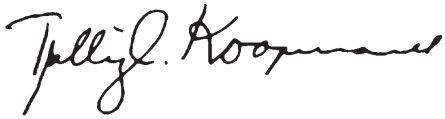
Tjalling C. Koopmans Research Institute



Discussion Paper Series nr: 09-14

The impact of Dutch works councils according to managers

Annette van den Berg
Yolanda Grift
Arjen van Witteloostuijn

Universiteit Utrecht

Utrecht School of Economics

Tjalling C. Koopmans Research Institute
Utrecht School of Economics
Utrecht University

Janskerkhof 12
3512 BL Utrecht
The Netherlands
telephone +31 30 253 9800
fax +31 30 253 7373
website www.koopmansinstitute.uu.nl

The Tjalling C. Koopmans Institute is the research institute and research school of Utrecht School of Economics.
It was founded in 2003, and named after Professor Tjalling C. Koopmans, Dutch-born Nobel Prize laureate in economics of 1975.

In the discussion papers series the Koopmans Institute publishes results of ongoing research for early dissemination of research results, and to enhance discussion with colleagues.

Please send any comments and suggestions on the Koopmans institute, or this series to J.M.vanDort@uu.nl

ontwerp voorblad: WRIK Utrecht

How to reach the authors

Please direct all correspondence to the first author.

Annette van den Berg*
Yolanda Grift*
Arjen van Witteloostuijn*^
*Utrecht University
Utrecht School of Economics
Janskerkhof 12
3512 BL Utrecht
The Netherlands.
E-mail: J.E.vandenBerg@uu.nl
Y.Grift@uu.nl
^University of Antwerp
Faculty of Applied Economics
Department of Management
Antwerp Centre of Evolutionary Demography ([A]CED)
Prinsstraat 13
2000 Antwerpen
Belgium
E-mail: arjen.vanwitteloostuijn@ua.ac.be

This paper can be downloaded at: http://
www.uu.nl/rebo/economie/discussionpapers

Utrecht School of Economics
Tjalling C. Koopmans Research Institute
Discussion Paper Series 09-14

The impact of Dutch works councils according to managers

Annette van den Berg[a]
Yolanda Grift[a]
Arjen van Witteloostuijn[ab]

[a]Utrecht School of Economics
Utrecht University

[b]Faculty of Applied Economics
University of Antwerp

June 2009

Abstract

Although works councils have, by and large, equally extensive legal rights in Germany and the Netherlands, this is the first econometric analysis that investigates the influence of Dutch works councils on firm performance. We use a nation-wide Dutch dataset with information on management's perceptions of the works council's impact on their firms' efficiency and innovation. Inspired by the German study of Jirjahn and Smith (2006), we analyze which determinants influence management's attitude toward employee participation in the Netherlands. We establish a preponderant influence emanating from the works council's role attitude and management's leadership style.

Keywords: works councils, managerial response, effectiveness, efficiency, innovation

JEL classification: J53, M54

Acknowledgements

We would like to thank Robbert van het Kaar and Jan Kees Looise for providing the data, and Rob Alessi, Jan Cremers, and three anonymous referees for their helpful comments. Arjen van Witteloostuijn gratefully acknowledges the financial support from the Odysseus program of the Flemish Science Foundation (FWO).

1. Introduction

In both Germany and the Netherlands, labor relations at the firm level are characterized by a very strong form of mandatory worker codetermination (Looise and Drucker, 2003; Top and Cremers, 2003). Although the legal rights of Dutch works councils are, by and large, equally extensive as those of their German counterparts, extant research almost exclusively focuses on the latter. One of the reasons for this probably has to do with data availability. Since the mid-1980s, studies on Germany revealed that the presence of works councils can have a significant influence on matters such as productivity, profitability, innovation and labor turnover (for overviews, see Addison et al., 2004, and Jirjahn, 2006). In contrast, not a single quantitative analysis has been performed in the Netherlands, to date, simply because of data unavailability. A comparison of the German and the Dutch setting (CPB, 1997; Top and Cremers, 2003) makes clear that, although both systems of codetermination are very similar, there are some noticeable differences, both at the enterprise and the workfloor level.

At the enterprise level, depending on the firm's size and sector, German workers are legally entitled to occupy between one-third and fifty per cent of all seats in the supervisory boards of limited liability companies (CPB, 1997). Dutch employees have a much lower percentage of delegates on the supervisory board, and these non-executives are assumed to take the interests of all stakeholders into account, and not just those of the workers. At the workfloor level, German works councils have a much more formal relationship with management than their Dutch equivalents. This is reflected in the large percentage (16%), which is close to zero in the Netherlands, of cases in which German labor representatives have gone to court (Top and Cremers, 2003). Rather, works councils in the Netherlands are embedded in a culture of consultation, so typical of the Dutch corporatist 'poldermodel'.

Recently, a large nationally representative dataset was made available with all sorts of information about the way in which Dutch works councils operated in 1998. Using this

database, the current paper reports the first econometric analyses on the – by managers – perceived effectiveness of works councils in Dutch establishments, offering the following contribution to the literature. First, we follow Jirjahn and Smith's (2006) study to infer which determinants of management's attitude toward employee participation are significant in the Netherlands. Unlike Jirjahn and Smith, we do not have any information about firms without a works council. However, contrary to their sample, which only covers the manufacturing industry, our dataset includes all branches of the private sector. Moreover, we are able to distinguish between management's perception of the works council's effect on efficiency and innovation. And finally, our data offer the opportunity to test two extra hypotheses, specifically with respect to the effect of the works council's role attitude and management's leadership style.

Our paper is structured as follows. In Section 2, we introduce the Dutch codetermination system. The theoretical background will be elaborated upon in Section 3, in which we set out how a works council is expected to affect firm performance. Here, we will also formulate predictions with respect to the determinants of management's perception of the effect of codetermination on the firm's efficiency and innovation. We will explore additional arguments as to the likely impact of the works council's role attitude and management's leadership style. Next, the data are described in Section 4, after which we provide our evidence in Section 5. In the concluding Section 6, we summarize and interpret our main findings.

2. Works councils in the Netherlands

Codetermination in the Netherlands is mandatory in all sectors of the economy for all firms employing fifty or more workers. Among the most important legal privileges of Dutch works councils are the right to be informed, the right to give advice, and the right to provide

consent. What should be stressed is the dualistic nature of the council's legal task, which is typical for the Netherlands and Germany, and which sets them apart from most of their counterparts elsewhere in the world. On the one hand, the works council must stand up for the interests of all personnel. On the other hand, the works council is legally obliged to operate in the interest of the firm at large. This implies, for instance, that the Dutch works council does not have the right to go on strike.

The works council has the right to be sufficiently informed on all relevant matters so as to perform its tasks optimally. Among other things, this information is necessary in order to be able to oversee the management's compliance with the law, with the collective labor agreement and with other regulations concerning safety, health and well-being. Next, the law entitles the works council to be consulted on all management's important economic decisions. This includes decisions about large investments and large loans, and expansion or reduction of business activities. The entrepreneur is obliged to ask for the council's advice in time, so that the latter can really be able to influence the decision process. Finally, the works council has the right of consent with respect to all social arrangements within the firm, insofar as the substance of the matter in question has not already been regulated in a collective agreement between employers and unions. This includes codetermination not only on payment systems, working hours, holidays, health and safety at work, but also on job evaluation schemes, training facilities, and rules on hiring, firing and promotion. In order to use all these rights effectively, the position of the works council members is legally protected. They are allowed – within certain limits – to meet during working hours, to follow training courses and to consult outside experts at the expense of the employer. If the works council has a case of a management team that does not satisfactorily follow up on their advice or has taken a decision ignoring legally required consulting procedures, they have the right to go to court. Earlier work revealed that in practice only a minority of all Dutch works councils uses

their rights to the fullest (Everaers, 2006; Cremers, 2007). Usually, individual employers only allow works councils to participate in decision-making with respect to personnel policy, and to a much lesser extent with respect to strategic issues (Van het Kaar and Looise, 1999).

Note that Dutch works councils hardly ever have the right to determine wages or other fringe benefits. For many years, the unions have legally been given precedence over negotiating the terms of employment at the sector level. As soon as wages and working hours are settled upon in a collective labor agreement, which applies to the vast majority of the Dutch workforce, a works council is not allowed to renegotiate this at the company level. At the same time, the direct influence of Dutch labor unions on company policies is limited. Contrary to Germany, where works councils are dominated by unions (CPB, 1997), there exists no formalized relationship between councils and unions in the Netherlands. Although, by the end of the 1990s, 64 per cent of all works councilors were also union members, in practice there are no strong ties between Dutch labor unions and works councils (Schilstra and Smit, 2005).

3. Theoretical expectations

Works councils have the potential to exert great influence on company policies, if they exploit their rights optimally. Freeman and Lazear (1995) contend that each of the works councils' rights can be to the benefit of the entire organization, leading to an increase of the 'joint surplus'. First, exchange of information can ensure that parties trust each other more, which in turn may improve efficiency. Second, advisory rights may allow workers to come up with suggestions and solutions to problems that have an excess value. Third, co-determination rights give the employees more control over their own working conditions and work security, which prompts them to take a longer-run view of the prospects of the firm. In addition, Van den Berg (2004) argues in a variation on principal-agent theory that not only

the manager can be regarded as a principal who needs to supervise the actions of his subordinates (agents), but also that the works council too could be regarded as a principal vis-à-vis management when it comes to monitoring the compliance with collective labor contracts and the law. Shareholders also benefit from this extra check, because opportunistic managers may engage in rent-seeking behavior and their non-observance of (explicit as well as implicit) agreements can be noticed by the works council. This could lead to negative reputation effects, making it harder in the future to hire qualified personnel (cf. Williamson, 1985, who applies this notion to unions).

There could also be a drawback of works councils' presence. Freeman and Lazear (1995) argue that the organization runs the risk that a powerful workforce will only try to enlarge the pie in favor of themselves, claiming wage rises and preservation of jobs in an irresponsible manner that may lead to lower profits. Another possible negative impact of works councils on firm performance could follow from their lack of know-how and a slackening effect on decision-making. Moreover, the operation of a works council involves costs in the form of lost working hours due to meetings and schooling of the members, and expenses related to the hiring of outside professionals and going to court (Kaufman and Levine, 2000).

Influenced by the prominent study by Freeman and Medoff (1984), Bryson et al. (2006) point to the importance of managerial response to any form of worker voice. They claim and find that firm performance greatly depends on the degree in which management is inclined to give (representatives of) employees a say in company policies. Hence, the next question then becomes in what circumstances managers can be expected to take a more positive or a more negative view toward (the effects of) employee participation. Jirjahn and Smith (2006) come up with a series of arguments, subdivided into six categories, as discussed below. Because one of the aims of our study is to replicate their German analysis for the

Netherlands, we will adhere to the same categorization. Moreover, in a seventh category, we add a few novel hypotheses with regard to both managerial and worker attitudes.

The first category involves *general establishment characteristics*. We hypothesize that management's attitude toward codetermination is more positive, the larger the establishment. Then, the complexity of the organization is larger. Limits to the span of control of management may render a good relationship with works councils necessary. Moreover, Addison et al. (1997) reason that older plants and their managers are more accustomed to worker participation, and may therefore hold a more positive view. So, we expect that in younger firms in which the newest production technology is used, management is more likely to take a negative view on works councils' effectiveness.

The second category is the *structure of the workforce*. Jirjahn and Smith (2006) argue that management is more likely to advance a cooperative relationship with its personnel when the workforce (mainly) consists of highly qualified employees with tenure, because these are usually more committed to the firm in the long run. This will increase the likelihood that managers think positively about employee participation. This is supported by Delaney and Huselid (1996), who argue that firms aim to hire the best-qualified workers and to improve the quality of their current personnel, because they believe that skilled employees can contribute to the firm's success.

The third category relates to *principal-agent owner-management issues*. Managerial incentive schemes can influence management's motivation as to whether or not to build a trustful bond with employees (Jirjahn, 2003). Firm owners try to combat opportunistic behavior of the executive team by means of profit-sharing and/or active monitoring, either by the shareholders themselves or by the supervisory board. These control mechanisms may have opposite effects on managers' intention to stimulate a cooperative relationship with workers (Jirjahn and Smith, 2006). The introduction of profit-sharing and monitoring may

make managers behave less cooperatively vis-à-vis employees because they become highly committed to the owners' goals, implying that the benefits from allying with owners are larger than the costs of breaching implicit contracts with their subordinates. Alternatively, profit-sharing and monitoring may trigger rent-seeking managers to cooperate more with employees in order to enhance firm performance, because this cooperation is in their own financial gain.

The fourth category has to do with the *industrial relations system*. There are different ways in which employers can interact with employees. Bargaining takes place with unions while consulting is institutionalized through the works council, but a manager may also decide to introduce other forms of worker participation. Alongside the presence of a works council, workers may be given direct involvement individually or in the form of production teams with increased responsibility. If all individual employees are given more say in company decisions, this may indicate that managers prefer this kind of participation as a substitute for the influence of a formal works council. Hence, we then expect a negative attitude toward the council. If certain specific groups of workers receive participation rights in a format other than a works council, it may indicate that managers are positive about complementary forms of worker participation. Additionally, following Hübler and Jirjahn (2003), we expect that a collective labor agreement contributes to a constructive view of management toward works councils. In a reaction to the claim of Freeman and Lazear (1995) that an influential council will seize too large a part of the pie at the expense of shareholders, it can be argued that a collective agreement between employer and union eliminates a possible source of distributional conflict between management and works council. Instead, councils are able to concentrate on other firm-related issues that may improve the work climate, and thus enhance productivity.

The fifth category includes *human resource management (HRM) practices*. HRM policies are used to motivate workers with the ultimate aim to improve firm performance (Delaney and Huselid, 1996; Addison, 2005). Successful HRM implies a good relationship between the employer, on the one hand, and employees and their representatives, on the other hand. Jirjahn and Smith (2006) therefore formulate the expectation that the introduction of typical HRM tools is associated with a positive view of managers toward works councils, because the latter may be needed to communicate the justification of the HRM arrangements to the workforce. In addition, it is hypothesized that HRM policies are especially important in periods of downsizing: reductions in employment must be made acceptable, and this can be done via communication through the works council (Freeman and Lazear, 1995; Cascio and Wynn, 2004). Hence, if management intends to reduce the workforce, a positive attitude toward cooperation with the works council will be performance-enhancing.

Jirjahn and Smith's (2006) sixth and final category focuses on *market strategy and innovation*. The type of market in which a firm operates and the type of technology used in the production process may also have an impact on labor relations within the firm. With respect to the first aspect, Nickell (1999) argues that the more intense the pressure is from competitors, the more the need is for managers and workers alike to increase effort. Hence, it will be in the interest of management to cooperate with the works council. With respect to the second aspect, Jirjahn and Smith (2006) formulate the expectation that if management aims to introduce new technologies, it will be of avail to them to have a positive attitude toward works councils: via this channel, management can obtain and transmit valuable information that might boost innovativeness. It may be important to distinguish between the effects of process innovation and product innovation. Addison et al. (2001) argue that councils are likely to oppose the former type of innovation because this may lead to lay-offs, while they

would support the latter type of innovation because this may be beneficial for workers as well.

We add a seventh category: the *interaction between management team and works council*. Given the theory that managerial responsiveness to worker participation has a great impact on firm performance (Freeman and Medoff, 1984; Bryson et al., 2006), we formulate two additional hypotheses. First, we assume that the management's leadership style reflects their opinion about consulting employees and involving them in firm policies. Consequently, we expect that the more executives run the organization in a formal and authoritative manner, the more likely it is that they perceive a negative effect from codetermination. Second, we expect that the attitude and activeness of the works council also affect the managerial view on codetermination. We hypothesize that the more a works council adopts a proactive attitude toward company policies, the more this can benefit the whole organization, which in turn influences management's view on the council's effectiveness positively.

We conclude this theoretical exercise by briefly addressing the difference between management's perceptions of the works council's impact on efficiency and innovation, to which we refer as 'perceived efficiency effect' and 'perceived innovation effect', respectively. Characteristics reflecting cost control and profit maximization, such as labor flexibility and market strategy, may be more important to explain the perceived efficiency effect. Likewise, characteristics reflecting creativity and a pro-worker environment, such as the degree of schooling of the workforce and favorable HRM-induced facilities, may be more important for explaining the perceived innovation effect.

4. Data and research method

In 1998, a large survey was conducted economy-wide among Dutch organizations that operated with a works council. The questionnaire was sent to both the management (board of

directors) and works councils of 3,500 companies, government agencies and other organizations of whom 656 returned the form: 365 works councils and 423 directors. The research was conducted by Van het Kaar and Looise (1999) to establish to what degree Dutch works councils had gained influence in the preceding decade. For this paper, we use the directors' survey only. Moreover, the analysis is confined to private sector firms, leaving 203 observations. The final dataset consists of 142 firms for which all relevant information is available. This sub-sample of 142 observations is not significantly different from the larger directors' dataset with 423 respondents.

Due to the design of the survey, almost all data are perceptual scores from individual respondents. For both perceived efficiency and innovation in the codetermination model, Harman's single-factor test (see Podsakoff et al., 2003) revealed four factors with an Eigen value greater than one. Moreover, no single factor explained most of the variance. The calculated VIF scores (all below 2) did not indicate multicollinearity. In Table 1, the descriptives are presented. As most variables are self-explanatory, we will focus on the two dependent and our key independent variables with respect to the interaction between management teams and works councils.

[INSERT TABLE 1 ABOUT HERE]

Dependent variables. Managers were asked whether they think that works councils have a substantial positive, neutral or negative impact on efficiency and innovation. If the answer is affirmative, we interpret this as a positive view of managers toward works council's effectiveness: 15% of the managers reported a negative view as to the works council's effect on efficiency, whereas 8% reported a positive view; for innovation, 12% revealed a positive view and 11% a negative view. Although the number of observations is relatively small, this shows that there is sufficient variation.

Key independent variables. The first codetermination characteristic is managerial leadership style: 22% has a formal leadership style, which implies being strict and following the rules, as opposed to a more cooperative style. The second codetermination feature is works council attitude. In 43% of the cases, councils have a proactive stance, which implies that they actively influence company decision-making. In 27% of the firms, councils strictly focus on monitoring. The more passive councils that mainly communicate with management serve as reference category.

Due to the small size of the dataset, extra attention is paid to the distribution of the variables. A significant difference in the perceived efficiency effect can be observed between formal authoritative and informal cooperative management styles, whereas there is no difference between proactive and monitoring works councils (p=0.048). For the perceived innovation effect, both management's leadership style (p=0.049) and a monitoring works council (p=001) are significant. A multivariate analysis will be done by performing ordered probit. The advantage is that we can make a clear distinction between a positive and negative attitude of managers to works councils' effects on efficiency and innovation.

5. Empirical results

In Table 2, the outcomes of the ordered probit analyses are shown, as well as the marginal effects, with regard to managerial perception of works councils' effects on both efficiency and innovation. Taken as a whole, the results of the replication of the Jirjahn and Smith (2006) analysis (columns 1 and 5) improve when we additionally include the three variables that measure how management teams and work councils interact (columns 2 and 6). This supports our argument that this interaction matters. We focus on this codetermination model in analyzing the managerial perception of works council effects.

[INSERT TABLE 2 ABOUT HERE]

Starting with *general establishment characteristics*, firm size does not play a noteworthy role. For firm age, we can infer that in younger firms in which the newest production technology is used, management is indeed more likely to be pessimistic about works councils' effectiveness. Apparently, in younger firms, management teams and works councils still have to get used to one another.

The four variables reflecting the *structure of the workforce* show mixed results. The perceived innovation effect of a large proportion of higher educated staff is positive, confirming the notion that management is more likely to support a works council that predominantly represents higher qualified personnel, as this can be seen as an investment. For the perceived efficiency effect, a negative influence of an increase in labor flexibility is found, confirming the logic that managers prefer to collaborate with a works council when this body mainly represents committed workers with tenure. However, a higher number of temporary workers, surprisingly, are associated with a positive view of management on the works council's contribution to efficiency. An interpretation might be that as cheaper and flexible temporary workers are thought to positively affect efficiency, management believes that this co-opts the works council to support this efficiency-enhancing strategy that does not directly affect their tenured constituency.

As to *principal-agent owner-management issues*, we find interesting results. Supervision by financially involved stakeholders (i.e., the active owners) positively influences the perceived efficiency effect, whereas monitoring by a neutral supervisory board negatively influences the perceived innovation effect. The former result indicates that shareholder activism incites rent-seeking managers to cooperate with the works council because that is in their best interest when striving after efficiency. The latter finding suggests that highly committed managers mainly aim to serve the interests of their principals, and are therefore less inclined to collaborate with the works council when innovation is considered.

For the perceived innovation effect, we find opposite results for the two variables related to profit-sharing. It stands to reason to find a positive effect if the incentive pay system is designed for the whole workforce. After all, the works council acts for all workers, and collaboration may increase innovative efforts. On the contrary, when just higher staff receives bonuses, this suggests a more negative attitude of managers toward works councils, as the latter can be expected to be opposed to this preferential scheme.

The findings for the variables reflecting the *industrial relations system* are as hypothesized, especially as regards to the perceived efficiency effect. A collective labor agreement has a positive effect on managerial attitudes toward the council, because then both parties are not engaged in any conflicts about remuneration but can concentrate on matters affecting a smooth work organization. Giving a say in company affairs to quality circles is indeed seen as a complement to works councils, whereas giving more influence to individual employees is seen as a substitute. Apparently, the management's goal to increase efficiency is perceived to be best taken care of if participation is organized collectively.

The variables linked to *HRM practices* show outcomes partly in line with our expectations. The distinction between the insignificant effect of HRM measures on perceived efficiency and the positive effect on perceived innovation is clear. HRM policies stimulate and motivate workers in innovative firms. Managers that aim at efficiency believe they do not need works councils to communicate and implement HRM measures.

For *market strategy and innovation* variables, several noteworthy significant results show up. Management's plans to increase market share (by entering into some form of joint venture with foreign firms) lead to a more positive attitude of managers as regards to the council's contribution to efficiency. Internationalization requires the support of personnel. At the same time, if management experiences increasing competitive pressure, the perceived

efficiency effect turns significantly negative, which suggests that in those circumstances the managers do not appreciate the council's input.

Both types of innovation are positively related to the perceived innovation effect, indicating that management believes to benefit from the support of the works council. With respect to the negative perceived efficiency effect, introducing a new product line requires considerable start-up costs to the detriment of efficiency. Consulting the works council may amplify this effect even further for at least two reasons: first, such codetermination processes take time; and second, works council members might initially oppose such plans because they fear an increase of the work load.

Finally, and most interestingly, we find the strongest effects if we add three variables that represent *interaction between management teams and works councils*. Our assumption that a very formal leadership style contributes negatively to the managerial opinion of the council's effectiveness is convincingly confirmed. And if we look at the effect of the stances of a works council, we may deduce that a pro-active council is not appreciated at all by executives, neither is a council that engages in strict monitoring whether management fulfils its duties and implements decisions properly. Apparently, in the perception of managers, a works council is most effective when it only takes a passive stance.

Looking at effect sizes requires calculating the marginal effects. As the marginal effects for the three distinguished categories of variables add up to zero, only two are presented in columns 3-4 and 7-8. Some effects, measured in percentage point changes, are quite large. Here we illustrate this with one of our key variables. A formal leadership style increases the probability of a negative perceived efficiency effect with almost 19 percentage points and decreases the probability of a positive effect with 3.5 percentage points. For the perceived innovation effect, the changes in probability are 6 and -3 percentage points, respectively.

6. Conclusion

In this paper, management's perception of the works council's impact on firm performance is analyzed. It is the first empirical paper that econometrically analyzes Dutch data. Our study is inspired by and moves beyond the work of Jirjahn and Smith (2006). Our final results are quite different from theirs. With our data, we cannot differentiate between firms with and without a works council, nor could we explore issues of causality. We can however elaborate on the behavior of the councils (passive, monitoring or proactive) and the attitude of management toward employee participation (formal versus cooperative). Firm performance impact is operationalized as the managers' perceived effects of works councils on efficiency and innovation.

A first finding worth mentioning relates to the large differences in results when comparing the perceived efficiency with the perceived innovation effect. Apart from our key explanatory management team – works council interaction variables, hardly any determinant scores significantly on both items at the same time. Our most noteworthy and robust finding refers exactly to the measures on how management and council approach each other. This supports our argument that the way in which management and council interact plays an important part in determining which factors influence managerial perceptions of works council's effectiveness. Our first hypothesis that a formal leadership style leads to a negative perception of the works council's effectiveness, is confirmed; our second hypothesis that a proactive works council will be appreciated by management, is rejected. Looking at the joint results of these two hypotheses, we may conclude that if managers would have a more cooperative leadership style combined with a passive works council, a more positive impression of the merits of a works council emerges. This could help to increase efficiency and stimulate innovation, contributing to a smooth operation of the firm.

References

Addison, John T. 2005. "The Determinants of Form Performance: Unions, Works Councils, and Employee Involvement/High-Performance Work Practices". *Scottish Journal of Political Economy* 52:406-450.

Addison John T., Claus Schnabel and Joachim Wagner. 1997. "On the Determinants of Mandatory Works Councils in Germany". *Industrial Relations* 36:419-445.

Addison John T., Claus Schnabel and Joachim Wagner. 2001. "Works Councils in Germany: Their Effects on Establishment Performance". *Oxford Economic Papers* 53:659-694.

Addison John T., Claus Schnabel and Joachim Wagner. 2004. "The Course of Research into the Economic Consequences of German Works Councils". *British Journal of Industrial Relations* 40:221-248.

Bryson, Alex, Andy Charlwood and John Forth. 2006. "Worker Voice, Managerial Response and Labour Productivity: an Empirical Investigation". *Industrial Relations Journal* 37:438-455.

Cascio, Wayne F. and Peg Wynn. 2004. "Managing a Downsizing Process". *Human Resource Management* 43:425-436.

CPB Netherlands Bureau for Economic Policy Analysis. 1997. *Challenging Neighbours. Rethinking German and Dutch Economic Institutions.* Berlin-Heidelberg: Springer Verlag,

Cremers, Jan (ed.). 2007. *Medezeggenschap in Beeld (An Image of Codetermination).* Den Haag: Reed Business bv.

Delaney, John T. and Mark A. Huselid. 1996. "The Impact of Human Resource Management Practices on Perceptions of Organizational Performance". *The Academy of Management Journal* 39:949-969.

Everaers, Jan. 2006. "Hoezo Volwassen? (In what Way Mature?)". *Zeggenschap* 17:20-23.

Freeman, Richard B. and Edward P. Lazear. 1995. "An Econometric Analysis of Works Councils." In *Works Councils–Consultation, Representation and Cooperation in Industrial Relations,* edited by Joel Rogers and Wolfgang Streeck, pp. 27-52. Chicago: University of Chicago Press.

Freeman, Richard B. and James L. Medoff. 1984. *What Do Unions Do?* New York: Basic Books.

Hübler, Olaf and Uwe Jirjahn. 2003. "Works Councils and Collective Bargaining in Germany: The Impact on Productivity and Wages". *Scottish Journal of Political Economy* 50:1-21.

Jirjahn, Uwe. 2003. "Executive Incentives, Works Councils and Firm Performance". *Journal of Applied Social Science Studies* 123:397-421.

Jirjahn, Uwe. 2006. "Ökonomische Wirkungen der Mitbestimmung in Deutschland: Überblick über den Stand der Forschung und Perspektiven für zukünftige Studien (Economic Effects of Codetermination in Germany: a Literature Overview and Perspectives for Future Research)." *Sozialer Fortschritt. German Review of Social Policy* 55:215-226.

Jirjahn, Uwe and Stephen C. Smith. 2006. "What factors Lead Management to Support or Oppose Employee Participation–With and Without Works Councils? Hypotheses and Evidence from Germany". *Industrial Relations* 45:650-680.

Kaufman, Bruce E. and David I. Levine. 2000. "An Economic Analysis of Employee Representation." In *Nonunion Employee Representation-History, Contemporary Practice, and Policy*, edited by B.E. Kaufman and D.G. Taras, pp. 149-175. Armonk, New York: M.E. Sharpe.

Looise, Jan C. and Michiel Drucker. 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.

Podaskoff, Philip M., Scott B. MacKenzie, and Jeong-Yeon Lee. 2003. "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies". *Journal of Applied Psychology* 88: 879-903.

Schilstra, Keimpe and Evert Smit. 2005. *Voeten op de Vloer. Strategische Keuzes in de Belangenbehartiging van Werknemers (Feet on the floor. Strategic choices in decision-making of employees)*. Amsterdam: Aksant.

Top, Martijn and Jan Cremers. 2003. *OR-Faciliteiten bij de Buren (Works Council Facilities at the Neighbours)*. Den Haag: Reed Business Information.

Van den Berg, Annette. 2004. "The Contribution of Work Representation to Solving the Governance Structure Problem". *Journal of Management and Governance* 8:129-148.

Van het Kaar, Robbert H. and Jan C. Looise. 1999. *De Volwassen OR: Groei en Grenzen van de Nederlandse Ondernemingsraad: Resultaten van het grote OR-onderzoek (The Mature Works Council: Findings of the large Study of Works Councils)*. Alphen aan den Rijn: Samsom.

Williamson, Oliver E. 1985. *The Economic Institutions of Capitalism.* New York: The Free Press.

Table 1. Descriptives

Variable	Freq	Mean	St.Dev.	Min	Max
Perceived effect works council on efficiency					
• negative	22	0.155			
• neutral	108	0.760			
• positive	12	0.085			
Perceived effect works council on innovation					
• negative	17	0.120			
• neutral	109	0.768			
• positive	16	0.113			
General establishment characteristics					
Establishment size (categorical variable)		3.190	1.44	1	6
Technology at the newest level (%)[a]	123	13.337	18.13	0	100
Industry dummies:					
- manufacturing		.43			
- construction, and housing industry		.13			
- transportation, trade, services, and hotel and catering industry		.32			
- banking sector and insurance companies		.12			
Structure of the workforce					
Workforce by function:					
- proportion of blue-collar workers		24.852	25.84	0	90
- proportion of white-collar workers		47.391	26.03	0	100
- proportion of higher educated staff		27.757	18.62	2	100
Workforce by type of contract:					
- proportion of workers with a fixed contract		86.887	8.78	60	100
- proportion of workers with a temporary contract		6.845	5.68	0	30
- proportion of workers from a temping agency		6.370	6.29	0	30
Increasing labor flexibility		.930	.26	0	1
Principal-agent owner-management issues					
Profit-sharing for all personnel		.859	.87	0	1
Increasing influence of shareholders (active owners)		.380	.49	0	1
Quotation on the stock exchange (profit-sharing higher personnel)		.366	.48	0	1
Presence of supervisory board		.711	.45	0	1
Industrial relations system					
Participation in quality circles[b]		.500	.50	0	1
Participation of individual employees		.627	.49	0	1
Collective labor agreement		.683	.47	0	1
Human resource management practices					
Reorganization (in 1996-1997)		.423	.50	0	1
HRM practices combined (factor; sum of 12 three-point scale practices)[c]		27.359	3.83	18	34
Market strategy and innovation					
Development competition in past three years (decreased – increased)		3.063	.77	1	4
Development internationalization [d]		.451	.63	0	1
Process innovation (factor)[e]		8.592	1.34	6	12
Product innovation (factor)[f]		8.908	1.44	6	12
Interaction between management teams and works councils					
Formal leadership style		.218	.41	0	1
Works councils' attitude:					
- passive works council		.338	.47	0	1
- proactive works council		.417	.50	0	1
- monitoring works council		.245	.45	0	1
Number of observations	142				

Data source: Van het Kaar and Looise (1999).

[a] Due to a large number of missings on this item (13%), a dummy for the missings has been included.

[b] These are teams of employees that are involved in improving production processes.

[c] Using factor analysis, we have combined a total of 12 three-point scale measures of HRM practices running from informing personnel via job evaluation conversation to team building.

[d] Past, present and expected future international cooperation, mergers and acquisitions.

[e] This combines the criteria 'efficiency' and 'flexibility in the firm' with the market requirements 'to produce for the lowest price' and 'to provide a large choice'.

[f] This combines the criteria 'to improve the quality of products' and 'to develop new commodities' with the market requirements 'producing the highest quality' and 'producing a unique product'.

Table 2. Ordered probit analyses of perceived efficiency and innovation

		Perceived effect works council on efficiency				Perceived effect works council on innovation			
		Coefficients		Marginal effects		Coefficients		Marginal effects	
				Negative view (=1)	Positive view (=3)			Negative view (=1)	Positive view (=3)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
General establishment characteristics									
	Establishment size	-0.343	-0.177			-0.344	-0.216		
		(-0.76)	(-0.37)			(-0.81)	(-0.46)		
	Establishment size squared	0.065	0.048			0.0535	0.035		
		(1.03)	(0.73)			(0.91)	(0.53)		
	Technology at the newest level[a]	-0.024**	-0.028***	.004	-.002	-0.011	-0.013*	.001	-.001
		(-2.49)	(-2.69)			(-1.44)	(-1.69)		
	Industry dummies included	Yes	yes	yes		yes	yes	yes	
Structure of the workforce									
	% blue-collar workers	-0.004	-0.01			0.003	0.000		
		(-0.72)	(-1.25)			(0.53)	(0.01)		
	% higher educated staff	-0.001	-0.003			0.012*	0.015*	-.001	.001
		(-0.12)	(-0.32)			(1.65)	(1.81)		
	% workers with temporary contract	0.041	0.048*	-.008	.003	-0.020	-0.023		
		(1.60)	(1.80)			(-0.86)	(-0.85)		
	Increasing labor flexibility	-0.958*	-0.994*	.083	-.129	0.012	0.138		
		(-1.812)	(-1.82)			(0.02)	(0.26)		
Principal-agent - owner-management issues									
	Profit-sharing for all personnel	0.16	0.168			0.226	0.292*	-.020	.020
		(0.91)	(0.93)			(1.38)	(1.65)		
	Increasing influence shareholders (active owners)	0.508*	0.589*	-.082	.041	0.010	-0.129		
		(1.79)	(1.89)			(0.04)	(-0.43)		
	Quotation on the stock exchange (profit sharing for higher personnel)	-0.522	-0.486			-0.743**	-0.623*	.052	-.039
		(-1.58)	(-1.40)			(-2.31)	(-1.77)		
	Presence of supervisory board	-0.310	-0.197			-1.123***	-1.045***	.053	-.116
		(-1.078)	(-0.65)			(-3.54)	(-2.91)		
Industrial relations system									
	Participation quality circles	0.642**	0.599**	-.092	.037	0.240	0.201		
		(2.27)	(2.02)			(0.89)	(0.68)		
	Participation individual employees	-0.642**	-0.731**	.100	-.054	-0.547**	-0.601**	.037	-.050
		(-2.40)	(-2.56)			(-2.10)	(-2.10)		
	Collective labor agreement	0.755**	0.713**	-.131	.034	0.247	0.195		
		(2.45)	(2.23)			(0.85)	(0.61)		

HRM practices									
	Reorganization (in 1996-1997)	0.191	0.104			-0.041	0.094		
		(0.71)	(0.37)			(-0.15)	(0.31)		
	HRM practices combined	0.035	0.020			0.071*	0.084**	-.006	.006
		(0.97)	(0.52)			(1.94)	(2.01)		
Market strategy and innovation									
	Development competition	-0.602***	-0.662***	.101	-.039	-0.138	-0.299		
		(-3.33)	(-3.42)			(-0.83)	(-1.58)		
	Development internationalization	0.402*	0.402*	-.061	.024	-0.042	-0.079		
		(1.75)	(1.65)			(-0.20)	(-0.33)		
	Process innovation	0.119	0.107			0.174*	0.204*	-.014	.014
		(1.22)	(1.06)			(1.84)	(1.92)		
	Product innovation	-0.160*	-0.160*	.024	-.009	0.199**	0.238**	-.016	.017
		(-1.74)	(-1.69)			(2.19)	(2.33)		
Interaction between management teams and works councils									
	Formal leadership style		-0.891**	.187	-.035		-0.629*	.061	-.033
			(-2.49)				(-1.77)		
	Proactive works council		-0.546*	.088	-.031		-0.947***	.079	-.065
			(-1.79)				(-2.91)		
	Monitoring works council		-0.452				-1.612***	.230	-.076
			(-1.43)				(-4.19)		
	Observations	142	142			142	142		
	LR	46.17	56.17			41.99	69.42		
	Prob > chi2	0.004	0.001			0.013	0.000		
	Pseudo R2	0.236	0.287			0.210	0.348		

Data source: Van het Kaar and Looise (1999).

[a] Due to a large number of missings on this item, a dummy for the missings has been included.

Absolute value of t-statistics in parentheses: * significant at 10%; ** significant at 5%; *** significant at 1%.

(1) and (5): replication, adding and adjusting characteristics used in Jirjahn and Smith model (2006).

(2) and (6): adding interaction between management teams and works councils.

(3) and (4): marginal effects based on column (2).

(7) and (8): marginal effects based on column (6).