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# The performance effects of attitudes of management *vis-à-vis* employee representatives in Belgium

Performance effects of attitudes of management

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## Abstract

**Purpose** – The purpose of this paper is to move beyond the usual analysis of the effects of worker representation. Instead of estimating the impact of the mere presence of works councils on business achievements, the focus is on the performance effects of managerial attitudes *vis-à-vis* worker representation. More precisely, the authors study whether managerial willingness to cooperate with employee representatives and giving them a (timely) say in company policies translates into better company performance.

**Design/methodology/approach** – After an introduction of the typical Belgian workplace representation, the authors briefly discuss the relevant literature and the sample, leading to several hypotheses. The data are from a survey in Belgium complemented with annual report information. Hypotheses are tested with hierarchical OLS regression. Special attention is given to moderating and mediating effects.

**Findings** – The authors find that especially the timing of involving worker representatives in company decision making has a significant impact on labor productivity. More broadly, the authors reveal that these managerial attitudes matter more in larger establishments.

**Research limitations/implications** – Although nationwide, representative, and statistically valid, the data set is quite small (142 usable observations), which obstructs the application of refined estimation techniques.

**Practical implications** – Practical advice should be conditional on country context and size class. In Belgium, smaller enterprises can boost their performance by involving the works council rather late in the process. Probably, this has to do with the powerful position of Belgian unions in works councils. The managerial implications for larger Belgian establishments are very different, however. In these cases, earlier involvement of the works council is advised, as this will enhance the establishment's performance.

**Originality/value** – Belgian works councils reflect a specific employee representation system that is rarely studied. More broadly, attitudinal effects are under-researched. The data set is unique, combining subjective with objective data, so reducing the risk of respondents' bias.

**Keywords** Quantitative, Productivity, Profitability, Belgium, Managerial attitudes, Worker representatives

**Paper type** Research paper



## 1. Introduction

In the industrial relations (IR) literature, considerable attention has been paid to the economic effects on firm performance of having a works council. Especially in the case of Germany, which has a long tradition of codetermination, the impact of worker involvement through works councils has been studied a great deal (for an overview, see Addison, 2009; Jirjahn, 2010a). Other European countries with works councils have, however, been examined much less frequently. In recent years, the estimated effects of (German) works council presence on several firm performance indicators have often been found to be positive. This holds unambiguously for productivity (Mueller, 2012), and to a lesser degree for profitability (Mueller, 2011) and employment growth (Jirjahn, 2010b).

One element in this quantitative stream of empirical literature remains rather underdeveloped: the analysis of behavioral aspects that may really drive what happens inside the organization, in the interaction between management and employee representatives. The favorable impact of works council presence might only come about if there is a fundamentally positive attitude among the people involved, with both management and employee representatives being well disposed toward mutual cooperation. Therefore, another line of research does focus on this behavioral perspective, mostly by applying qualitative research methods (e.g. Kotthoff, 1994; Dilger, 2002; Frege, 2003; Nienhüser, 2009; Pfeifer, 2011; Van der Brempt *et al.*, 2017; Sapulete and van den Berg, 2017).

The purpose of this paper is to test to what degree managerial willingness to cooperate with employee representatives and giving them a say in company policies translate into better company performance. We contribute to the IR literature by focusing on the effect of behavior on economic outcomes, instead of the impact of the mere presence of a works council. Specifically, we add to the behavioral strand in this IR by applying a quantitative research method. Our paper concerns the understudied case of Belgium, which has had mandatory works councils already for many decades. Still, the Belgian employee representation system is largely ignored in the English language IR literature. As we argue below, the Belgian system differs from its German and Dutch counterparts along a few fundamental dimensions, making Belgium an interesting case to examine from a comparative angle.

We make use of a self-constructed survey administered among Belgian CEOs to investigate the perceived role of works councils, their interaction with management, and the impact of this interaction on firm performance. With our unique data set, we are able to look more closely into the way works councils are treated and viewed upon by management, and estimate the effects of these attitudes on establishment-level productivity and profitability. We only find significant direct effects on productivity, in particular of management's inclination to involve the worker representation at a later stage. Another finding concerns the moderating role of firm size, revealing that managerial attitudes regarding worker representatives generate more positive effects in larger *vis-à-vis* smaller establishments. Moreover, we test for mediation, finding a significant indirect effect on profitability.

Section 2 provides a description of the typical Belgian IR system, notably workplace representation. Next, Section 3 gives a brief overview of the existing literature regarding attitudinal aspects of management-works council relations. We then continue in Section 4 with a description of the sample, after which we formulate our hypotheses that are specifically geared to the Belgian setting. The estimation results are presented in Section 5. We summarize and interpret the main findings, and offer suggestions for further research in the concluding Section 6.

## 2. IR in Belgium at the workplace level

For all Belgian companies with at least 50 employees, health and safety committees (hereafter referred to as H&S committees) are mandatory, while companies employing over

100 workers also have to install a works council (Mus, 2010). Contrary to in Germany and the Netherlands, both bodies are joint committees, with both employer delegates and employee representatives holding seats. In many establishments, trade union delegations are also present. Although official statistics are lacking, Vandaele and Faniel (2012, p. 130) estimated that overall union density is relatively high and even slightly growing in the first decade of this century, from around 57 to 60 percent. Formal statistics on the proportion of employees represented by a works council or committee are lacking. However, since both the government and the powerful unions see to it that elections are held every four years in all eligible establishments, the incidence of representative bodies is estimated to be high, especially in comparison to Germany. The latest European Company Survey (ECS) of 2013 confirms this claim, revealing that about 54 percent of all Belgian firms have an employee representation body, while the large and medium-sized Belgian companies even score around 98 and 83 percent, respectively (Eurofound, 2015). If no H&S committee or works council is established, this is most often due to a lack of candidates[1].

The Belgian dual channel system is evidently dominated by trade unions, which have the exclusive right to nominate their own members for the two representation bodies. There is a strict division of tasks between the union delegation in the firm (they have the exclusive legal right to negotiate the terms of employment), on the one hand, and the works councils and H&S committees, on the other hand (Van Gyes, 2006; European Commission, 2008). In principle, the committees in the smaller establishments are only involved in the work environment's H&S issues, whereas works councils fulfill a deliberative role in all remaining matters. However, if an establishment does not have a works council, their information and consultation rights are partly descended to the H&S committee.

Belgian law specifies a wide range of social and financial-economic issues about which the employee representation body needs to be informed (Steyaert *et al.*, 2009). The employer must provide this information timely, so as to enable the worker representatives to act on this information to avoid being overtaken by events. The employee delegation of the works council has the statutory right to be assisted by an external auditor, who clarifies the supplied information, and judges whether this information meets the legal requirements of completeness and fairness. In Europe, this is unique, being considered to be a very strong asset of Belgian works councils (De Beelde and Leydens, 2002).

Moreover, the law states explicitly that all organizations concerned should consult their employees about a range of specified issues. The H&S committees may give advice on social matters, whereas the works councils' rights encompass financial-economic issues as well (Mus, 2010). However, the consultation rights of Belgian works councils are less extensive than those of their German and Dutch counterparts. Additionally, Belgian law does not oblige employers to follow the works council's advice (Steyaert *et al.*, 2009). Furthermore, legal co-decision rights are underdeveloped in Belgium, foremost as compared to Germany, being well-known for its very influential works councils due to the right of codetermination on many policy areas (cf. European Commission, 2008; Addison, 2009). The right of Belgian worker representatives to co-decide covers a few specific social issues only, mainly in the field of leisure (holidays, social benefits such as sport facilities, and canteen services).

The influence of Belgian works councils appears to be overshadowed by that of the unions, whose delegates are exclusively entitled to appeal against employer's decisions, handle employee complaints, actively monitor the observance of the law and collective agreements, and negotiate on all terms and conditions of employment at the workplace. According to Rigeaux (2000, p. 14), this may induce Belgian employers to provide less information to the works council. And when they do present rather sensitive material, they quite often demand confidentiality from the works council members, and they may try to circumvent their duty to provide financial-economic information to works councilors under the pretext of urgent competitive reasons (Steyaert *et al.*, 2009, pp. 240-241).

This introduction of the Belgian workplace representation system fits with the characterization of countries in the latest ECS 2013 overview report (Eurofound, 2015, pp. 107-112). Of the four distinguished types, Belgium scores high in the category “extensive and conflictual,” implying that, on average, the Belgian employee representatives have sufficient facilities and receive an intermediate level of information, but feel that they have rather limited influence on decision making. Moreover, mutual trust between employee representatives and management is low, and the incidence of industrial action is quite high.

### 3. Brief overview of management-works council relations in the literature

#### *Theoretical insights*

The most cited theory paper is probably Freeman and Lazeur (1995), analyzing the works councils-firm performance relationship by examining the advantages and risks of sharing information and involving worker representatives in company decision making. Ideally, works councils serve as an effective intermediary between management and workforce, exchanging valuable information top-down and bottom-up, promoting trust and creating commitment among employees, which all should contribute to firm-level surplus. For instance, works councils can have a positive effect on labor productivity not only because worker involvement will encourage workers to become dedicated to their firm, which translates into greater effort and hence higher productivity, but also because the regular consultations between workers and management may provide the latter with useful information regarding efficiency-enhancing measures. However, a downside might be rent-seeking behavior on the part of the workers and their representatives, using their bargaining power at the cost of the firm’s results. Hence, management may decide to involve their employees to a lesser degree or not at all. Freeman and Lazeur’s arguments have been extended by, e.g. Addison (2009), pointing at lower contracting costs and reduced hold-up risks, and Kaufman and Levine (2000), stressing all kinds of costs for employers of having a worker body. Therefore, the theoretical expectation for “profitability” cannot be unconditional (cf. Mueller, 2011), but depends on whether the benefits or costs are dominant.

Remarkably, most extant empirical studies only estimate the effect of the mere presence of works councils on business achievement, so ignoring the subtle underlying mechanisms. Van der Brempt (2014) refers to this as the mainstream “input-output” framework, suggesting an alternative “input-throughput-output” approach, taken from the organizational behavior literature. This implies that much more weight is given to what happens during the process of management-works council interaction, as reflected in, e.g., mutual trust and cooperation. In the end, such underlying mechanisms will determine whether or not the right conditions are in place to stimulate firm performance.

#### *Empirical evidence*

The majority of German studies are based on the consecutive waves of the IAB (Institute for Employment Research) Establishment Panel, of which only the 2006 wave has inquired about the cooperativeness of the works council; all the other waves only asked whether or not a works council was present. This neglects that, in practice, many employee consultation bodies do not function optimally – for instance, due to disinterest or inexperience at the side of the workers or as a result of obstructive managers frustrating employee voice. Many of these studies try to proxy this aspect of works council functioning by distinguishing between smaller and larger establishments, frequently finding that the impact of works councils on firm performance is more often significant and stronger in larger workplaces (e.g. Addison *et al.*, 2001; Mueller, 2011). In larger firms, worker representation is usually endowed with more support and resources, while relations with management tend to be more professional.

Still, a failure to include the quality of functioning of worker representation bodies (specifically, that of the interaction) may lead to biased results when only estimating the effect of their simple presence. Inspired by the work of Kotthoff (1994), who distinguishes between different types of German works councils that each reveal different behavior toward management, Frege (2002, 2003) convincingly argues that even in the case of legally mandated works councils, mutual cooperation between management and employee representatives may not emerge. Different works council types will have different impact on firm performance. For instance, a works council with a well-disposed attitude of employee representatives toward management and vice versa will have quite a different impact on organizational outcomes as opposed to the case where either or both parties adopt an antagonistic stance. Group dynamics in the form of parties' attitudes and interaction processes play an important role in determining the influence of representative employee participation. A relatively modest, but growing number of studies underpins this line of reasoning.

Early evidence comes from Frick (2002), finding a very strong positive effect of antagonistic works councils on the number of high-performance work practices, and Dilger (2002) establishing that tough and cooperative works council types stimulate the introduction of flexible working-time arrangements. Jirjahn and Smith (2006) examined which determinants drive a supportive or unsupportive managerial environment regarding works councils, reasoning that having cooperative IR is an important prerequisite for effectively functioning worker bodies, and hence for a positive firm performance impact. Nienhüser (2009) distinguishes between four works council types on the basis of two dimensions: weak vs strong and willing to cooperate vs less willing to cooperate. His results indicate that strong works councils conclude more works agreements than their weaker counterparts. In addition, he analyzes the determinants of management's assessment of the works agreements, revealing that works councils less willing to cooperate affect management's valuation of the agreement negatively. Pfeifer (2011) finds that well-disposed and active works councils are associated with a strong positive effect on productivity (compared to firms without worker representation), while active but noncompliant works councils are found to have a stronger negative effect on profitability than more cooperative councils.

Three more studies outside of Germany are worth mentioning. A Dutch study of van den Berg *et al.* (2011) shows that management's willingness to cooperate with the works council enhances the firm's economic position, and so does a constructive attitude of the council toward management. Moreover, the earlier the works council is informed and asked for advice, the better this works out for the organization. Second, a cross-country study by van den Berg *et al.* (2013) reveals the effect of managerial attitudes toward worker participation on performance (measured as a subjective indicator) in five internally coherent clusters of EU countries, grouped according to their worker representation system. Their "French cluster" includes Belgium, *inter alia*. For this cluster, if management believes that the employee representation helps them in a constructive manner, this is positively associated with performance. This impact is moderated by the number of employees, for example, a positive attitude of management *vis-à-vis* the worker body has a stronger effect in the smallest and the largest firms, as compared to the intermediate firms. Finally, a recent Belgian study of Van der Brempt *et al.* (2017) distinguishes employee and employer delegates in Belgian works councils, and further subdivides the former into representatives of three different unions (Christian, Socialist, and Liberal) and of three different functional categories (junior managers, blue- and white-collar workers). All these subgroups often have divergent characteristics and interests, which in turn may have an adverse effect on trust and cooperation, and hence on the effectiveness of representative participation.

#### 4. Data and hypotheses

##### *Data collection and sample representativeness*

In mid-2011, CEOs (or their representatives) of 1,128 private enterprises across Belgium were approached with a survey containing all sorts of (objective and subjective) questions about their firm, the functioning of the board of directors, and the characteristics of the social dialogue inside their establishment. The targeted firms operate in all industries of the private sector, and include all size classes, from very small establishments of around 10 employees to very large ones with up to over 2,000 employees. Originally, 233 CEOs responded, of whom 20 percent did not have any form of worker representation in their establishment, which fits nicely with the factual statistics. These firms were removed from the sample, as we only analyze establishments in which either a works council or a H&S committee is installed. We further lose a number of observations due to missing values[2]. Finally, we drop a handful of outliers[3].

Due to the chosen model specifications, our final sample involves 142 observations, implying a net response rate of 12.6 percent. Set against the macro-level division of firms over the three main Belgian regions (Flanders, Wallonia, and Brussels), we observe that our sample hardly deviates from the true population with respect to geographical dispersion. With regard to industry distribution, manufacturing companies in the sample account for 45 percent, just 2 percent higher than in the actual population. Trading firms are rather underrepresented with 12 percent, set against 26 percent in the Belgian economy. Hence, the third and final sector, services, is overrepresented.

##### *Subjective and objective variables*

We included questions with respect to the functioning of the worker representation, and other aspects of labor relations in general, which provide information that is usually not available for quantitative work. This makes the data unique in its kind. A large number of items are in the form of subjective statements that respondents were asked to evaluate from their establishments' perspective, mostly with answer possibilities ranging from 1 to 5 (totally disagree – totally agree, very little – very much, etc.). These statements concern, for example, the extent to which mutual understanding between management and worker representation is good, whether or not the works council is involved in the decision-making process and at what stage, the extent to which worker representatives are capable to perform their tasks well, and the extent to which social dialogue can contribute to greater efficiency and profitability.

As we knew the firm of each respondent, we were able to find factual data for these firms in the national data set “Belfirst,” such as the number of employees, percentage of part-time workers, labor productivity, and capital intensity. Hence, as opposed to most other studies in this field, we could combine the “subjective” answers of the CEOs (or their representatives) with a series of objective performance measures. An unexpected shortfall appeared to be that the respondents, quite systematically, failed to answer subjective questions and statements that were formulated in a negative way. For example, half of the respondents did not fill in the statements “In the past two years, the worker representatives delayed the decision-making process” and “It is unlikely that the external auditor shares valuable information with the worker representatives,” whereas the statement “The external auditor provides valuable information to the worker representatives” scored twice as many responses.

In survey studies in social sciences, a large number of similar subjective items are normally included to increase the reliability and validity of the respondents' answers regarding latent constructs. To test the validity and reliability of our attitudinal measures, we ran factor analyses and calculated Cronbach  $\alpha$ 's per group of items associated with the same underlying attitudinal construct (Hof, 2012). Items loading high on one factor (and not

on any other) are expected to represent one and the same underlying construct. Subsequently, a few meaningful (interpretable) constructs were selected and used in our OLS regression analysis. Especially with a small-sample data set such as ours, a model's specification should include a limited number of measures of latent constructs that each express a particular attitude, next to "traditional" control variables.

*Measures and main-effect hypotheses.* We are foremost interested in the estimated effects of a number of attitudinal aspects (concerning the interplay and mutual understanding between management and worker representatives) on two objective performance indicators. The first dependent variable is the log[4] of labor productivity, and the second is profitability, as measured by return on total assets (ROA). As both are continuous variables, we performed straightforward OLS estimations. By taking these two variables from the 2012 version of Belfirst while all other variables concern the year 2011, we try to avoid – at least for a considerable part – the ever-threatening risk of reverse causality, that is, in our case, whether a positive attitude leads to higher firm performance, or whether higher firm performance leads to a positive attitude[5]. We have divided our independent variables into the following categories: managerial attitudes (our key variables), firm and sector characteristics, personnel features, HRM attributes, and organizational change variables. A short overview is reported in Table I[6].

Our key explanatory variables involve three managerial attitudes, all three generated through factor analysis[7]. The first one includes two dummy variables that indicate whether the consultation body was "Not involved" or "Late involved" in company decision making, as set against the group of firms where workers were involved early, which is only 18 percent of the total sample. Based on the findings by van den Berg *et al.* (2011), revealing a positive association of early involvement of workers with a stronger economic position of the firm, we formulate our first hypothesis:

*H1.* Early involvement of workers reflects trust and willingness to cooperate, which in turn translates into higher firm performance.

The second attitudinal variable is "Influence WC on company policies" (WC = works council and H&S committee), and concerns the perceived influence of the consultation body on company management. This is the weighted average of five questions where the respondent was asked (on a 1-5 scale) as indicate how much influence the consultation body has on different company policy areas: technology, finance, organization, working conditions, and personnel issues (Cronbach's  $\alpha$  is 0.73). As Table I shows, the overall average score is 2.5. Theoretically, an influential worker body could have significant impact on any performance indicator, but not necessarily positive, as for instance Pfeifer (2011) has shown. However, because a works council is supposed to act to the benefit of the firm, we formulate our second hypothesis:

*H2.* Works council influence is positively associated with firm performance.

The third attitudinal variable is "Open consultations," which represents the weighted average of five questions regarding the respondent's satisfaction about the firm's social dialogue (two different questions), the mutual understanding between management and consultation body representatives, and whether or not management and employee representatives are willing to compromise (Cronbach's  $\alpha$  is 0.77). On the whole, respondents were rather positive regarding this aspect. Based on similar findings by Dilger (2002), van den Berg *et al.* (2011), and Nienhüser (2009), reporting that a willingness to cooperate is positively associated with several firm performance indicators, we formulate our third hypothesis:

*H3.* Constructive managerial attitudes are positively associated with higher firm performance.



Variable	Obs	Mean (SD)	Explanation
<i>Dependent variables</i>			
Labor productivity (log) 2012 (B)	142	4.36 (0.5)	Gross value added per employee (in full-time equivalents)
ROA 2012 (B)	142	5.6 (9.5)	Profitability, measured by return on total assets
<i>Mutual attitudes and behavior</i>			
Late involved	142	0.30 (0.5)	Employee representatives are being involved only just prior to the final company decision making
Not involved	142	0.52 (0.5)	Employee representatives are not involved in company decision making
Early involved (reference group)	142	0.18 (0.4)	Employee representatives are being involved in all stages of company decision making
Influence WC on company policy (construct)	142	2.52 (0.6)	Weighted average of five questions where the respondent was asked (on a 1-5 scale) as indicate how much influence the consultation body has on different company policy areas: technology, finance, organization, working conditions, and personnel issues
Open consultations (construct)	142	3.68 (0.5)	Weighted average of five questions related to the degree of the respondent's satisfaction about the firm's social dialogue (two different questions), the mutual understanding between management and the representatives of the consultation body, and whether or not management and employee representatives are willing to compromise
<i>Firm and sector characteristics</i>			
Number of workers (log) (B)	142	4.90 (1.0)	Log of total employees in the establishment
Manufacturing	142	0.46 (0.5)	Percentage of respondents in manufacturing
Building industry	142	0.12 (0.3)	Percentage of respondents in building industry
Services (reference sector)	142	0.42 (0.5)	Percentage of respondents in services
Innovativeness (scale 1-5)	142	2.55 (1.0)	On a five-point scale, where 1 = focus on longstanding products and 5 = focus on R&D, innovation and technological leadership
Capital intensity (log) (B)	142	2.96 (1.5)	Log of tangible fixed assets divided over the number of ftes
<i>Personnel features</i>			
Union density	142	48.1 (36.6)	Percentage of unionised employees in the firm
Dummy union	142	0.25 (0.4)	= 1 if union density unknown
White-collar workers (B)	142	0.48 (0.3)	Percentage of white-collar workers in the establishment
Part-time workers (B)	142	0.17 (0.2)	Percentage of part-time workers in the establishment
<i>HRM attributes</i>			
Merit pay (no-yes)	142	0.69 (0.5)	= 1 if the firm has performance-related pay for any class of employees
Degree of bureaucracy (scale 1-5)	142	3.87 (1.1)	On a five-point scale, where 1 = very few rules and procedures and 5 = most activities subject to rules and procedures
Average number of workers who receive training (index) (B)	142	0.68 (0.5)	Average number of workers that receive training. This can be more than once per year
<i>Changes in the organization</i>			
Turnover rate (B)	142	0.01 (0.1)	Relative change in full-time equivalents in 2011 as compared to 2010
Organizational change (construct)	142	0.88 (0.9)	Company involved in none, one or more of the following changes (0 = none; 4 = all four) related to merger, take-over (as the buying party), take-over (as the target), and/or restructuring

**Table I.**  
Variable definitions  
and descriptive  
statistics

**Notes:** FTEs, full-time equivalent (FTE) employees. All independent variables relate to the year 2011  
**Source:** CEO data set, except B = taken from Belfirst data set

The remaining categories of independent variables serve as control variables. We selected those that have been advanced by several leading authors in the IR literature, among whom are Addison *et al.* (2001), Jirjahn and Smith (2006), and Mueller (2011). With respect to the group firm and sector characteristics, we include the “Number of workers,” “Manufacturing,” and “Building industry” (with Services as the reference group), the degree of “Innovativeness,” and “Capital intensity.” Regarding personnel features, we add three different variables: “Union density[8],” the proportion of “White-collar workers,” and the proportion of “Part-time workers.” We discard two additional variables due to collinearity. In particular, the workers’ education level correlates much too strongly with the percentage of blue- and white-collar employees, while gender correlates heavily with the proportion of part-time workers. We have three control variables involving HRM attributes: “Merit pay,” the “Degree of bureaucracy,” and the “Average number of workers who receive training.” Additionally, we add two variables that indicate change in the organization: employee “Turnover rate” and “Organizational change,” related to merger, an acquisition, and/or restructuring event.

#### *Expected moderation and mediation effects*

Based on prior research, we expect different outcomes for smaller *vis-à-vis* larger firms. This gives our fourth hypothesis:

*H4.* The three hypothesized effects as set out above will be stronger for larger firms.

The argument for this moderation effect is that larger firms tend to have a more professional consultation body that acts as an effective intermediary between shop floor and management. Moreover, even well-disposed mutual attitudes and behaviors can come under strong pressure as a consequence of hectic times (such as a major reorganization), or cannot evolve as a result of too much red tape. Alternatively, well-disposed mutual attitudes may thrive in firms characterized by a high entrepreneurial and innovative spirit.

A second issue relates to the estimated impact of managerial attitudes concerning worker representation on profitability. Judged by the specific Belgian setting in which unions dominate works councils, the latter may not be that powerful. Hence, managerial attitudes regarding the works council might very well not generate any direct effect on firm profitability. However, affirmative managerial attitudes *vis-à-vis* employee representatives may stimulate employee commitment, which enhances productivity. In turn, enhanced productivity may improve profitability. This is our fifth hypothesis:

*H5.* The positive effect of our three attitudinal variables on profitability runs through their positive impact on productivity.

If such an indirect effect can be established empirically, we have evidence of mediation (cf. Preacher and Hayes, 2008).

## 5. Estimation results

### *Productivity and moderation*

We first focus on “Labor productivity.” The results can be found in Table II. We will only discuss our attitudinal variables. All remaining control variables display the expected sign, with several being significant. Column (1) represents the findings of the basic model containing all control and independent variables. Just one of our three key explanatory variables is significantly positive, namely “Late involved,” suggesting that when worker representatives are only consulted during the final stage of decision making, this stimulates productivity. Hence, early involvement has exactly the opposite effect – a result that deviates from the findings for the Netherlands by van den Berg *et al.* (2011), and contradicting our first hypothesis[9].

Explanatory variables	(1)	(2)	(3)	(4)
<i>Mutual attitudes and behavior</i>				
Late involved	0.239** (2.384)	1.167* (1.833)	0.199** (2.004)	0.239** (2.368)
Not involved	0.144 (1.497)	2.000*** (3.179)	0.109 (1.144)	0.144 (1.485)
Influence WC on company policy	-0.006 (-0.110)	0.028 (0.536)	-0.713*** (-2.662)	-0.006 (-0.111)
Open consultations	-0.049 (-0.725)	-0.047 (-0.734)	-0.053 (-0.800)	-0.148 (-0.415)
Late involved × Number of workers (log)		-0.191 (-1.499)		
Not involved × Number of workers (log)		-0.376*** (-2.990)		
Influence WC × Number of workers (log)			0.150*** (2.692)	
Open consultations × Number of workers (log)				0.019 (0.284)
<i>Firm and sector characteristics</i>				
Number of workers (log)	-0.051 (-1.345)	0.216* (1.822)	-0.422*** (-2.958)	-0.120 (-0.486)
Manufacturing	0.142* (1.736)	0.148* (1.874)	0.115 (1.434)	0.146* (1.753)
Building	-0.070 (-0.586)	0.012 (0.102)	-0.071 (-0.606)	-0.066 (-0.542)
Innovativeness	0.074** (2.049)	0.075** (2.183)	0.064* (1.811)	0.074** (2.054)
Capital intensity (log)	0.087*** (3.712)	0.102*** (4.451)	0.089*** (3.908)	0.087*** (3.709)
<i>Personnel features</i>				
Union density	0.002 (1.076)	0.002 (1.101)	0.002 (1.010)	0.002 (1.025)
Dummy union	0.240* (1.920)	0.219* (1.814)	0.206* (1.673)	0.232* (1.804)
% white-collar workers	0.534*** (4.082)	0.612*** (4.795)	0.503*** (3.925)	0.531*** (4.021)
% part-time workers	-0.819*** (-3.629)	-0.706*** (-3.215)	-0.855*** (-3.879)	-0.810*** (-3.551)
<i>HRM attributes</i>				
Merit pay	0.069 (0.856)	0.073 (0.953)	0.078 (1.002)	0.070 (0.864)
Degree of bureaucracy	0.078** (2.475)	0.080*** (2.629)	0.080** (2.602)	0.079** (2.480)
Workers receiving training	0.114 (1.521)	0.0857 (1.171)	0.117 (1.601)	0.114 (1.509)
<i>Changes in the organization</i>				
Turnover rate	0.859** (2.136)	0.937** (2.427)	0.792** (2.015)	0.877** (2.146)
Organizational change	0.049 (1.237)	0.040 (1.029)	0.049 (1.280)	0.050 (1.250)
Constant	3.418*** (8.984)	1.908*** (2.766)	5.245*** (6.782)	3.781*** (2.835)
Observations	142	142	142	142
Adjusted $R^2$	0.430	0.475	0.457	0.425
<b>Notes:</b> $t$ -statistics in parentheses. * $p < 0.1$ ; ** $p < 0.05$ ; *** $p < 0.01$				

**Table II.** Results attitude model explaining Labor productivity (log)

The insignificant outcomes for the two other attitudinal variables implies that we cannot confirm or reject the second and third hypothesis either.

When we interact the “Number of workers” with “Late involved” and “Not involved,” respectively (Column 2), we see that establishment size matters. The interaction term with “Not involved” turns out significantly negative. Moreover, an additional  $F$ -test reveals that the combination of “Not involved,” “Late involved” and their two interaction terms is jointly significant ( $F = 4.72$ ). This means that, *ceteris paribus*, involving worker representatives late or not at all gives a positive impact on labor productivity for the smallest firms. As the number of employees grows, this positive effect weakens. Beyond a certain turning point (204 workers for “Not involved” and 461 for “Late involved”) the effect becomes smaller when compared to the group of establishments that are in the “Early involved” category.

This is visualized in Figure A1. This outcome is in line with our fourth hypothesis: in larger firms, it pays more to consult early with the workforce through a representation body.

A second interaction effect once again indicates the impact of establishments growing in size. In Column (3), we include the moderator “Influence WC” $\times$ “Number of workers.” In the basic model, the main effect of the Influence WC variable is negative but insignificant. However, in combination with firm size, the effect on “Labor productivity” as a result of works council influence on company policy becomes significantly less negative when the number of employees rises, again in line with the fourth hypothesis. Figure A2 provides a graphical representation. From Figure A2 we learn that, overall, in the Belgian context, firms are hampered and not stimulated by an influential consultation body, as all effects on “Labor productivity” are located in the negative quadrant.

Finally, Column (4) includes the results for the third possible moderator by adding the product term “Open consultations” $\times$ “Number of workers.” This estimate is insignificant, against the prediction in our fourth hypothesis. By way of exploratory analysis and robustness check, we also ran models with “Organizational change,” “Turnover rate,” “Degree of bureaucracy,” and “Innovativeness” as potential moderators. However, all results turned out to be insignificant (available upon request).

#### *Profitability and mediation*

Additionally, we estimated the (direct) effect of managerial attitudes on profitability (i.e. ROA). In brief, this model produced only very insignificant coefficients, not worthwhile to present here (available upon request). As argued above, this may mask an indirect effect of one of our key variables on profitability, running through labor productivity. Because our strongest result is connected to the timing variables (“Late involved” and “Not involved”), we chose to concentrate on these two, to establish not only whether they affect labor productivity, but also whether the latter significantly impacts profitability. If so, this is an indication of mediation. Table III shows the results of our mediation test.

From Table III, we can infer the same pattern as from Table II: there is a significant effect of “Late involved” on “Labor productivity” (Column (1)), but not on ROA (Column (2)). At the same time, there is a significant effect of “Labor productivity” on ROA (Column (3)). This suggests the possibility of full mediation, which we subsequently tested in a more sophisticated manner with the aid of the Preacher and Hayes (2008) method (full results available upon request). The outcome [10] shows that there is indeed evidence suggesting that late involvement of worker representatives affects profitability positively, albeit indirectly through its positive effect on labor productivity. This finding offers support for our fifth hypothesis.

## **6. Conclusion and discussion**

This study focuses on the performance effects of management attitudes *vis-à-vis* works councils in the understudied case of Belgium. The existing literature is still dominated by empirical studies that only examine the impact of the mere incidence of works councils on business achievements, mainly in Germany. Our survey takes managerial attitudes into account. Hence, we can estimate the effects of these attitudes on productivity and profitability, so opening the black box of the performance impact of representation bodies. We argue that having a works council *per se* does not provide a guarantee for better firm performance; instead, research should concentrate on the ways in which managers and employee representatives view the other side (and, probably, how they behave accordingly).

Because we can combine the subjective assessments of the respondents with a series of objective performance measures taken from a national database, we are able to bypass the risk of respondents’ bias. Another obvious difficulty of our type of data concerns the issue of reversed causality. Perhaps, higher productivity causes managerial attitudes (and mutual relations) to be favorable, rather than the other way around. We have tried to

Explanatory variables	(1) Labor productivity (log)	(2) ROA	(3) ROA
<i>Mutual attitudes and behavior</i>			
Late involved	0.239** (2.384)	-0.927 (-0.358)	
Not involved	0.144 (1.497)	-2.627 (-1.057)	
Influence WC on company policy	-0.006 (-0.110)	0.975 (0.702)	1.332 (1.067)
Open consultations	-0.049 (-0.725)	-0.130 (-0.0752)	0.753 (0.478)
<i>Firm and sector characteristics</i>			
Number of workers (log)	-0.051 (-1.345)	-1.544 (-1.577)	-1.122 (-1.251)
Manufacturing	0.142* (1.736)	0.738 (0.349)	-1.092 (-0.562)
Building	-0.070 (-0.586)	1.016 (0.328)	1.872 (0.663)
Innovativeness	0.074** (2.049)	1.214 (1.312)	0.855 (1.041)
Capital intensity (log)	0.087*** (3.712)	-0.496 (-0.823)	-1.381** (-2.386)
Labor productivity (log)			10.41*** (5.011)
<i>Personnel features</i>			
Union density	0.002 (1.076)	0.010 (0.251)	-0.007 (-0.207)
Dummy union	0.240* (1.920)	0.518 (0.160)	-1.884 (-0.631)
% white-collar workers	0.534*** (4.082)	1.755 (0.520)	-4.312 (-1.325)
% part-time workers	-0.819*** (-3.629)	3.043 (0.523)	12.20** (2.269)
<i>HRM attributes</i>			
Merit pay	0.069 (0.856)	1.805 (0.874)	0.691 (0.368)
Degree of bureaucracy	0.078** (2.475)	0.191 (0.234)	-0.492 (-0.650)
Workers receiving training	0.114 (1.521)	1.561 (0.808)	0.559 (0.315)
<i>Changes in the organization</i>			
Turnover rate	0.859** (2.136)	1.679 (0.162)	-5.882 (-0.614)
Organizational change	0.049 (1.237)	-1.538 (-1.508)	-2.178** (-2.335)
Constant	3.418*** (8.984)	7.062 (0.719)	-34.37*** (-3.053)
Observations	142	142	142
Adjusted R <sup>2</sup>	0.430	-0.0450	0.128

**Table III.**  
Testing for mediation  
in the attitude model

**Notes:** *t*-statistics in parentheses. \* $p < 0$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

tackle this issue by including both our dependent variables for the year 2012, whereas our independent variables are measured in the year before. Unfortunately, we could not test directly for endogeneity because data limitations, such as a small sample size, obstruct the application of advanced econometric solutions. In future work, we hope to collect panel data for a larger sample of enterprises, offering the opportunity to take the next step in unraveling the causalities underlying works council functioning.

Our most prominent result is the finding that, in Belgium, CEOs involving workers in company decision making at an early stage only positively affect labor productivity in very large establishments. In the smaller ones, the effect on labor productivity is more beneficial if workers are being involved very late. Although this is not in the spirit of the Belgian law, this finding does seem to tune well with the rather delicate relationship that exists between the union-dominated worker bodies and management. Furthermore, we find no direct effect of any of our attitudinal variables on profitability, but there is an indication of (full) mediation; overall, late involvement contributes positively to productivity, while productivity in turn has a favorable impact on profitability. Apparently, these particular forms of social interaction are geared to the Belgian workplace in such a way that the business outcome is not necessarily hindered by this type of social dialogue.

This set of findings underlines that Belgium and the Netherlands have rather different IR systems. On the whole, Dutch managers may have much more accepted the works council

as a mature consultation partner (van het Kaar and Looise, 1999), whereas Belgian management usually only abides by the minimum requirements with respect to worker involvement as formulated in the law. Because Belgian works councils are dominated by unions, management runs the risk that confidential information they give to the works council will end up circulating across trade union ranks. Alternatively, precisely because Belgian unions are so strong and watch over the rights of employee representatives, management cannot afford to circumvent the worker representatives altogether, as this would create social unrest. This would explain why we find a positive effect for “Late involved” rather than for “Not involved,” *ceteris paribus*.

However, extant work suggests that the manner in which late involvement is executed in an organization may differ across establishment size classes. That is, in small firms, management might tend to primarily use informal channels to involve employees in the decision-making process, while they will only resort to the formal consultation of the works council when this is legally obliged, such as when announcing reorganizations or when financial difficulties occur. In contrast, in large firms, taking the route of the formal mechanism of a works council is necessary as the organization is too large to rely primarily on informal mechanisms to involve employees. This finding is in line with our earlier remarks about the factual context in Belgium and the characterization of Belgian IR by the ECS in 2013, which demonstrates the rather low level of mutual trust and involvement. In all, our findings reveal that any practical advice should be conditional on country context and size class. In Belgium, smaller enterprises can boost their performance by involving the works council rather late in the process, which is in contrast with findings from earlier work conducted in the Netherlands. Probably, this has to do with the much more powerful position of Belgian unions in works councils *vis-à-vis* the Netherlands. The managerial implications for larger Belgian establishments are very different, however, and much more in line with what prior work revealed for the Netherlands. In these cases, earlier involvement of the works council is advised, as this will enhance the establishment’s performance. Surely, further comparative work across countries and enterprises is needed to increase our understanding of the subtle impact of the institutional and firm context on the effect of worker representation on company performance.

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### Notes

1. In 2012, due to a lack of candidates for the H&S committees, the elections were terminated in 18.8 percent of all eligible establishments. For works councils, this amounted to 13.4 percent (Federal Public Service Employment, Labour and Social dialogue, n.d., part 1, p. 30).
2. Managerial attitudes are more difficult to capture, as for this, we were dependent on the willingness of the respondents to answer a series of rather sensitive questions concerning forms of social interaction, and opinions about the other side’s behavior. Indeed, quite a number of those questions generated substantial missing values.

3. In such a small sample as ours, a few large outliers have a big impact on the outcome of the model. However, at the same time, dropping outliers reduces our sample size even more. So, we decided to leave out only those variables with values exceeding three times the standard deviation (both plus and minus). In our final model specifications, this implies that we only lose eight observations due to outliers concerning the variables labor productivity, return on total assets, capital intensity, and turnover rate.
4. The independent variables “Number of workers” and “Capital intensity” have been logged as well, in both cases because of their skewness. For the sake of the text’s legibility, we henceforth only refer to logs in the tables.
5. In an additional attempt to control for reversed causality, we initially included the 2011 log labor productivity as a control variable. However, due to the very high correlation coefficient (over 0.9) between the 2011 and 2012 variables, adding the lagged dependent variable turned all remaining explanatory variables into insignificant values.
6. We also checked for possible correlations between all variables in the final sample, but we found no high values. The full correlation matrix is available upon request.
7. For reasons of interpretability, the two dummy indicators belonging to the first attitudinal variable could be taken up in their original form while the other two attitudinal variables are constructs based on high factor loadings; they were both calculated separately by taking their weighted averages. Statistics are available upon request.
8. We do so to control for the possible impact of union presence on firm performance. Since this figure is only known for 106 out of the 142 firms, we included a dummy variable taking value 1 if the density rate is missing. In that way, we can still perform our analyses on the whole sample – which is rather small anyway – without losing any more observations (see e.g. Kantor and Fishback, 1995).
9. Of course, we cannot completely rule out reversed causality, implying that when productivity develops favorably, there is less need to consult the workers at an early stage. But, as argued earlier, we try to circumvent this problem by taking up the (log) labor productivity of one year later.
10. To determine significance, standard practice is to check the  $t$ -value or the  $p$ -value, but in the case of indirect effects this is not feasible in SPSS. The solution is to use a bias-corrected confidence interval around the product coefficient of the indirect effect, and to re-estimate the sample 10,000 times (bootstrapping). In our case, this resulted in a confidence interval ranging from 0.42 to 5.27. Since this interval does not include 0, the indirect effect is significant at  $\alpha = 0.05$  (full results available upon request).

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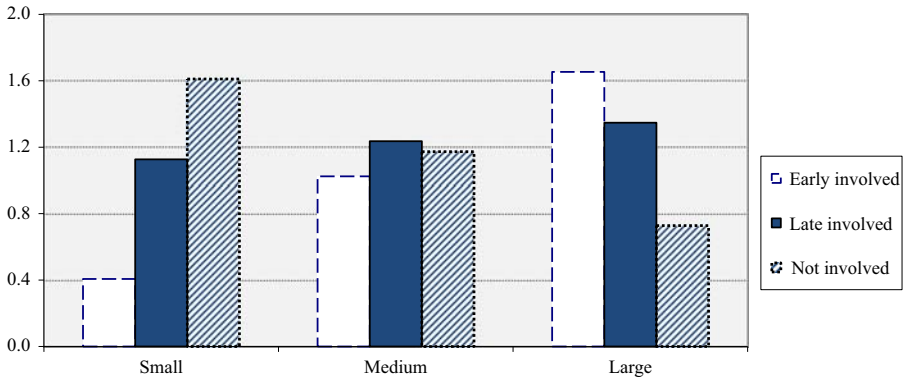
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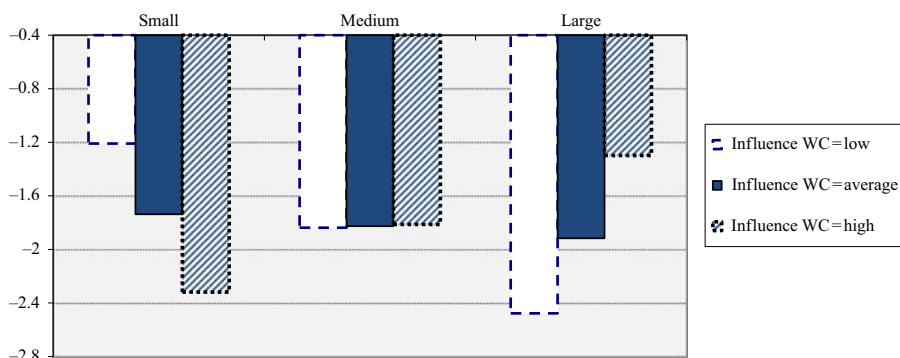
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**Appendix. Graphical representation of interaction effects in Table II**



**Figure A1.**  
Timing of involvement set against number of employees (small-medium-large)

**Note:** The vertical axis depicts the effect on the percentage change in Labor productivity (log)



**Note:** The vertical axis depicts the effect on the percentage change in Labor productivity (log)

**Figure A2.** Perceived influence of consultation body set against number of employees (small-medium-large)

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