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## 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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# **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**

This study seeks to offer a contribution to the works council – organizational performance 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:** mutual relationship and collaboration between works councils and management, organizational performance

**JEL classification:** J53 M54

## **1. Introduction**

The effect of works councils on organizational performance received in-depth attention in the industrial relations literature. As is clear from reviews such as those of Addison et al. (2004) and Addison (2005), the evidence is mixed. For example, using a financial performance measure as the yardstick, some studies report positive effects (e.g., Addison et al. 2001), others a negative impact (e.g., Dilger 2002), and yet others the absence of any influence (e.g., Addison et al. 2004). Mixed results are found as well when using other performance measures such as innovation, wages and labour turnover. This implies that further work is needed to explore the underlying contingencies that can explain the nature of the works council – organizational performance linkage. Our study seeks to offer a contribution here by adding, to date, largely unexplored potential contingencies: the attitudes of top managers and works councils as to the functioning of the latter, in bad vis-à-vis good times.

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. 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. Related to our focus 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 sub-sample, and compare the results carefully with those from the private sector analyses. 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. The compilers of this dataset have published their main findings with the aid of descriptive statistics only (Looise & Drucker 2003; Van het Kaar & Looise 1999). To the best of our knowledge, there exists no prior study in which the effect of Dutch works councils on organizational performance has been analyzed by applying multivariate regression analysis. So, below we present the first empirical results from multivariate regression analyses with respect to the impact of the functioning of works councils on organizational performance in the Netherlands.

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 organization from weak to strong. Empirically, we test a comprehensive organizational performance model that not only incorporates standard economic explanatory variables such as firm and workforce characteristics in first-step analyses, but also includes attitudinal variables of the management teams and the works councils with respect to their internal dealings in second-step regressions. In the final third-step 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 Section 2, which results in the formulation of a set of five testable hypotheses, relating to four main effects and one set of interaction effects. Next, the data and research method are elaborated upon in Section 3. The main findings of our estimations will be presented in Section 4. Section 5 is the conclusion, in which 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.

## **2. Theory**

### *Background*

In the last decade, basically all empirical studies about the role and effect of works councils refer to the theoretical work by Freeman and Lazear (1995). They argue that the specific rights endowed to works councils can enhance firm performance, but at the same time they point to the inherent danger that these rights may lead to rent-seeking behaviour, with the result that the firm (or shareholder) is worse off. We will start by elaborating briefly on their arguments, and will add to that a number of additional insights that subsequently lead to our set of five hypotheses. Important to observe in advance is that in the Netherlands, just like in Germany, works councils have far-reaching legal rights. 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, 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 organization's 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 labour 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 also discuss the possibility that an influential labour 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 behaviour by works councils is very much curtailed by the law, which gives the prerogative of wage negotiations to the trade unions. 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 this 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. For the Dutch situation, 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 towards 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 towards employee representatives on labour productivity.

### *Hypotheses*

Based on the theoretical notions and empirical evidence mentioned above, we are now ready to develop several hypotheses that will be tested in the second part of this paper. 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. This leads to a set of four main-effect hypotheses.

First, the more management is inclined to adopt an open, sympathetic attitude towards the works council, the more the latter is willing to communicate, to give advice and to collaborate.

*H1: The management team’s positive attitude towards the works council is positively associated with the organization’s economic position.*

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.

*H2: The timely involvement by management of the works council in organizational decision-making is positively associated with the organization's economic position.*

The more the works council is inclined to adopt an open, considerate attitude towards the management team, the more fruitful their consultation meetings will be.

*H3: The works council's positive attitude towards management is positively associated with the organization's economic position.*

In the same manner, if the works council is not inclined to slacken the decision-making for its own sake, this will positively affect mutual understanding, which will have a favourable impact on the organization's economic position.

*H4: A works council that does not slacken organizational decision-making is positively associated with the organization's economic position.*

The first and third hypotheses can be associated with the direct effects of attitude, while the second and fourth hypotheses focus on side-effects of attitude, namely the propensity of the actors to seek cooperation at a well-timed moment.

The impact of the works council on the economic position of the organization is not unconditionally negative or positive. That is, the nature of the relationship is dependent upon 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 & 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 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 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, it will lead to passiveness and discouragement, 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 favourable 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 interaction-effect hypothesis. If the organization is going through a reorganization programme, the positive effect of a well-functioning management team – works council relationship (cf. H1, H2, H3 and H4) on the firm's economic position will be reinforced.

*H5: The effect of (a) the management team's positive attitude towards the works council, (b) timely involvement by management of the works council in organizational decision-making, (c) the works council's positive attitude towards management and (d) the works council's inclination not to slacken organizational decision-making is particularly positive when the organization goes through a reorganization programme.*

### 3. Methodology

In 1998, a large survey was conducted nation-wide among Dutch organizations that operated with a works council. A long list of questions was sent to both management teams (board of directors) and works councils of 3,500 companies, government agencies and other organizations. To date, the data were not econometrically analyzed, but only used for bivariate analyses. 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 firms. Second, the sub-sample with two completed questionnaires, by representatives from the management team and the works council, is too small for the type of econometric analyses we wish to apply here. The final dataset consists of 170 private firms and 158 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 per cent 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. Many respondents in the public sector therefore have not answered this question in the survey at all, except for those from public health and welfare organizations, where economic position can be interpreted in a meaningful way. The firms in these segments of the Dutch public sector have

been confronted, over a prolonged period of time, with a cutback in expenditures by the government. This probably explains why only 65 per cent reports a healthy economic position.

In Van het Kaar and Looise (1999), a comparison with respect to the economic position question is made between the descriptives from this dataset and similar information gathered in 1985. They find a clear difference between both years, as could be expected: in 1998, management teams evaluated the economic position much more positive than they did in 1985. Indeed, the 1980s were a bust period with mass redundancies and firm bankruptcies, whereas the late 1990s can be characterized as a boom period of economic growth in the mid of what later turned out to be the Internet bubble.

#### *Control variables: economic measures*

Following the existing literature on the effect of works councils on firm performance, our baseline model of the economic position of organizations includes characteristics concerning industry, firm, workforce, and personnel policy. First, the industry and firm characteristics refer to four different industrial sectors, the size of the firm (six categories), whether or not the firm has international collaborations, and whether or not the firm is legally independent. Second, the workforce features concern the percentage employed with tenure, the percentage of unskilled labour, the experience of the works council (measured on a three-point scale: an incipient, a fairly experienced or a professional council) and whether or not part-time work is increasing. Third, for the personnel policy characteristics, we use information about human resource management (HRM), and financial participation schemes for higher staff. A total of twelve measures of HRM were distinguished, running from performance interviews and team building to training possibilities and career prospects. The financial participation items relate to four different types of financial products (profit sharing, options, shares, and bonds). For

both HRM and profit sharing, we constructed composite measures by summing up the individual item scores, with higher scores reflecting more HRM or profit-sharing practices.

Because our study's focus is on the impact of codetermination in times of downsizing, the reorganization variables are treated here in a more fine-grained way. For the sub-sample of private firm respondents, 42 per cent of the managers reported that some type of reorganization had taken place in the period 1996-1997, of which 40 per cent involved compulsory redundancies. For the public sector, these numbers are 53 and 13 per cent, respectively. In the baseline analyses, we distinguish between the two types of reorganization: with and without involuntary layoffs. In the third step of our estimations, for the sake of parsimony when analyzing the effect of managers' and works councils' attitudes during bad times, we only take into account whether or not there has been any kind of reorganization.

#### *Independent variables: codetermination measures*

Based on the theoretical exposition in Section 2, we distinguish four different aspects in connection with codetermination: both the management teams' and works councils' attitude towards 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 decision-making process. As indicated above, all answers to the relevant questions are provided by the managers.

The managers' evaluation of their own attitude is classified as being prepared to make concessions or search for new ways to find solutions, on the one hand, or as formal and following rules or putting emphasis on power differences, 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, too: the works council monitors only the implementation of

policies decided upon by management, the works council has a say in the last phase of decision-making processes, or the works council is involved in decision-making processes right from the start. The slackening effect of works councils is incorporated on a two-point scale: does the manager perceive the works council as slowing down decision-making processes or not?

Analyzing the effect of codetermination in times of reorganization is done by including interaction variables, which are generated by multiplying the undifferentiated reorganization variable by the four respective codetermination variables. 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 results of the third-step analyses in the next section. In Table 1, the descriptives are presented.

[INSERT TABLE 1 ABOUT HERE]

### *Estimation strategy*

Due to the design of the survey, almost all measures reflect perceptual data from individual respondents. A potential problem using this dataset therefore can be common-method variance. To test for this, we have applied Harman's single-factor test (see Podsakoff et al. 2003). The assumption underlying this test is that if the data feature a substantial amount of common-method variance, a factor analysis on all dependent and independent variables will either reveal one single factor or several factors with one factor accounting for the majority of the (co)variance in the data. For the private firms in our data, the Harman test on economic position and its explanatory variables reveals two to three factors with an Eigenvalue greater than 1, and no single factor explaining most of the variance (i.e., the first factor always

explains 35 to 50 %, and cumulatively the two to three derived factors explain less than 80 %). A factor analysis for the public sector, however, shows a different pattern. Although for the most extensive analysis still only two factors with an Eigenvalue larger than 1 emerge (i.e., the first factor explains 45 or 51 %), for the in-between analyses no or only one factor is found. Therefore, we conclude that common-method variance is not a major concern for the analyses with respect to the private sector, whereas for the public sector there is potentially a problem, particularly with the more limited model specifications. The latter observation is in line with the common-method variance literature, which clearly reveals that the likelihood of a common-method bias sharply declines if non-linear and interaction terms are included in the model. We will therefore only report noteworthy results for the public sector from the comprehensive analyses. But note that these should be interpreted with caution.

Next to the common-method variance, multicollinearity might be an issue. 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). 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 2, implying that multicollinearity is removed (all results are available upon request). However, now the coefficients of the main effects in the extensive model cannot be compared directly with the coefficients in the codetermination model. As the pattern of results is not affected by mean-centering, we have incorporated the results without using this VIF-reducing method, for the sake of ease of interpretation.<sup>1</sup>

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 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. That is, it is plausible to assume that underperforming organizations are more likely to engage in reorganization programmes. However, in our survey, the economic position item relates to 1999, and the reorganization questions to 1997-1998. Hence, by the construction of the questionnaire, 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 is that the size of estimated coefficients cannot be interpreted straightforwardly. We need to calculate the marginal effects to be able to do so. However, we are mainly interested in the direction and significance of the effects, and not so much in their size, given that our study is the first of its kind on Dutch data. Besides, incorporating interaction variables makes the calculation and interpretation of the marginal effects less straightforward. We therefore decided, for the sake of brevity, to present the estimated coefficients instead of the marginal effects.<sup>2</sup>

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 is paid to the distribution of the variables used. Looking at one of the main codetermination variables – i.e., 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 ( $\chi^2(2) = 6.93$ , with  $p$ -value = 0.008). This

indicates that we can expect a positive influence of managers' attitude on the organization's economic position, *ceteris paribus*.

[INSERT TABLE 2 ABOUT HERE]

Additionally, in the last column of Table 1, the  $\chi^2$  statistic (and its *p*-value) are given for the respective cross table of the economic position dummy and all the independent variables.

#### **4. Evidence**

##### ***The private sector***

Table 3 shows the results for the different specifications regarding the private sector subsample. 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. We will discuss the findings from this baseline estimation only briefly. Thereafter, we add our codetermination measures, enabling us to test our first four main-effect hypotheses. In the last step of the analysis, we can test the interaction-effect hypothesis, when we investigate whether or not (and if so, to what degree) the effects of these codetermination variables are different in bad (reorganization) versus good times.

[INSERT TABLE 3 ABOUT HERE]

##### ***The baseline model***

In Column 1, 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.<sup>3</sup> With respect to the firm characteristics, we observe that the size of the organization is not significant.<sup>4</sup> The only noteworthy outcome concerns the finding that being part of a parent company negatively influences the economic position. Apparently, subsidiaries

perform less well, perhaps because they cannot fully determine their own course. Looking at the workforce characteristics, again only one aspect turns out to be significant: percentage employed with tenure has a positive effect on the economic position. This is quite a standard result, reaffirming that personnel holding permanent jobs usually is more committed to their organization than temporary workers. With respect to personnel policy, both human resource management practices and profit-sharing remuneration for the higher staff are significant, and have the expected positive sign. This confirms that introducing careful personnel policies and financial incentives does pay off. Finally, as anticipated, 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.

*The codetermination model with main effects only*

In Column 2 of Table 3, the characteristics of codetermination are added. A first observation is that this generates additional ‘economic’ results, compared with the ones obtained with the baseline economic model. We now find that larger and internationally oriented enterprises report a better economic position. Moreover, in addition to the positive effect of having a higher percentage of tenured personnel, an increase in part-time work affects the economic position negatively. This, in all likelihood, can be attributed to the general observation that people working less hours usually have a lower commitment. We also see that an experienced works council now does influence firm performance significantly, but in a negative way: 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 rather than stimulates constructive

consultation. 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 organizations that suit their attitudes, beliefs, personalities and preferences (see, e.g., Boone et al. 2004). Being part of a congenial group, high tenure reinforces people to be convinced of being right, hence sticking to their point of view. High group-level tenure is associated with group think and inertia.

A second observation is that we may conclude that the way in which codetermination is implemented does matter indeed. Three of our four main-effect hypotheses are confirmed – i.e., Hypotheses 1, 2 and 3. Overall, codetermination seems to have a positive effect on the economic position of private enterprises. First, we find a positive relationship between the open-mindedness of management and economic position. If the board of executive directors' attitude towards worker participation is favourable, this is likely to increase the quality of consultation, so indirectly improving firm performance. Second, similarly, 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 towards the executive team. This positive attitude probably reflects that the work floor is supportive of 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, which is in contrast with the prediction implied by Hypothesis 4. 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 to be able to distinguish between bad vis-à-vis good times.

*The extensive codetermination model with interaction terms*

Finally, Column 3 of Table 3 reveals that the effects of codetermination in times of reorganization are mixed. We infer this from the results for the four interaction terms, via which our last Hypothesis 5 is tested. As an aside, we notice that by incorporating these interaction variables the impact of all the different characteristics on the economic position becomes stronger. So, the fit of our model improves even more. Moreover, this proves the robustness of the results stemming from the baseline and codetermination models, providing further support for Hypotheses 1 and 2. By interacting the codetermination characteristics with the overall reorganization dummy, we can disentangle the effect of codetermination in good vis-à-vis bad times. 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.<sup>5</sup> Looking at the signs of both the main and interaction effects, we observe that the effect of codetermination on economic position changes in times of downsizing. We will comment on each of the significant effects separately.

The positive effect of an open-minded management on the economic position is strengthened in times of reorganization: in bad times, a constructive consultation of the works councils by the management team does make the firm particularly better off ( $\chi^2(2) = 10.34$  and  $p\text{-value} = 0.006$ ). This positive effect of codetermination on the firm's economic position during times of reorganization is also confirmed by the finding for the timing variable. The earlier the works council gets involved in the decision-making processes, the stronger the economic position of the firm. This effect, too, is reinforced in times of downsizing ( $\chi^2(2) = 9.16$  and  $p\text{-value} = 0.010$ ). This is in line with our hypothesis, and clearly indicates that when reorganization occurs, it is good to call in the works council at an early stage. Contrary to the

positive influence of an open-minded management, an open-minded works council unexpectedly seems to have a negative impact on economic position during periods of reorganization ( $H_0: \beta_{attitude\_WC} = -\beta_{attitude\_WC*reorganisation}$ ;  $p\text{-value} = 0.585$ ). 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 that does not slow down decision-making processes, shows a mixed pattern. The main effect becomes significantly negative, but a non-delaying works council has a positive impact on economic position in bad times. It seems that it does make a difference at what moment a works council slows down decision-making processes ( $H_0: \beta_{non\_delaying\_WC} = -\beta_{non\_delaying\_WC*reorganisation}$ ;  $p\text{-value} = 0.059$ ). Hence, contrary to the prediction of Hypothesis 4, *not* delaying the decision-making processes in good times turns out to be harmful for firm performance. Put differently, 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. In bad times, however, management wants to act more quickly. Then, the slackening approach of the works council hampers decision-making, which negatively affects the organization's economic position.

Overlooking the pattern of findings across all three 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 contributes positively to economic performance. Extending the codetermination model to determine 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, codetermination contributes positively to firm performance in times of downsizing, as expected. 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 subsamples, by way of comparison, with respect to the influence of codetermination on the organization's economic position. As indicated above, the results for the public sector may suffer from common-method variance. Although the common-method bias seems to become less when we add interaction terms to the model, the results remain tentative. Nevertheless, we want to present them because 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. We will briefly discuss both codetermination models without and with interaction terms below.

[INSERT TABLE 4 ABOUT HERE]

We confine ourselves to describing only the impact of codetermination on the organization's economic position, to compare the differences between the private and the public sector.<sup>6</sup> 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 favourable attitude of the management team has a positive effect on the economic position. This effect does not change in times of downsizing for organizations in the public sector. For the timing of the involvement of 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, especially in times of downsizing, 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. However, the effect disappears in times of downsizing.

For the private sector sub-sample, we found that slowing down the decision-making processes seems to reflect meticulous decision-making. Works councils take their time to consult with the managers, in order to create a favourable 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, neither in good nor in bad times. This is more in line with our original hypothesis that a slowing-down works council does so out of selfish reasons. 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.

## **5. Conclusion**

In their seminal work on the economics of codetermination, Freeman and Lazear (1995) argue that several legal 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 behaviour. 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 four main and one set of interaction-effect hypotheses, 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. That is, 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.

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, both in the private and the public sector. In the private sector, this result is even reinforced in times of reorganization. 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 economic position. Again, this positive effect is reinforced during a period of

downsizing. 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 a 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 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 behaviour. Note that this comparison is tentative only, due to possible common-method variance in the public sector sub-sample.

It is clear that more research needs to be done, and indeed can be done. Now we have only used the part of the questionnaire containing responses from managing directors. But the same dataset also provides a multitude of variables stemming from answers by works council members, which offers the opportunity to find out more about the importance of the relationship between management and worker representatives for the functioning of the organization. Regrettably, using the two-respondent management-works council sub-set of our dataset dramatically reduces the number of observations, as we then need two completed questionnaires per organization, which is why we decided not to explore this issue with this particular dataset. Moreover, even if we would have had a sufficient number of observations,

this still could not resolve the key causality issue. With cross-section data as ours, we can only explore associations. We cannot be sure about the direction of causality. It might well be that causality runs from economic position as the independent to managerial and works council attitudes as the dependents. So, if we want to know more about the effects of works councils on economic performance, we also have to make use of other datasets which contain more objective information on financial performance data. This is something to be done in the near future, now that more surveys have come to our disposal.

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## Notes

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<sup>1</sup> 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. The estimation tables are available upon request from the authors.

<sup>2</sup> The estimation tables are available upon request from the authors.

<sup>3</sup> 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.

<sup>4</sup> Initially, we also incorporated the quadratic term of the ‘size variable’ in all models, which never proved to be significant, in isolation nor jointly with the linear size term.

<sup>5</sup> 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 that are not shown here that doing so does not change the main findings.

<sup>6</sup> We ran a baseline economic model with only the variables that are applicable to the public sector included, and found only two significant results. First, the percentage of unskilled labour 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 labour. Second, if the share of part-time work is increasing, it has a negative impact on the economic position, which is similar to the effect found for the private sector.

## Literature

- Addison, J.T. (2005). 'The Determinants of Firm Performance: Unions, Works Councils and Employee Involvement / High Performance Work Practices'. *Scottish Journal of Political Economy*, 52: 406-450.
- , Bellmann, L., Schnabel, C. and Wagner, J. (2004). 'The Long-awaited Reform of the German Works Constitution Act'. *Industrial Relations*, 43: 392-420.
- , Schnabel, C. and Wagner, J. (2001). 'Works Councils in Germany: Their Effects on Establishment Performance'. *Oxford Economic Papers*, 53: 659-694.
- , Schnabel, C. and Wagner, J. (2004). 'The Course of Research into the Economic Consequences of German Works Councils'. *British Journal of Industrial Relations*, 42: 255-281.
- Boone, C., Van Olffen, W., Witteloostuijn, A. van and De Brabander, B. (2004). 'The Genesis of Top Management Team Diversity: Selective Turnover among Top Management Teams in the Dutch Newspaper Publishing, 1970-94'. *Academy of Management Journal*, 47: 633-656.
- Bryson, A., Charlwood, A. and Forth, J. (2006). 'Worker Voice, Managerial Response and Labour Productivity: An Empirical Investigation'. *Industrial Relations Journal*, 37: 438-455.
- Cascio, W.F. and Wynn, P. (2004). 'Managing a Downsizing Process'. *Human Resource Management*, 43: 425-436.
- Dilger, A. (2002). *Ökonomik betrieblicher Mitbestimmung. Die wirtschaftlichen Folgen von Betriebsräten (The Economics of Codetermination. The Economic Consequences of Works Councils)*. München und Mering: Reiner Hampp Verlag.

- Freeman, R.B. and Lazear, E.P. (1995). 'An Econometric Analysis of Works Councils'. In J. Rogers and W. Streeck (eds.), *Works Councils – Consultation, Representation and Cooperation in Industrial Relations*. Chicago: University Press, pp. 27-52.
- Freeman, R.B. and Medoff, J.L. (1984). *What Do Unions Do?* New York: Basic Books.
- Kaufman, B.E. and Levine, D.I. (2000). 'An Economic Analysis of Employee Representation'. In B.E. Kaufman and D.G. Taras (eds.), *Nonunion Employee Representation—History, Contemporary Practice, and Policy*. Armonk, New York: M.E. Sharpe, pp. 149-175.
- Looise, J.C. and 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'. *Economic and Industrial Democracy*, 24: 379-409.
- O'Brien, R. (2007). 'A Caution Regarding Rules of Thumb for Variance Inflation Factors'. *Quality & Quantity*, 41: 673-690.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003). 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies'. *Journal of Applied Psychology*, 88: 879-903
- Sorge, A. and Van Witteloostuijn, A. (2004). 'The (Non)Sense of Organizational Change: An Essai about Universal Management Hypes, Sick Consultancy Metaphors, and Healthy Organization Theories'. *Organization Studies*, 25: 1205-1231.
- Van het Kaar, R.H. and Looise, J.C. (1999). *De volwassen OR: groei en grenzen van de Nederlandse ondernemingsraad. Resultaten van het grote OR-onderzoek (The Mature Works Council: growth and limits of the Dutch works council. Findings of the large Study of Works Councils)*. Alphen aan den Rijn: Samsom.

**Table 1 Descriptives: Private ( $n = 170$ ) and public sector establishments ( $n = 158$ )**

Private sector variables	Mean	Std. Dev.	Min	Max	$\chi^2$
Economic position	0.847		0	1	
Manufacturing	0.424		0	1	$\chi^2 (1) = 0.18$ Pr = 0.67
Construction and housing	0.135		0	1	$\chi^2 (1) = 0.89$ Pr = 0.34
Transport, trade, services, hotels & catering	0.312		0	1	$\chi^2 (1) = 1.77$ Pr = 0.18
Banking and insurance	0.129		0	1	$\chi^2 (1) = 2.25$ Pr = 0.13
Establishment size	3.259	1.51	1	6	$\chi^2 (5) = 2.05$ Pr = 0.84
International collaboration	0.406		0	1	$\chi^2 (1) = 2.38$ Pr = 0.12
Parent company	0.553		0	1	$\chi^2 (1) = 3.93$ Pr = 0.05
Tenured personnel (in %)	87.364	8.79	60	100	
Unskilled personnel (in %)	23.444	24.63	0	90	
Experienced works council	1.859	0.61	1	3	$\chi^2 (2) = 6.30$ Pr = 0.04
Increase in part-time personnel	0.741		0	1	$\chi^2 (1) = 0.02$ Pr = 0.90
HRM practices combined (sum)	27.871	4.01	18	53	
Profit sharing for higher personnel (sum)	1.082	1.25	0	4	$\chi^2 (4) = 7.30$ Pr = 0.12
Reorganization overall	0.424		0	1	$\chi^2 (1) = 11.87$ Pr = 0.00
Reorganization without forced lay-offs	0.253		0	1	$\chi^2 (1) = 0.08$ Pr = 0.78
Reorganization with forced lay-offs	0.171		0	1	$\chi^2 (1) = 23.54$ Pr = 0.00
Managers' attitude	0.929		0	1	$\chi^2 (1) = 6.93$ Pr = 0.01
Timing of involvement works council	2.053	0.84	1	3	$\chi^2 (1) = 5.73$ Pr = 0.06
Works council's attitude	0.718		0	1	$\chi^2 (1) = 13.14$ Pr = 0.00
Non-delaying works council	0.424		0	1	$\chi^2 (1) = 0.18$ Pr = 0.67
<b>Public sector variables</b>					
Economic position	0.652		0	1	
Public health sector and welfare	0.658		0	1	$\chi^2 (1) = 0.40$ Pr = 0.53
Public administration and other non-profit	0.342		0	1	$\chi^2 (1) = 0.40$ Pr = 0.53
Establishment size	3.506	1.41	1	6	$\chi^2 (5) = 3.81$ Pr = 0.59
Tenured personnel (in %)	86.135	13.49	0	100	
Unskilled personnel (in %)	20.769	21.28	0	90	
Experienced works council	1.759	0.60	1	3	$\chi^2 (1) = 2.59$ Pr = 0.27
Increase in part-time personnel	0.873		0	1	$\chi^2 (1) = 0.97$ Pr = 0.32
HRM practices combined (sum)	26.886	2.95	17	35	
Reorganization overall	0.525		0	1	$\chi^2 (1) = 0.09$ Pr = 0.77
Reorganization without forced lay-offs	0.456		0	1	$\chi^2 (1) = 0.48$ Pr = 0.49
Reorganization with forced lay-offs	0.070		0	1	$\chi^2 (1) = 0.59$ Pr = 0.44
Managers' attitude	0.899		0	1	$\chi^2 (1) = 3.61$ Pr = 0.06
Timing of involvement works council	2.456	0.72	1	3	$\chi^2 (1) = 3.49$ Pr = 0.18
Works council's attitude	0.715		0	1	$\chi^2 (1) = 0.75$ Pr = 0.39
Non-delaying works council	0.614		0	1	$\chi^2 (1) = 2.11$ Pr = 0.15

**Table 2 Correlation between economic position and managers' attitude in the private sector**

	Economic position (= Y)		
Managers' attitude (= X)	Somewhat worrisome, and worrisome/weak (= 0)	Healthy / strong (= 1)	Total
Formal (= 0)	5 19.23%	7 4.86%	12 7.06%
Open-minded (= 1)	21 80.77%	137 95.14%	158 92.94%
Total	26 100%	144 100%	170 100%

**Table 3 Probit estimation results explaining the healthy economic position for the private sector**

Variable	(1) Economic position	(2) Economic position	(3) Economic position
<b>Firm and industry characteristics</b>			
Industry dummies <sup>d)</sup>	Included	included	included
Establishment size	0.0731 (0.60)	0.292* (1.69)	0.343 (1.52)
International collaboration	0.617 (1.64)	1.098** (2.19)	1.412* (1.94)
Parent company	-0.672* (1.87)	-1.397*** (2.81)	-2.313*** (2.96)
<b>Workforce characteristics</b>			
Tenured personnel (in %)	0.0426** (2.25)	0.0609** (2.33)	0.108*** (2.72)
Unskilled personnel (in %)	0.00949 (1.36)	0.0072 (0.79)	0.00413 (0.34)
Experienced works council	-0.0324 (0.13)	-1.111** (-2.48)	-1.847** (2.58)
Increase in part-time personnel	-0.332 (0.90)	-0.893** (1.90)	-1.568** (2.44)
<b>Personnel policy characteristics</b>			
HRM practices combined (sum)	0.115** (2.49)	0.125** (2.34)	0.224** (2.35)
Profit sharing for higher personnel (sum)	0.333* (1.95)	0.421* (1.87)	1.152** (2.53)
<b>Downsizing</b>			
Reorganization without forced lay-offs	-0.960** (-2.13)	-1.422** (2.18)	
Reorganization with forced lay-offs	-1.641*** (4.14)	-2.392*** (4.25)	
Reorganization overall			-10.04** (2.50)
<b>Codetermination characteristics</b>			
Managers' attitude		1.650** (2.01)	3.779** (2.51)
Reorganization $\times$ managers' attitude			2.750 (1.36)
Timing of involvement works council		0.846*** (2.66)	0.698 (1.31)
Reorganization $\times$ timing involvement			2.288** (1.99)
Works council's attitude		1.698*** (2.95)	3.917*** (3.23)
Reorganization $\times$ council's attitude			-4.379*** (3.01)
Non-delaying works council		-0.444 (-0.98)	-3.063** (2.53)
Reorganization $\times$ non-delaying council			4.858*** (2.67)
Constant	-5.600*** (2.77)	-7.034** (2.52)	-15.14*** (2.95)
Observations	170	170	170
Mean value of the dependent variable	0.85	0.85	0.85
LR	54.94	82.04	97.91
Prob > chi2	0.0000	0.0000	0.0000
Pseudo R2	0.3777	0.5640	0.6732

a) Source: data obtained from Van het Kaar and Looise (1999).

b) *t* statistics in parentheses.

c) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , and \*  $p < 0.1$ .

d) The complete estimation results are available upon request.



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

Variable	Private N = 170	Private <sup>b)</sup> N = 170	Public N = 158	Public N = 158
Control variables <sup>c)</sup>	Included	Included	Included	Included
Reorganization overall	-2.126*** (3.89)	-10.04** (2.50)	0.0562 (0.24)	-0.507 (0.48)
<b>Codetermination characteristics</b>				
Managers' attitude	1.776** (2.23)	3.779** (2.51)	0.936** (2.34)	0.972* (1.92)
Reorganization x managers' attitude		2.750 (1.36)		-0.135 (0.16)
Timing of involvement works council	0.943*** (2.85)	0.698 (1.31)	-0.400** (2.44)	-0.362 (1.58)
Reorganization x timing involvement		2.288** (1.99)		-0.007 (0.02)
Works council's attitude	1.587*** (2.80)	3.917*** (3.23)	-0.113 (0.43)	-0.331 (0.92)
Reorganization x council's attitude		-4.379*** (3.01)		0.443 (0.86)
Non-delaying works council	-0.398 (0.88)	-3.063** (2.53)	0.463* (1.92)	-0.033 (0.10)
Reorganization x non-delaying council		4.858*** (2.67)		1.053** (2.17)
Observations	170	170	158	158
Mean value of the dependent variable	0.85	0.85	0.65	0.65

a) Source: data obtained from Van het Kaar and Looise (1999).

b) Column 3 from Table 3.

c) *t* statistics in parentheses.

d) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , and \*  $p < 0.1$ .

e) The complete estimation results are available upon request.