common method biases in behavioral research: a critical review of the literature and recommended remedies. J Appl Psychol 88:879–903
- Sorge A, Van Witteloostuijn A (2004) The (non)sense of organizational change: an essai about universal management hypes, sick consultancy metaphors, and healthy organization theories. Organ Stud 25:1205–1231
- Van den Berg A, Grift Y, Van Witteloostuijn A (2009) The perceived effects of works councils on organisational outcomes—comparing the public with the private sector. Int J Employ Stud 17:90–132
- Van het Kaar RH, Looise JC (1999) De Volwassen OR: Groei en Grenzen van de Nederlandse Ondernemingsraad. Resultaten van het Grote OR-Onderzoek. Samsom, Alphen aan den Rijn

