WHAT TRIGGERS THE ESTABLISHMENT OF A WORKS COUNCIL?[1]

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ABSTRACT
This paper presents the first survey evidence about the agent and the event which triggers the establishment of a works council. We show that an increasing uncertainty of the workforce because of an organisational shock increases the probability of an establishment which indicate that the risk insurance function of a works council partly determines the trigger to establish a works council. The organisational shock is prevalent in around 40 percent of the companies establishing a works council. The workforce calls for election in around two third of all cases and the need for workers voice has a significant influence here. In the other third, the management was involved in the establishment.

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INTRODUCTION

There is a long tradition of empirical research on the effects of works councils (Frege 2002, Addison *et al.* 2004). Most contributions to this tradition analyse the effects of works councils on firm performance (cf. Addison *et al.* 2004) and wages (cf. Addison *et al.* 2006). These economic outcomes of enhanced firm performance, rent sharing, and the diversity in works councils' coverage may indeed be partly explained by the circumstances of establishment (Addison *et al.* 2004). Once established, voice regimes (like works councils' indirect formal voices) tend to be difficult to change because managers lack the freedom to choose their ideal voice regime (Willman *et al.* 2006). The result is that, in many establishments, voice regimes (and, by implication, a large part of the institutional response to voice) reflect normative management values and the balance of power between workers and management at the time of establishment rather than present needs (Charlwood 2006). This is a major concern for empirical estimations because it results in an endogeneity bias in regressions on economic outcomes. If the establishment of works councils is not random distributed, and establishment partly determines economic outcomes later on, regression results will be biased. Moreover, the establishment of works councils fundamentally changes intra-firm organisation in terms of the legitimacy of management decisions, employee involvement, and organisational processes. In spite of its relevance, the trigger mechanism for establishing a works council has not yet been studied through survey research. It has only been analysed so far by case studies (for example, Mueller-Jentsch 1995, Hall 2006, Schlömer *et al.* 2007), which provide valuable insights but lack the ability to generalize from findings.

Theoretically, we argue that an analysis of the trigger mechanism for establishing a works council should distinguish between the motivation and incentives of the workforce and the management. Both agents are concerned with their rents, but the workforce is more likely to trigger the establishment if they fear losing informal rights and rents (risk insurance) or if they are interested in enhancing their rent share (rent seeking). Management, on the other hand, is involved in triggering an establishment if they value productivity enhancement more than rent redistribution.

Empirically, our paper presents the first survey evidence, using a unique database, on the trigger mechanism for establishing a works council. First, we analyse the role of the trigger agent. Although only the workforce can call for an election, the workforce and management can cooperate to establish a works council. We show that management is involved in the establishment process in approximately one third of all cases and that this is strongly correlated with characteristics of management's leadership. Managerial involvement lends a commitment

value that provides for a lower likelihood of conflict and a more cooperative managerial response to workers' voice, as well as more cooperative works councillors.

Second, we investigate the trigger event itself, and focus our analysis on the prevalence of a risk insurance function for workers. We show that increasing uncertainty for the workforce, such as an outsourcing of part of the company, increases the probability of establishing a works council. We argue that uncertainty about workplace security leads to a desire for legal co-determination representation, which helps the workforce safeguard its interests. We can infer that risk insurance is a prevalent trigger for establishing a works council.

These results have two main implications. First, they confirm the argument that the constitution of a voice regime matters not only when measuring the effects of works councils (confer Bryson *et al.* 2006, Smith and Jirjahn 2006), but also at the time of establishment. More precisely, managerial response and works councillors' attitudes must be taken into account, as these partly determine the extent that a works council will be a liability or an asset (Bryson 2004). Second, the impact of uncertainty on the probability of establishing a works council undergirds works councils' risk insurance functions against arbitrary management decisions. This feature differentiates the works council from other voice regimes, such as informal worker representation and direct voice practices.

This paper presents the first evidence on trigger mechanisms for establishing a works council. While Dilger (2003) and Addison *et al.* (2003) have estimated the determinants of a newly established works council, they show only correlations with firm characteristics (but no causal relationship to trigger mechanisms). That is, they do not specify the trigger agent or how the trigger event is caused by rent insurance or rent seeking. The endogeneity of establishing a works council is only taken into account in the empirical studies of Hübler and Jirjahn (2003) and Zwick (2004).

The remainder of this paper is structured as follows: first, we present an overview of important institutions, theories about the incentives for establishing a works council, and the derivation of our main hypotheses (section 2). We then describe our data (section 3). In the fourth section, we describe companies that have newly established works councils, and present our results on trigger agents and trigger events. We conclude with a discussion of our results.

INSTITUTIONS, THEORY AND HYPOTHESES

Works councils' rights are laid down in the Works Constitution Act. Councils shall be elected by the workforces of establishments with five or more employees. Although their creation depends on the initiative of an establishment's employees, councils are not present in all eligible

establishments (Hübler and Jirjahn 2003). Even if works councils can only be established by the workforce, case studies show that managers also sometimes motivate the workforce to call for elections, or that management and workforce cooperate to establish a works council (Schlömer *et al.* 2007). Works councils have full codetermination rights on a set of issues, including the introduction of new payment methods, overtime work, and the use of technical devices designed to monitor employee performance. They have weaker consultation rights in matters such as changes in equipment and working methods that affect job requirements. Their participation rights in financial and economic matters cover information provision (Hübler and Jirjahn 2003).

Theoretically, the effects of works councils can be analysed using exit voice theories, transaction cost approaches, cost-benefit, and principal agent models. These models typically analyse the outcome of an existing works council, while its establishment can be predicted if expected benefits exceed the expected costs. We analyse the incentives to trigger the establishment for management and workforces separately. Management is typically more interested in productivity enhancement, while the workforce is more concerned with renegotiating the firm's rent distribution.

The managerial motivation for supporting the establishment of employee representation has been theoretically analysed by Freeman and Medoff (1984), and adapted to works councils by Freeman and Lazear (1995). The main objective of works councils is to provide workers with voice in order to enhance their productivity or "… to foster labour and management cooperation with the goal of increasing the size of the enterprise 'pie'. …" (Freeman and Lazear 1995). Cooperation provides a worker with a voice and enables more effective communication and information sharing, which build trust and mutual understanding (Hall *et al.* 2007). This trust increases employee commitment and motivation and makes employees willing to share their ideas to improve the efficiency of production. Increased motivation leads to a further reduction in quitting, which implies lower hiring and training costs and less disruption in the functioning of works groups, all of which should increase productivity. In addition, the likelihood that workers and firms remain together for a long period should increase the incentive for investments in skills specific to the enterprise, which also raises productivity (Freeman an Medoff 1984). Moreover, works councils increases the legitimacy of management decisions. On the other hand, employee involvement gives workers a stronger bargaining position to renegotiate a firm's rents. The rents redistribution is the main reason that managers oppose the establishment of a works council, especially when the expected increase of rent share for the workforce offsets the expected increase in total rent (Freeman and Lazear 1995). Although the

works council has no legal right to strike, it can still increase workers' bargaining power using their veto rights or the delaying of decisions where co-determination and consultation rights prevail (Visser 1995). Moreover, management needs more time to prepare for consultations and persuade works councillors (Hall *et al.* 2007). However, we will show that the managerial involvement in the establishment process is a relevant trigger mechanism for establishing a works council.

The incentive for the workforce to trigger the establishment is generally considered that a works council is an instrument to renegotiate the rent distribution. Workers' concerns about the rent share can stem from two different sides. On the one hand, workers can claim a bigger slice of the pie, such that the works council is an instrument to bargain for better working conditions and force the company to pay higher wages (rent-seeking behaviour). This incentive is typically considered as workers' primary motivation. On the other hand, the work council can be an instrument for risk insurance or rent protection. This can be prevalent, for example, with companies in economic trouble (i.e., where lay-offs are imminent or where management changes threaten the cancellation of implicit fringe benefits). In these cases, the works council is an instrument to safeguard workforce interests because works councils have legal access to information on financial and economic matters, as well as legal co-determination rights on personnel issues such as hiring of workers, overtime regulations, and lay-offs. These statutory rights reduce the risk of arbitrary management decisions and give the workforce a say during the transformation process, which fosters trustful employment relations and cooperation (i.e., workers' voice). The risk insurance function based on enforceable legal rights distinguishes works councils from informal worker representation and direct voice practices. We argue that the request for risk insurance can trigger the establishment of a works council, and that this is empirically testable by exploiting organisational shocks like outsourcing or a shutdown of part of a company. The organisational shock leads to the workforce's increasing uncertainty about the future of their workplace. This results in the desire for legal co-determination, which helps the workforce to safeguard their interests. This mechanism can theoretically be modelled by a shift parameter in the benefit function of the workforce, whereby uncertainty makes a works council more beneficial by shifting the benefit function up to a certain threshold that then triggers the call for election. This results in our first hypothesis:

Hypothesis 1 (trigger event): An organisational shock increases the workforce's uncertainty, which results in a higher probability to establish a works council.

Manager characteristics are also important in evaluating the managerial support for council establishment, as well as evaluating workers' willingness to call for elections. Important characteristics include whether he or she is an employed manager or an owner of the firm. This characteristic can be easily modelled using a simple principal agent framework where the owner is the principal and the manager is the agent. The agent is concerned with enhancing firm performance, so works councils are a possible instrument for motivating employees and improving communication and cooperation within the company. On the other hand, the owner-manager, who combines the principal and agent in one person, is more concerned about shareholders' rent share. He or she may therefore emphasize the rent-sharing behaviour of the works council and not support its establishment. This may result in the owner-manager being viewed as a paternalistic leader, one who is described in case studies as strongly opposed to establishing any worker representation that might restrict his power (Schlömer *et al.* 2007, van den Berg *et al.* 2008). The opposition of owner-managers to the establishment of works councils is based on their strongly negative attitude towards co-determination. This attitude is not only relevant during the establishment process, but also in determining the effects of workers' voice (Freeman and Medoff 1984). This is empirically shown by Bryson *et al.* (2006), Smith and Jirjahn (2006), and van den Berg *et al.* (2008).

The owner-manager might not only be less likely to become involved in the establishment process, but he or she might also prevent the call for an election by the workforce alone. Case studies show that owner-managers are more likely to fear rent-seeking, loss of power, authority, and freedom in decision-making without concomitant improvements in firm performance (van den Berg *et al.* 2008). The owner-manager cancel fringe benefits for the entire workforce and can deter the development of a cooperative culture. Moreover, van den Berg *et al.* report that he or she is more likely to suppress works councils by exerting informal pressure on any employee who shows interest in one. The owner-manager, for example, can threaten potential works councillors with lack of promotions or wage increases such that these workers fear victimization. This fear and pressure can be seen as potential costs to the workforce in establishing a works council, costs which are mostly neglected in other studies. These costs are more prevalent if management vehemently opposes the establishment of a works council. In turn, this vehemently opposition can result in a selection of antagonistic works councillors who, for their part, strongly oppose managerial decisions. This behaviour may lead to more antagonistic and less cooperative works councillors, according to the classification of Kotthoff (1981). Finally, antagonistic works councillors and managers can bring about more intra-firm

conflicts, which then result in poorer economic performance. This leads us to our second hypothesis:

Hypothesis 2 (owner-manager): Companies where the manager is also an owner have a lower probability of establishing a works council.

DATA

The empirical analysis is carried out using two datasets, the IfM Bonn Works Council Survey and the IAB Establishment Panel. The IfM Bonn Works Council Survey is a unique cross-sectional dataset about co-determination in small- and medium-sized companies in Germany. This dataset was collected by the Small and Medium Size Enterprise Research Institute in 2005 (Institut für Mittelstandsforschung - IfM) and contains detailed information about the intra-firm organisation of co-determination, attitudes of managers toward employee representation and the establishment of works councils, and other company characteristics. The survey is representative of companies with 20 to 500 employees and contains 788 establishments (see Schlömer *et al.* 2007 for a detailed data description). The firm size range is appropriate for analysing the establishment of works councils because it is primarily firms of these sizes that undertake the decision of establishing a works council. For example, less than 5 percent of all companies with fewer than 20 employees have a works council and more than 90 percent of companies with more than 500 employees have one (confer Addison *et al.* 1997, Addison *et al.* 2003).

The unique feature of this survey is a set of questions about the establishment of a works council. All companies covered by a works council report the trigger event, the trigger agent, the time of establishment, and the managerial attitude towards formal employee representation at the time of establishment. Indeed, the survey was collected in 2005, only several years after most companies established their works councils. Therefore, we drop all companies where the manager reports that he or she cannot remember or was not in charge at the time of establishment. Further, we restrict the event sample (i.e., companies with a works council) to companies that established their works council between 2001 and 2005. We draw this sub-sample because these companies also report the number of employees at the time of establishment, which is necessary for our subsequent regression analyses. This yields an estimation sample of 490 companies, where 63 established a works council between 2001 and 2005.

We use the IfM Bonn Works Council Survey to assess the second hypotheses about the trigger agent and to provide some additional descriptive statistics on the trigger event. Unfor-

tunately, this dataset does not include questions about organisational shocks for firms that did not introduce a works council, and a control group is necessary to estimate the influence of an organisational shock on the probability of establishing one. Thus, we use the 1999-2006 waves of the IAB Establishment Panel. This representative survey is based on a stratified random sample–strata for 16 industries and 10 employment size classes–from the population of all German establishments. Although larger plants are over-sampled, sampling is random within each cell (see Kölling 2000 for data description). This panel contains information about works council status, organisational shocks, and other firm characteristics for each company. The organisational shock in the IAB Establishment Panel is defined as an outsourcing, a spin-off, or a shutdown of a part of the company during the last year. We restrict the sample to companies that are observed at least three times, have established a works council, and employ between 20 and 500 employees at the time of establishment. This yields a sample of 213 companies that established a works council between 1999 and 2006. These companies are both the control and treatment groups, as we estimate the trigger event using a within-firm identification strategy.

FINDINGS

Description of the companies that have established a works council

First, we describe the companies at the time when they established their works councils. As discussed in the prior section, the number of employees at the time of establishment is an important concern, as firm size helps determine the definition of adequate control groups in subsequent studies of the effects of works councils' economic consequences. Using the IAB Establishment Panel, we observe 464 companies with 5 to 500 employees that established a works council between 2000 and 2006[2] and we observe newly established works councils in the entire firm size range. Additional descriptive statistics on the company at the time of establishment are displayed in table A3 and A4 in the appendix.

Table 1: Firm Size at the Time of Establishment

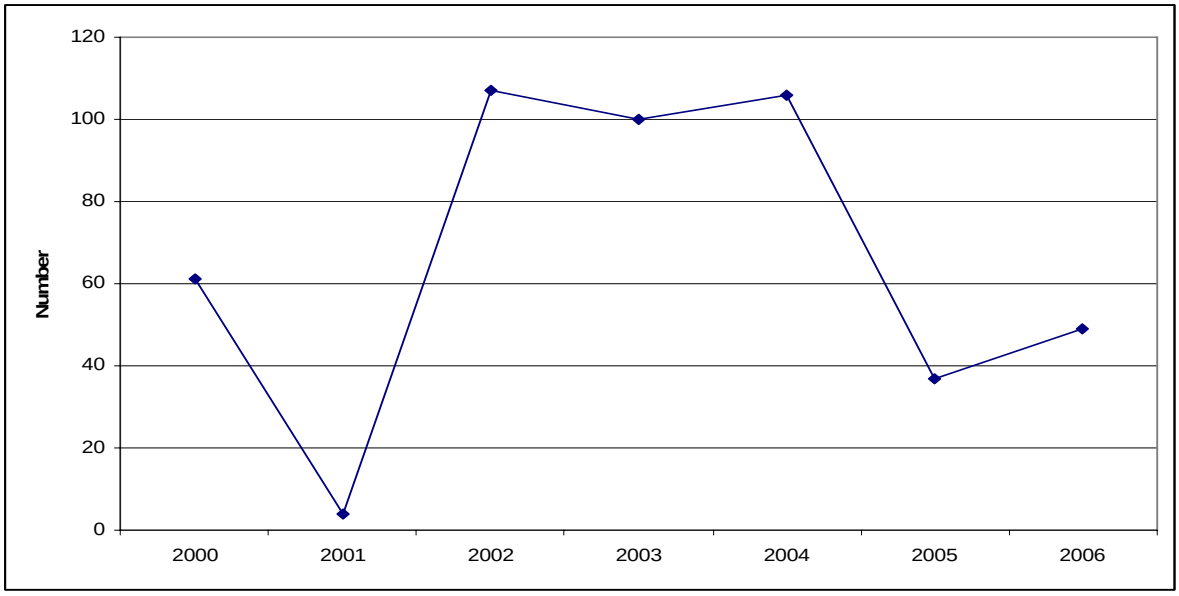
Firm Size Class	Percentage	Firm Size Class	Percentage
5-19	28.32	80-99	5.66
20-39	22.07	100-149	7.81
40-59	11.91	150-199	4.49
60-79	8.59	200-299	6.84

Source: IAB Establishment Panel 1999-2006.

[2] 1999 is the initial year of works council status at the previous period.

Alongside the firm size at establishment, the distribution of the establishment years provides valuable hints as to the motivations for calling election (see figure 1). This distribution shows an interesting pattern: The number of companies with newly established works councils is notably higher during the first years of the economic downturn (between 2002 and 2004). This might be a hint that risk insurance is a prevalent trigger for establishment. On the other hand, the business cycle differs between sectors, so this figure is only a first hint such a correlation, though it seems reasonable to study risk insurance as a potential trigger event.

Figure 1: Development of the Establishment during the Business Cycle



Source: IAB Establishment Panel

Trigger agent

We use the IfM Bonn Works Council Survey to analyse which agents trigger the establishment of works councils. The sample is restricted to companies that established their works council between 2001 and 2005, and the manager provided all survey answers. The workforce alone triggered the establishment in approximately two thirds of all cases (table 3). In the other third, the management was involved in the establishment process. In approximately 6 percent of cases, the management itself motivated the workforce to call for an election. Management motivations for establishing worker representation are described in the case studies of Schlömer *et al.* (2007). They discuss a manager who understands the positive effects of a works council from his previous job, especially the mediation role provided by works councillors, and therefore motivates the workforce to call for an election in his new company in order to take the advantage of the effects of worker representatives.

Table 2: The Trigger Agent for Establishing a Works Council

	Observations	Percent (Sample)
Workforce Alone	39	61.9
Management Involved	20	31.75
Management Motivated	4	6.35

Sample restriction: companies that have established a works council between 2001 and 2005;
Source: IfM Bonn Works Council Survey 2005.

It is also possible to calculate descriptive statistics on the trigger agent for the entire sample, but the use of retrospective questions may cause recall problems for respondents and bias the results. For example, it can be shown that the number of firms where the management was involved in the establishment process or motivated the workforce to call for election significantly increases when the time-span between the establishment and the survey increases. This may be a tribute to good employment relations in these companies, whereby managers cannot imagine opposing employee representation[3]. Nevertheless, we can conclude that the workforce alone and the workforce in conjunction with management are both prevalent initiators of council establishment.

In order to analyse the hypothesis regarding the trigger agent, we divide companies that established a works council between 2001 and 2005 according to the trigger agent – that is, if management was involved or if the workforce alone triggered the establishment. We then add all companies that had no works council in 2005 as the control group (or base category). Descriptive statistics for this sample are shown in appendix table A1.

We first estimate models for both trigger agents separately using a Probit analysis. We then create a multinomial variable that defines companies without a works council as the base category. We can thereby estimate the impact of covariates between the control and treatment groups, but also between both treatment groups. Both regression models yield similar results. Therefore, we display and interpret the multinomial regression here, while the Probit estimations are shown in appendix tables A6 and A7.

[3] Accordingly, Schlömer *et al* (2007) cite managers who state, "if works councils do not exist, they have to be invented."

Table 3: Multinomial Regression of the Trigger Agent; Dependent Variable: Companies without a Works Council (Base Category), Companies where the Workforce Alone Triggers the Establishment, and Companies where Management Was Involved.

	Initiator Workforce Alone			Initiator Management Involved		
	Coeff.	Z-Value		Coeff.	Z-Value	
Number of Employees	0.0198	3.34	***	0.0098	1.33	
Squared Number of Employees/1000	-0.0316	2.27	**	-0.0073	0.44	
Dummy: Owner is Manager	-1.7142	4.39	***	-3.0412	4.96	***
Dummy: Single Site Company	0.2079	0.54		0.0399	0.08	
Dummy: Located in East Germany	0.0847	0.20		-0.1916	0.33	
Industry Dummies	yes			yes		
Number of Establishments	490					
P-Value of LR chi(2)	0.0000					
Pseudo R^2	0.2421					
Log Likelihood	-174.20					

Sample restriction: companies that established a works council between 2001 and 2005 or have no works council in 2005; * significant on the 10% level, **significant on the 5% level, *** significant on the 1% level;
Source: IfM Bonn Works Council Survey 2005.

The regression confirms our hypotheses: having an owner-manager decreases the probability of a works council for both agent types. The marginal effect of having an owner-manager is largest, at about 12 percent, if the workforce alone calls for an election. The marginal effect when there is managerial involvement is rather small, i.e., 0.7 percent. These effects can be interpret that the owner-manager, in contrast to an employed manager, weighs the potential rent sharing behaviour of the works council greater than the potential effects of enhancing firm performance. This may lead the owner-manager to see the works council as intra-firm opposition, consistent with case studies. For example, Schlömer *et al.* (2007) cite an owner manager who successfully opposed the establishment of a works council in his company by treating the workers to cancel all workers' fringe benefits and freezing intra-firm communication if workers called for an election. This vehement opposition to the establishment of a works council is especially observed when the owner-manager founded the company, with works councils more likely to be established after the retirement of the company's founder.

The significant difference between trigger agents is firm size. Firm size has a positive, concave effect on the probability of establishing a works council when the trigger agent is the workforce alone. Firm size has no effect, however, on the probability of establishment when there is managerial involvement. This latter finding can be interpreted to mean that, similar to the case for owner-managers, managerial attitude towards works councils determines the like-

lihood that management is involved in the establishment process. A manager who prefers a worker representative in the cooperative culture supports establishment. We can verify this assumption by adding a variable for management's attitude towards works councils in the regression. This attitude is measured in 2005 for the non-event subsample and at the time of establishment in the event subsample. The results show that a positive attitude towards works councils has a strong effect on the probability of managerial involvement in the establishment process, but no effect when the workforce alone calls for an election (see tables A5-A7 in the appendix). The effect of managerial attitude is obvious in this context, but supports our interpretation of the firm size effect.

The significant firm size effect when the workforce alone calls for an election suggests that workers are better able to articulate their voice in smaller companies. There, they can discuss their concerns directly with management, better appraise the firm's economic circumstances, have more trust in managerial decisions, and have better access to relevant information. These advantages are not relevant when firm size increases and the benefits to representative voice become apparent, which leads to a greater probability of establishing a formal works council. The other two control variables are not significant, meaning that a location in East Germany and the company's status as independent or branched are not correlated with the probability of establishment for either type of trigger agent.

Finally, we note that this cross-sectional regression can only show correlations and initial insights into the role of the trigger agents. Unfortunately, the dataset does not provide additional covariates or suitable instruments to assess a causal relationship. Nevertheless, it is the first survey study to show the relevance of the trigger agents, especially the distribution which agents are involved, the importance of the workers' voice, and the relevance of managerial responses in the establishment process.

Trigger event

In the second stage of our analysis, we study the impact of the trigger event on the probability of establishing a works council. Descriptive statistics are calculated using the IfM Bonn Works Council Survey subsample of companies that established works councils between 2001 and 2005 (table 4). Managers provided answers to this survey in 2005, and multiple answers per company were possible. In total, 23 percent of companies established a works council because the managers wanted a fixed workers representative, management wanted to improve the motivation and productivity of their workforce (reason managerial communication). In these

cases, the management was involved in the establishment process and almost all management-motivated establishments gave these reasons (table 5).

Table 4: The Trigger Event of the Establishment of a Works Council[4]

	Observations	Percent
Organisational Shock	31	37.80
Workers Voice	40	48.78
Managerial Communication	19	23.17

N = 63 companies, total numbers and percentages, multiple answers possible, source: IfM Bonn Works Council Survey 2005. The answers are itemized in appendix table A8.

The second trigger event category is workers' voice, which was occurred in approximately one-half of the cases. Workers' voice is defined as conflicts between management and workforce, workers want more co-determination, new workers with experience in employee representation were hired, and manager knows no special reason why the workers want a works council. Workers' voice trigger events were frequently associated with the establishment coming from the workforce alone, as precisely 75 percent of workers' voice trigger events had the workforce alone as the trigger agent (see table 5). An organisational shock was specified as the trigger event in approximately 38 percent of cases. Organisational shocks are defined as the occurrence of a new owner, a shutdown, and a radical restructuring of the company. Organisational shocks were strongly associated with the likelihood of the workforce alone calling for election (74 percent), but shocks also induced 23 percent of the managerial involvement cases (table 5). In addition, most multiple answers covered an external shock, particularly new management together with the voice category that workers wanted more co-determination. This joint occurrence is easily conceivable.

Managerial reasons for involvement in the establishment process are typically productivity enhancement and a first attempt to incorporate workers' voice in the company's rent distribution strategy. Contrary, it is unclear whether the workers voice category "conflicts between management and workers" results from a risk insurance strategy spurred by something like management's plan to cancel fringe benefits or from a rent-seeking strategy. An unexpected organisational shock, such as the outsourcing of part of the company or the hiring of new management, may signal a risk insurance strategy. Therefore, we analyse whether an organisational

[4] The classification in the three groups: managerial communication, workers voice and organisational shock, are based on logical connection due to the fact if the management was named in the question or not and if an organisational shock is asked. This classification cannot be obtained by a factor analyses because of 85 percent of the respondents tick only one possible answer and therefore the factor analyses can only be based on a minor subsample.

shock (as a risk insurance strategy) triggers the establishment of a works council. Unfortunately, the IfM Bonn Works Council Survey does not provide a sufficient control group to test this trigger mechanism, as organisational shocks are not asked of the non-event sample. Nevertheless, we can analyse the impact of an organisational shock on the probability of establishing a works council using the IAB Establishment Panel. This database observes companies over several years, and we can identify whether the establishment of a works council was caused by an organisational shock. In the IAB Establishment Panel, an organisational shock is defined as an outsourcing, a spin-off, or a shutdown of part of the company during the last year.[5] We argue that the workforce may fear losing informal rights or fringe benefits because of an unpredicted organisational shock, such as the outsourcing of part of the establishment. This shock increases the uncertainty about the security of the workplace, which can lead to a desire for legal co-determination and representation, both of which helps the workforce safeguard its interests.

Table 5: Cross-tabulation of Trigger Agent and Trigger Event in the Establishment of a Works Council

		trigger event					
		Organisational Shock		Workers Voice		Managerial Communication	
trigger agent	Workforce Alone	23 0.74	0.43	30 0.75	0.57	0 0.00	0.00
	Management Involved	7 0.23	0.21	10 0.25	0.30	16 0.84	0.48
	Management Motivated	1 0.03	0.25	0 0.00	0.00	3 0.16	0.75

The trigger event question allowed for multiple answers; in each cell: top left = the number of cases; top right = the percentages of trigger agents (row); bottom left = the percentages of trigger events (column).
Source: IfM Bonn Works Council Survey 2005.

In order to estimate this effect, we use a Probit model as a first benchmark. This model treats every observation of a firm in the panel as independent, and does not allow us to control for unobserved heterogeneity across establishments. Therefore, we prefer the Conditional or Fixed Effect Logit Model to estimate trigger events. This model identifies the trigger effect us-

[5] The responses of the IAB Establishment Panel cover only a part of shock definition of the IfM Bonn Works Council Survey, precisely the shutdown and a part of the new owner cases, precisely the outsourcing and spin-offs (confer table A8 in the appendix).

ing a subsample of "changers." This means that all companies that do not change their works council status are not incorporated in the estimation, as the intra-firm variability of these companies is zero and that they therefore provide no additional explanatory power to the estimate of organisational shocks' causal effects on the establishment of a works council. The model identifies the trigger effect by comparing (or matching) within-establishment variation for the observation before and after its establishment of a works council in each company. In order to estimate the trigger effect for the establishment of a works council, we delete all companies with more than one change in works council status and all companies that switch from having to not having a works council. The results of both regressions are shown in table 7.

Both models confirm our hypothesis that an organisational shock leads to a higher probability of establishing a works council, which supports the idea that risk insurance motivates such establishments. [6] Since organisational shocks are strongly correlated with the type of trigger agent (i.e., with the workforce alone calling for an election [see table 7]), the dummy can be interpreted as an upward shift in the benefit function for the workforce, which makes establishment more likely when exceeding a certain threshold. In particular, the organisational shock increases uncertainty about the security of workplaces, implicit working conditions, and fringe benefits, to name a few. This encourages workers to establish a works council, which provides statutory information and the co-determination of rights, in order to safeguard its interests.

The insignificance of the other covariates in the Conditional Logit Model can be explained by the identification strategy. The insignificance means that neither the composition of the workforce, nor the number of employees, the coverage of a collective bargaining contract,[7] the export-share, or the investments fundamentally changes because of the establishment of a works council within one company, which can be due to either employment protection or long-term delivery contracts.

The identification and interpretation differ slightly in the Probit model. Here, we identify the organisational shock by comparing the year of the newly established works council with all other observations with and without works councils in the treatment group. This model treats all observations for each company as independent, and does not control for unobserved heterogeneity (though the standard errors are clustered by company). The model also supports our

[6] We estimate a Conditional Logit Model where the calculation of marginal effects is only possible under the assumption that the fixed effect is zero for all establishments. The marginal effect is then close to the Probit model, which is reasonable because of similar assumptions.

[7] The collective bargaining contract is significant at the ten percent level in the displayed regression, but is mostly insignificant in the most other specifications, so that we do not want to interpret this effect.

hypothesis that an organisational shock is more likely in the year of a works council's establishment than in any other year. Just as in the Conditional Logit Model, most other covariates have no influence on the probability of establishment. In other words, they do not differ significantly in the year of establishment. In contrast, companies seem to invest less in the year of establishment, and the firm size effect is also significant in this specification but the size of the effect is very small.

Table 7: Trigger Events for the Establishment of a Works Council; Dependent Variable: Works Council (Conditional Logit); Newly Established Works Council (Probit – marginal effects displayed)

	Probit		**Conditional Logit**			
	Coef.	T-Value	Coef.	T-Value	Coef.	T-Value
Dummy: Organisational Shock	0.141	2.02 **	1.992	2.47 **	1.639	2.07 **
Number of Employees	0.001	2.22 **	0.010	0.62		
Squared Number of Employees/ 1000	-0.003	2.56 **	-0.014	0.56		
Reference Category: Share of Unskilled Workers						
Share of Apprentices	0.070	0.61	4.173	1.17		
Share of Skilled Workers	0.023	0.48	-0.526	0.46		
Share of Part-Time Workers	0.002	0.04	-0.911	0.66		
Share of Low-Income Worker	0.063	0.83	1.630	0.53		
Dummy: Collective Barg. Contract	0.032	1.47	1.052	1.72 *		
Export-Share	-0.001	1.03	-0.011	0.57		
log(Investments per Capita)	-0.005	2.38 **	-0.019	0.41		
Dummy: Single Side Company	0.007	0.33	-0.010	0.02		
Year Dummies	yes		yes		yes	
Industry Dummies	yes		no		no	
Number of Establishments	1060[8]		1206		1206	
LR chi(2)	47.2		790.01		782.86	
Pseudo R^2	0.0322		0.8369		0.8293	
Log Likelihood	-542.7213		-77.0007		-80.5773	

Sample restriction: companies that have established a works council and had between 5-500 employees at the time of establishment; * significant on the 10% level, **significant on the 5% level;
Source: IAB Establishment Panel 1999-2006

The organisational shock, however, has a very narrow definition in the IAB Establishment Panel. Theoretically, risk insurance comprises more than just organisational shocks due

[8] The smaller number of observations is caused by a collinearity between the year dummies. No valid observation established a works council in 2001 and, therefore, all observations in this year are dropped in the Probit model.

to outsourcing, spin-offs, or a shutdown of a part of the company. Risk insurance can also be prevalent in shrinking firms and firms experiencing financial troubles, where the works council can protect workers' rents. In these companies, management may be more likely to annul implicit contracts (e.g., seniority wage rules), lay-off tenured workers, enhance the target agreement for workers' performance pay, or cancel fringe benefits. Therefore, the risk insurance function of a works council can be defined much more broadly than we are able to address in our regression. This is why the wider definition of organisational shocks in the IfM Bonn Works Council Survey could lead to a stronger trigger of risk insurance motivations.

The causal relationship between an organisational shock and the establishment of a works council, interpreted as motivated by risk insurance, raises immediate concerns about the correlation between the establishment of a works council and the profit situation of companies with newly established councils. The profit situation during the period of establishment can be another proxy for the risk insurance trigger of establishment. More specifically, companies in economic trouble will be more likely to cancel fringe benefits, dismiss workers, or cut wages. Thus, a works council is a suitable instrument for risk insurance or obtaining creditable information on the economic situation of the firm in order to increase the workers' effort. Indeed, the distribution of the profit situations of companies during the period of establishment does not significantly differ from the profit situation distribution of non-treatment firms (table 8). In both groups, we observe companies with an excellent profit situation and companies with poor profit situations. Accordingly, the profit situation is not a significant trigger in multivariate regressions.[9] Indeed, an unexpected organisational shock such as outsourcing can occur in companies with both good and poor profit situations.

Table 8: Profit Situation during the Last Year

	Excellent	Good	Satisfied	Sufficient	Poor
All Firms	0.04	0.27	0.35	0.20	0.14
Newly Established Works Council	0.04	0.25	0.38	0.18	0.15

Source: IAB Establishment Panel 1999-2006.

In order to check the robustness of our results, we also calculated everything in deviations from sector means, incorporating only companies observed at least four times, and relaxing assumptions for firm size. All results were very similar to those presented above and we therefore do not display them separately here.

[9] We have inserted the profit situation instead of the organisational shock in the same Conditional Logit estimation as above, but this effect was insignificant.

CONCLUSION AND DISCUSSION

This paper presents the first survey evidence for the trigger mechanisms establishing a works council. The establishment of a voice regime, like the formal representation of a works council, fundamentally changes intra-firm communication, organisation, and cooperation. However, once established, voice regimes are difficult to change and managers usually lack the freedom to choose their ideal voice regime. Therefore, the circumstances of establishment may explain a part of the variability in economic outcomes of workers' representation, such as productivity enhancement and rent (re)distribution.

First, we analysed the role of the trigger agent. The descriptive analysis revealed managerial involvement in approximately one third of all establishments. Managers were more likely to be involved if they had a positive attitude towards formal employee representation. This was shown in the strong negative effect of having an owner-manager, who is generally described as vehemently preventing the establishment of a works council. We explained this finding by arguing that the employed manager is more concerned with firm performance and productivity enhancement, while the owner-manager is more concerned about the possible of rent seeking by the works council. Moreover, the workforce alone is more likely to call for an election as firm size increases. This hints toward a lower relevance of representative worker voice in small companies. We only showed, indeed, the prevalence of the managerial attitudes at the time of establishment. The trigger agent allows for further insight into the effects of works councils on productivity enhancement and rent distribution because the establishment process incurs potential intra-firm conflicts later on (Addison *et al.* 2004). Conflicts may occur more often in companies where the workforce alone has called for an election. On the one hand, this may result in the cooperative or non-cooperative works councillors, as classified by Kotthoff (1981). An uncooperative works council may delay important decisions, restrict overtime extensions, or bargain for costly but attractive working conditions; but the working atmosphere may still not support the motivation of workers. On the other hand, managerial involvement shows a commitment value that may signal a positive managerial response to establishment, which results in better outcomes for employee representation (Bryson 2004, Bryson *et al.* 2006, Smith and Jirjahn 2006). It would be interesting to further examine how the relationship between management and the works council progresses over time, especially whether good relations at the time of establishment change after initial conflicts or if the worse relations at the time of establishment improve over time, perhaps after the replacement of council members or management.

Second, we showed that an organisational shock leads to a higher probability of establishing a works council. An organisational shock, such as outsourcing a part of the company, causes uncertainty about the security of the workplace, which then triggers the establishment of a works council. The works council, as a legal co-determining representative, helps the workforce safeguard its interests. This confirms that risk insurance is a trigger mechanism for council establishment. However, we have also discussed the fact that risk insurance can be defined much more broadly, and may therefore play a more important role in the establishment of works councils. In addition to risk insurance respectively rent protection, rent seeking can be another reason to trigger the establishment of a works council, one that is not analysed here. Moreover, we do not analyse whether the introduction of worker voice can improve establishment performance in subsequent years through enhanced productivity or reduced quitting, nor how the establishment of a works council affects the rent distribution between shareholders and the workforce.

Nevertheless, these findings allow for some important inferences about the effects of works councils. First, we show the importance of managerial attitudes towards employee representation during the establishment process, and it can be expected that such good relations will remain stable over time and therefore induce fewer conflicts later on. On the one hand, managerial involvement may signal a commitment value or a positive managerial response, which will result in better outcomes of employee representation (Bryson 2004, Bryson *et al.* 2006, Smith and Jirjahn 2006). This is because the managerial response determines the extent to which a works council is a liability or an asset. On the other hand, this may result in the classification of cooperative or non-cooperative works councillors, as described by Kotthoff (1981). Second, we demonstrated the relevance of organisational shocks for the probability of establishing a works council. This supports the risk insurance function of works councils against arbitrary management decisions. The risk insurance function is a unique characteristic of works councils incurred by legal information and co-determination rights, and such a function differentiates the works council from other voice regimes like informal worker representation and direct voice practices. This finding, in turn, can be interpreted as a utility increasing feature of works councils for the workforce. Further, both results help explain the distribution of works council coverage, especially in small firms. On the one hand, managers can prevent workers from calling for an election. On the other hand, workers who are satisfied with management are more likely to call for an election if they face uncertainty about the security of their workplaces.

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APPENDIX

Table A1: Descriptive Statistics for the IfM Bonn Works Council Survey Estimation Sample.

	Mean	SD	Min	Max
Dependent Variables:				
Dummy: Initiator Workforce Alone	0.0796	0.2709	0	1
Dummy: Initiator Management Involved	0.0490	0.2160	0	1
Company Characteristics				
Number of Employees	99	97	19	500
Squared Number of Employees	19131	39075	361	250000
Dummy: Owner is Manager	0.7408	0.4386	0	1
Dummy: Single Side Company	0.5204	0.5001	0	1
Dummy: Located in East Germany	0.2082	0.4064	0	1
Distribution by Industry				
Dummy: Manufacturing	0.1673			
Dummy: Construction	0.0816	0.2741	0	1
Dummy: Trade	0.1633	0.3700	0	1
Dummy: Traffic	0.0592	0.2362	0	1
Dummy: Service for Companies	0.3898	0.4882	0	1
Dummy: Service for Households	0.1388	0.3461	0	1
Number of Observations	490			

Table A2: Descriptive Statistics of the Companies for Companies with newly Established Works Council in the IfM Bonn Works Council Survey.

	Mean	SD	Min	Max
Dependent Variables:				
Dummy: Initiator Workforce Alone	0.6167	0.4903	0	1
Dummy: Initiator Management Involved	0.3833	0.4903	0	1
Company Characteristics:				
Number of Employees	174	119	18.6	440
Squared Number of Employees	44093	50997	346	193600
Dummy: Owner is Manager	0.3333	0.4754	0	1
Dummy: Single Side Company	0.3833	0.4903	0	1
Dummy: Located in East Germany	0.2500	0.4367	0	1
Distribution by Industry:				
Dummy: Manufacturing	0.2000			
Dummy: Construction	0.0833	0.2787	0	1
Dummy: Trade	0.0333	0.1810	0	1
Dummy: Traffic	0.1000	0.3025	0	1
Dummy: Service for Companies	0.4833	0.5039	0	1
Dummy: Service for Households	0.1000	0.3025	0	1
Number of Observations	60			

Table A3: Descriptive Statistics for the Estimation Sample of the IAB Establishment Panel.

	Mean	SD	Min	Max
Dependent variables:				
Dummy: Works Council	0.4436	0.4970	0	1
Dummy: Newly Established Works Council	0.1766	0.3815	0	1
Dummy: External Shock	0.0431	0.2032	0	1
Employee Characteristics:				
Share of Apprentices	0.0517	0.0817	0	1
Share of Unskilled Workers	0.2248			
Share of Skilled Workers	0.7235	0.2791	0	1
Share of Part Time Workers	0.1552	0.2373	0	1
Share of Low-Income Workers	0.0698	0.1373	0	1
Establishment Characteristics:				
Number of Employees	75	86	2	614
Squared Number of Employees	12934	32018	4	376996
Dummy: Collective Barg. Contract	0.5663	0.4958	0	1
Export share	6.4838	17.0675	0	100
Log(Investment per Capita)	8.2242	5.5883	0	17
Dummy: Single Side Company	0.5771	0.4942	0	1
Distribution by Industry:				
_Iwz_3	0.0265			
Timber Industry	0.0439	0.2051	0	1
Chemical Industry	0.0547	0.2275	0	1
Metal Working Industry	0.0788	0.2695	0	1
Automotive Engineering	0.0738	0.2615	0	1
Electrical Industry	0.0713	0.2574	0	1
Construction	0.0705	0.2561	0	1
Wholesale and Retail	0.2247	0.4176	0	1
Logistic and Telecommunication	0.0531	0.2243	0	1
Services for Companies	0.1269	0.3330	0	1
Research and IT	0.0357	0.1855	0	1
Services for Households	0.0904	0.2868	0	1
Healthcare and Education	0.0498	0.2175	0	1
Distribution by Firm Size:				
1-4 Employees	0.0116			
5-19 Employees	0.2098	0.4073	0	1
20-99 Employees	0.5672	0.4957	0	1
100-249 Employees	0.1534	0.3605	0	1
more than 250 Employees	0.0580	0.2339	0	1
Number of Establishments	1206			

Table A4: Descriptive Statistics of the Companies for Companies with newly Established Works Council in the IAB Establishment Panel.

	Mean	SD	Min	Max
Dummy: External Shock	0.0704	0.2565	0	1
Employee Characteristics:				
Share of Apprentices	0.0561	0.0820	0	1
Share of Unskilled Workers	0.2179			
Share of Skilled Workers	0.7260	0.2794	0	1
Share of Part Time Workers	0.1559	0.2367	0	1
Share of Low-Income Workers	0.0703	0.1349	0	1
Establishment Characteristics:				
Number of Employees	74	82	5	433
Squared Number of Employees	12065	26443	25	187489
Dummy: Collective Barg. Contract	0.5869	0.4936	0	1
Export share	5.6901	16.8788	0	100
Log(Investment per Capita)	7.1342	6.0073	0	17
Dummy: Single Side Company	0.5822	0.4944	0	1
Number of Establishments	213			

Table A5: Multinomial Regression of the Trigger Agent; Dependent Variable: Companies without a Works Council (Base Category), Companies where the Workforce Alone Triggers the Establishment, and Companies where Management Was Involved.

	Initiator Workforce Alone		Initiator Management Involved	
	Coeff.	Z-Value	Coeff	Z-Value
Managerial Attitude Towards Formal Employee Involvement	0.0368	1.46	0.1968	4.97 ***
Number of Employees	0.0229	3.32 ***	0.0124	1.23
Squared Number of Employees/1000	-0.0356	2.14 **	-0.0143	0.59
Dummy: Owner is Manager	-1.5844	3.78 ***	-2.4988	3.34 ***
Dummy: Single Side Company	0.1245	0.30	0.1609	0.25
Dummy: Located in East Germany	0.4362	0.95	-0.1934	0.27
Number of Establishments	433			
LR chi(2)	0.0000			
Pseudo R^2	0.3435			
Log Likelihood	-140.59			

Source: IfM Bonn Works Council Survey 2005

Table A6: Marginal Effects after Probit of the Trigger Agent; Dependent Variable: the Workforce Has Established a Works Council, Control Group: Companies without a Works Council in 2005.

	Coefficient	Z-Value		Coefficient	Z-Value	
Managerial Attitude Towards Formal Employee Involvement				0.0004	0.37	
Number of Employees	0.0010	3.13	***	0.0012	3.33	***
Squared Number of Employees/1000000	-1.6500	-2.19	**	-1.9700	2.30	**
Dummy: Owner is Manager	-0.0975	-3.67	***	-0.0914	3.19	***
Dummy: Single Side Company	0.0111	0.55		0.0070	0.32	
Dummy: Located in East Germany	0.0057	0.24		0.0216	0.81	
Number of Establishments	490			433		
Prob > chi2	0.0000			0.0000		
Pseudo R2	0.1663			0.1959		
Log likelihood	-113.47			-101.63		

Source: IfM Bonn Works Council Survey 2005

Table A7: Marginal Effects after Probit of the Trigger Agent; Dependent Variable: the Workforce Has Established a Works Council, Control Group: Companies without a Works Council in 2005.

	Coefficient	Z-Value		Coefficient	Z-Value	
Managerial Attitude Towards Formal Employee Involvement				0.0017	5.36	***
Number of Employees	0.0002	0.72		0.0001	1.08	
Squared Number of Employees/1000000	-0.0247	0.05		-0.1340	0.70	
Dummy: Owner is Manager	-0.1444	4.72	***	-0.0327	2.94	***
Dummy: Single Side Company	0.0039	0.27		0.0021	0.41	
Dummy: Located in East Germany	-0.0082	0.53		-0.0020	0.41	
Number of Establishments	490			433*		
Prob > chi2	0.0000			0.0000		
Pseudo R2	0.2116			0.4391		
Log likelihood	-75.52			-50.41		

Source IfM Bonn Works Council Survey 2005
*the lower number of observation is due to missings in the managerial attitude variable

Table A8: Itemized Answers of the Trigger Event to Establish a Works Council

	Total Observation	Workforce Alone	Management Motivated	Management Involved
New Owner	19	14	0	5
Rapid Shutdown	3	3	0	0
Radical Restructuring	9	6	1	2
To Improve the Productivity	8	0	1	7
To Improve the Motivation	3	0	0	3
Need a Fixed Representative	8	0	2	6
New Workers with Works Council Experience	8	7	0	1
Conflicts between Management and the Workforce	7	6	0	1
Workers want More Co-Determination	12	9	0	3
Management Knows no Reason	13	8	0	5

Total numbers and percentages, multiple answers possible, source: IfM Bonn Works Council Survey 2005.