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Research Papers in Economics No. 7/13

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**Abstract:** German works councils provide a highly developed mechanism for codetermination designed to increase trust and cooperation within firms. This study examines whether or not the functioning of works councils depends on the type of ownership. Comparing domestic- and foreign-owned firms in Germany, we find that works councils and managers in foreign-owned firms are less likely to cooperate. The finding fits the notion that the activities of foreign multinational companies can involve tensions with the institutional framework of the host country.

**JEL:** F23, J50, J53.

**Keywords:** Corporate Globalization, Foreign Ownership, Works Council, Codetermination, Cooperation.

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**Acknowledgements:** The authors are grateful to Great Place to Work<sup>®</sup> Germany for providing access to the data used in this study. The views expressed in this study are those of the authors and do not necessarily reflect the views of the Great-Place-to-Work Institute.

### 1. Introduction

The last decades have witnessed an enormous growth in foreign direct investment (FDI) around the world (UNCTAD 2004). This also holds true for Germany which is one of the largest host economies for inward FDI among developed countries (Jost 2011). Comparing the stocks of inward FDI for the year 2009, Germany was ranked position four, after the United States, the United Kingdom, and France. It experienced a dramatic growth in the inward FDI stock in the last two decades. The stock rose from US\$ 120 billion in the year 1990 to US\$ 937 billion in the year 2009. Foreign-owned firms in non-financial industries now account for about 20 percent of total gross value added and employ more than 10 percent of all workers in those industries.

Corporate globalization is usually explained by the superior products and production processes of multinational companies (MNCs) to which other firms have no access (Helpman 2006, Markusen 1995). However, corporate globalization has also given rise to concerns about the threats to national institutions and regulatory regimes. Foreign multinational firms may bring different firm strategies to the host country and may face difficulties in adjusting to the institutional framework of the host country so that their activities can involve tensions with that framework (Kostova and Roth 2002).

Our study provides an econometric analysis of those tensions for works councils in Germany. We examine whether or not foreign ownership has an influence on the cooperation between works councils and managers. This is particular interesting as German works councils have acquired extensive powers compared to works councils in other European countries. They provide a highly developed mechanism for codetermination. German works councils have attracted considerable attention as an

institution that fosters trust within firms through its information sharing and contract enforcement role (Freeman and Lazear 1995, Kaufman and Levine 2000, Smith 1991). 
Both the workforce and the employer may benefit from this trust-building role of works councils. From the workers' viewpoint, a works council reduces the risk that management unilaterally takes actions without considering their interests. From the management's viewpoint, a council fosters workers' willingness to provide effort and to be loyal to the firm. The potential value of high-trust relationships with employees can induce management to cooperate with the works council and to involve it in a wide range of decisions. However, at issue is whether this role of works councils applies generally to all firms or whether it depends on the type of ownership of the firm.

From a theoretical point of view, the influence of foreign ownership on cooperative relationships between managers and works councils is ambiguous. On the one hand, managers and works councils in foreign-owned firms might cooperate at least just as managers and works councils in domestic-owned firms. MNCs tend to implement unified management practices that follow company-wide standards. Adopting the practices of a foreign parent company is very likely to entail a high degree of uncertainty and ambiguity for the workers of the local subsidiary. The involvement of a works council has potentially a high commitment value to management if the council is able to ensure that the foreign parent company behaves in accordance with its explicit and implicit commitments and does not take excessive advantage of the local subsidiary.

On the other hand, several reasons suggest that it is difficult for management and works council to cooperate when the firm is owned by a foreign parent company. A high degree of information asymmetry makes it less likely that the works council can play an

effective information sharing role in a foreign-owned firm. While the works council of the local firm has no access to the information possessed by the parent company's managers, the managers of the foreign parent company lack sufficient information about the local conditions of the firm. This can result in increased distrust and antagonism. The council may not support the implementation of the practices of the foreign parent company if it has only limited access to relevant information. The foreign parent company's managers in turn may view codetermination rather as an obstacle and induce the managers of the local subsidiary to bypass the council in order to unilaterally implement the practices. This tendency is reinforced if the MNC is more volatile and the foreign parent company's managers have little interest in long-term cooperation with the works council. The threat to transfer production abroad can effectively weaken the power of the council to cooperatively build high-trust relationships and to realize mutual gains for the firm and the employees. In this situation, the council may use its remaining power to actively resist the implementation of the policy of the foreign parent company.

Our empirical analysis uses firm data conducted by Great Place to Work® Germany (a research group specialized in employer and employee surveys) on behalf of the German Federal Ministry of Labor and Social Affairs in 2006. Comparing domesticand foreign-owned firms, we demonstrate that managers of foreign-owned firms are less likely to report a cooperative relationship with the works council. The finding provides evidence that foreign ownership indeed involves tensions with the industrial relations system in Germany.

This study contributes in several ways to the literature. As emphasized by Collings (2008), research on MNCs and industrial relations is a road less travelled. This

also holds true for Germany. While there is a remarkably increasing number of econometric analyses on German works councils, only very few papers consider the role foreign ownership plays in the functioning of works councils.<sup>2</sup> Addison et al. (2003) and Schmitt (2003) examine whether or not workers in foreign-owned firms are more likely to adopt a works council. They find that foreign-owned firms are more likely to have a works council than domestic-owned firms. However, while investigating the link between foreign ownership and works council incidence deserves interest in its own right, this does tell us little about potential tensions. Workers may see foreign owners as entailing a greater risk and uncertainty and, hence, adopt a works council even though a council in foreign-owned firms can only provide a minimum level of protection and aggravates conflicts with the management. Our findings fit this hypothesis. We can confirm a positive association between foreign ownership and works council incidence with our data and, moreover, show that foreign ownership reduces the likelihood of a cooperative relationship between management and works council.

Studies by Heywood and Jirjahn (2013) and Jirjahn and Mueller (2013) examine the interaction effect of foreign ownership and works councils on firm performance and practices to increase firm performance. Both studies find a negative interaction effect suggesting that works councils play a positive role in firm performance among domestic-owned firms but not among foreign-owned firms. While this negative interaction effect is consistent with the hypothesis of increased conflict in firms with foreign ownership, it leaves room for alternative interpretations. The negative interaction might simply reflect that foreign ownership and codetermination act as substitutes. Either foreign owners or works councils could increase performance, but this influence might not be additive. Our

analysis provides direct evidence of reduced cooperation between management and works council in foreign-owned firms. Thus, it helps interpret the negative interaction effect found by the two previous studies.<sup>3</sup>

The rest of the paper is organized as follows. In the second section, the institutional framework is described. The third section presents our background discussion. The fourth section describes the data and variables. The estimates are presented in the fifth section. The sixth section concludes.

### 2. Institutional Framework

Industrial relations in Germany are characterized by a dual structure of employee representation with both unions and works councils (Keller 2004). While unions negotiate over wage rates and general aspects of the employment contracts, works councils provide a highly developed mechanism for codetermination at the establishment level.<sup>4</sup> Collective contracts are typically negotiated between unions and employers' associations on an industrial level. Employers are covered by industry-level agreements if they are members of employers' associations.

Works councils are formally independent of collective bargaining. Their rights are defined in the Works Constitution Act (WCA). Workers in establishments with five or more employees may elect council members but the creation of the council depends on the initiative of the establishment's employees. Hence, councils are not present in all eligible establishments. They negotiate over a bundle of interrelated establishment policies. On some issues they have the right to information and consultation, on others a veto power over management initiatives and on still others the right to coequal participation in the design and implementation of policy. Their rights are strongest in

social and personnel matters such as the introduction of new payment methods, the introduction of technical devices designed to monitor employee performance, and up and down grading. They also have consultation rights, though not as strong, in matters such as decisions relating to manpower planning and planned structural alterations to the plant. Their participation rights in financial and economic matters cover only information provision.

Works councils are institutionalized bodies of worker representation that have functions that are distinct from those of unions. Works council and employer are not allowed to engage in activities that interfere with the peace within the establishment. While the council does not have the right to strike, the employer must not obstruct its activities. Works council and employer shall collaborate with the serious attempt to reach an agreement and to set aside differences. If they fail to reach an agreement, they may appeal to an internal arbitration board or to the labor court. Moreover, the WCA does not allow wage negotiations. The aim is to restrict distributional conflicts on the establishment level. Rather works councils are designed to increase joint establishment surplus. Works council and employer are required by law to cooperate "in a spirit of mutual trust . . . for the good of the employees and of the establishment."

# 3. Background Discussion

# 3.1 Cooperation between Works Council and Management

The existence of information asymmetries and commitment problems is one explanation as to why works councils may play the intended role in fostering trustful industrial relations within establishments. Employees will withhold loyalty and effort when an employer cannot credibly commit to take into account their interests. There is a variety of

situations in which commitment problems can arise. For example, information asymmetries may cause workers to refuse concessions even when concessions are necessary to ensure competitiveness of the establishment. If employees do not share the same economic information possessed by management, they may fear that the employer overstates a crisis to demand greater concessions. Similarly, workers fearing job loss due to organizational change may try to sabotage a management-initiated restructuring of production. Moreover, if information about potentially performance-enhancing innovations is in the hands of the employees, they may not wish to reveal it for the fear that the employer may use the information to their disadvantage.

Theory suggests that worker representation can be a way to protect the interests of the workforce (Freeman and Lazear 1995, Kaufman and Levine 2000, Smith 1991). The information rights of a works council help reduce information asymmetries. This makes it easier to verify the employer's claims. Moreover, the veto and coequal participation rights of the council help avoid that the employer unilaterally takes actions without considering workers' interests. This in turn fosters workers' willingness to provide effort and to be loyal to the firm. Altogether, the unique institutional design of works councils suggests that they have the potential to realize mutual gains for employees and employers.

However, while the argument that a council helps in building trust by mitigating the employer's commitment problems fits with the intention of the WCA, the functioning of codetermination is not completely predetermined by the letter of the law and can vary dramatically depending on the circumstances. Case studies (Frege 2002) and recent econometric examinations (Jirjahn and Smith 2006, Jirjahn et al. 2011, Nienhueser 2009,

Pfeifer 2011, 2013) show that there is a wide range of industrial relations regimes characterized by different interactions of management and works council. In some firms, works council and management are indeed able to build cooperative and trustful relationships. Managers encourage the works council to participate in a wide range of decisions and to play a co-managerial role. The council, in turn, takes responsibility for productivity and economic success of the firm (Mueller-Jentsch 1995).

Yet, in other firms, the works council has extremely adversarial relationships with management. An aggravation of conflicts may emerge in various situations. One scenario is that the council uses its codetermination rights not for increasing joint firm surplus but rather for rent-seeking activities (Addison et al. 2001). A council may use its codetermination rights on social and personnel matters to obtain employer concessions even on issues where it has no legal powers. The council may negotiate higher wages and less productive work practices that require lower effort by the workers.

A second possible scenario is that the owners or managers of the firm are not interested in long-term cooperation with the workforce (Jirjahn 2003, Jirjahn and Smith 2006). They may rather prefer to maximize short-term profitability by reneging on implicit contracts with the employees. In this case, management may spend resources in isolating and weakening the works council instead of investing those resources in performance-enhancing projects. The council may try to act as a countervailing power in order to protect employee interests. However, the likely outcome is a lot of time spent in adversarial bargaining.

Finally, despite of the information rights of the works council, there can be situations in which serious information asymmetries remain (Jirjahn et al. 2011, Kennan

and Wilson 1993). Management may still have private information on predictions of demand and production, or on opportunities to redeploy capital in other locations and to substitute capital for labor. In this case, a works council is very likely to demand extensive consultations with management and to enter conflictual negotiations in order to obtain credible information. Management in turn may try to avoid involving the council if it fears that the involvement of the council results in delayed decisions. Thus, if a works council is not able to substantially reduce information asymmetries, codetermination may aggravate distrust and conflict.

The heterogeneity in works council-management relationships gives rise to the question as to which factors influence whether or not works council and management are able to build a cooperative relationship. We address this question by examining the role of foreign owners.

# 3.2 The Role of Foreign Owners

The management practices of foreign-owned firms differ (to a greater or lesser extent) from those of domestic-owned firms (Bloom and Van Reenen 2010, Doeringer et al. 1998, Freeman et al. 2008, Heywood and Jirjahn 2013, Poutsma et al. 2006, Walsh 2001). The existence of MNCs is often explained by their superior products or production processes to which other firms have no access (Helpman 2006, Markusen 1995). Specific management practices may be one source of this advantage, and even when not, the unique products and production processes of a MNC may be a source of competitive advantage only if the managers and employees of its subsidiaries undertake complementary efforts and human capital investments. Practices such as performance management and variable pay provide corresponding incentives. These practices may be

seen by the managers of the parent company as specifically important to the extent that diverse workforces and diverse environments in the various host countries make coordination and agency problems in the subsidiaries more severe. Hence, the managers of the parent company may prefer to implement unified management practices in the subsidiaries that follow company-wide standards. As emphasized by Kostova and Roth (2002), this can potentially involve tensions with the cultural and institutional context of the respective host country. At issue is whether or not this also holds true for codetermination in Germany.

Adopting the management practices of the foreign parent company entails a high degree of uncertainty and ambiguity for the employees of the local subsidiary (Scheve and Slaughter 2004). Change requires renewed effort. Moreover, employees may suspect that they will lose their jobs due to competence-destroying change. Hence, they should have an increased desire for representation in order to protect their interests. This is confirmed by Addison et al. (2003) and Schmitt (2003). They find that works councils are more likely to be present in foreign-owned establishments.

However, a positive link between foreign ownership and works council incidence tells us little about the quality of industrial relations in foreign-owned firms. On the one hand, managers and works councils in foreign-owned firms might cooperate at least just as managers and works councils in domestic-owned firms. Given that foreign ownership entails a high degree of risk to workers, the involvement of a works council has potentially a high commitment value. To discourage employees from withholding effort and resisting change, the managers of the foreign-owned firm might have a high interest in cooperating with the works council. On the other hand, the employees of the foreign-

owned firm may adopt a works council to ensure some (minimum) protection even though the council is not able to play a co-managerial role and aggravates conflicts with management. Indeed, several reasons suggest that foreign ownership reduces the chance that management and works council cooperate.

One reason is that a high degree of information asymmetry in a foreign-owned firm makes it difficult for the works council to play an effective information sharing role. Important decisions are made by managers of the foreign parent company and not by managers of the local subsidiary. As the council of the local subsidiary has only very limited access to the information possessed by the parent company's managers, it is less effective in reducing information asymmetries and building trust. Quite the contrary, the council is more likely to resist change if it has no access to relevant information and, hence, distrusts the foreign owner. Lack of transparency implies that it is more difficult for local managers to convince the council. The result is a lot of time spent in meetings and adversarial bargaining.

Even if local managers and works council are able to find a local solution, local managers have to convince the head office. If managers of the foreign parent company lack sufficient information about local conditions of the subsidiary, they are less likely to agree. This may be also the case if the parent company's managers have little experience with codetermination. In this sense, the intervention of an uninformed third party complicates negotiations between local management and works council and, hence, makes it more difficult for them to cooperate.

The managers of the foreign parent company may even generally not value local solutions that modify the common practices of the MNC. They may rather prefer to

harmonize management practices across countries. Hence, as suggested by case study evidence, they exert pressure on the local managers to unilaterally implement unified management practices that follow company-wide standards (Tempel et al. 2006). In response to this pressure, the local managers take actions to bypass the works council (Royle 1998). This destroys trust and cooperation. In such a situation, the works council views the management practices of the MNC as more of a threat. As a consequence, the council acts as a countervailing power and tries to resist the implementation of those practices.

The foreign owner's incentive to make and implement decisions unilaterally may be reinforced to the extent foreign ownership inherently weakens the bargaining strength of the works council. If the foreign MNC maintains capacity to produce the same good in different national markets, the parent company's managers can more easily threaten to transfer production abroad (Caves 1996, Fabbri et al. 2003, Slaughter 2007). This limits the council's ability to shape policy and to play a trust-building role. If the works council cannot effectively increase joint firm surplus, it may use its remaining bargaining power to specialize in rent seeking activities. Indeed, Gaston (2002) presents a formal model showing that worker organizations with lower bargaining power place greater weight on redistribution. The outcome is again increased conflict between management and works council.

Finally, the 'varieties of capitalism approach' suggests that codetermination requires patient capital to cooperatively realize long-term mutual gains for investors and employees (Hall and Soskice 2001). Yet, foreign owners appear to be more volatile than domestic owners. A series of international studies show that foreign ownership is

associated with an increased probability of firm closure (Bernard and Sjoeholm 2003, Goerg and Strobl 2003, Harris 2009, Wagner and Weche Geluebcke 2011), higher levels of outsourcing (Girma and Goerg 2004), and a faster adjustment of employment (Fabbri et al. 2003, Navaretti et al. 2003). There is even evidence that firms with foreign ownership face pressure to maximize short-term profit (Dill et al. 2013, Liljeblom and Vaihekoski 2010). These findings indicate that foreign-owned firms have a shorter time horizon implying that management may have little interest in long-term cooperation with the works council.

## 4. Data and Variables

### 4.1 Data Set

Our empirical investigation uses representative firm data collected by Great Place to Work® Germany in the year 2006. The survey was conducted on behalf of the German Federal Ministry of Labor and Social Affairs. Managers of 339 firms answered a comprehensive online questionnaire. The questionnaire covers various aspects of firm structure and firm behavior with an emphasis on issues related to human resource management. The population of the survey consists of firms with 20 or more employees. The 339 firms are almost evenly spread across the different industries in Germany (Berger et al. 2011). For our empirical analysis we exclude the public sector and non-profit organizations. After eliminating observations for which full information is not available, the investigation is based on data from 213 firms.

### 4.2 Industrial Relations Regimes

The survey provides information on the incidence of a works council and on the

relationship the works council has with the management. Table 1 shows the distribution of the industrial relations regimes. 43 percent of the firms have no works council. In 31 percent of the firms, a works council is present and management views the relationship with the council as being based on cooperation and partnership. In 26 percent of the firms, a works council is present and management does not view the relationship with the council as cooperative. Hence, in 55 percent of the firms with a works council, management describes the relationship as being based on cooperation and partnership. In 45 percent of the firms with a works council, it does not view the relationship with the council as cooperative.

We use this information to define two dependent variables. The first variable is a dummy equal to 1 if a works council is present in the firm. It is equal to 0 if no council is present. Previous studies have found that foreign-owned firms are more likely to have a works council (Addison et al. 2003, Schmitt 2003). We estimate the determinants of works council incidence to check if we can confirm this finding also with our data.

However, as emphasized, examining the link between foreign ownership and works council incidence provides no information on the implications foreign ownership has for the quality of industrial relations. Thus, for those establishments having a works council, we define a second dependent variable capturing the quality of industrial relations within the firm. It is a dummy equal to 1 if management views its relationship with the works council as being based on cooperation and partnership. It is equal to 0 otherwise.

### 4.3 Explanatory Variables

Table 2 provides the variable definitions and descriptive statistics of the explanatory

variables. The key explanatory variable is a dummy variable equal to 1 if the firm is foreign-owned. The survey asks whether or not the firm is majority-owned by another company. If the answer is 'yes', interviewees are asked to provide information on the location of the parent company. This allows us to identify if the firm has a dominant foreign owner. 11 percent of the firms in the sample are in the hands of a dominant foreign owner. A dummy variable for a domestic-owned subsidiary is also taken into account. This is important as it helps examine whether subsidiaries in general or foreign-owned subsidiaries in particular are characterized by a specific industrial relations climate. The reference group consists of firms that are no subsidiaries.

The role of unions is captured by a dummy variable for the coverage by a collective bargaining agreement. Works councils often help unions recruit union members (Behrens 2009). Hence, unions should support the implementation of works councils. A union can provide expertise so that it is easier for workers to implement a works council. Moreover, the WCA provides that a union which has at least one member in the establishment can initiate the introduction of a works council. Centralized collective bargaining may also influence the relationship between works council and management. It reduces distributional conflicts on the firm level, allowing the council to play a more productive role (Huebler and Jirjahn 2003). This suggests that collective bargaining coverage should have a positive influence on works council-management cooperation.

Furthermore, we include several variables for general establishment characteristics. Previous research has shown that firm size and firm age are positively associated with the incidence of a works council (e.g., Addison et al. 2003). Particularly,

firm size may also play a role in the relationship between works council and management. Works councils may mitigate transaction costs in larger firms where the need for communication is likely to be higher. Thus, in larger firms, the benefits of a works council to the employer and the workforce should be greater. This should increase the probability that management and works council cooperate. Moreover, 8 industry dummies are included to control for the nature of the production process.

In order to examine whether or not monetary incentives for managers influence the incidence of a council or the quality of industrial relations, we control for managerial share ownership and the average share of performance-related pay in managers' total compensation. The firm's market strategy is captured by variables for innovativeness and quality orientation. A strategy based on innovation or product quality should increase management's incentive to cooperate with the works council. If the works council improves the information flow within the firm, this may provide managers with ideas about the potential for innovations and quality improvements (Jirjahn and Smith 2006, Smith 1994). Codetermination may also play a role in motivating employees to develop valuable innovations and quality improvements. Moreover, the legal form of the firm is captured by dummy variables for a limited company and a stock corporation. If owners are protected by limited liability, they may induce management to undertake risky projects (Harhoff et al. 1998). This in turn may increase workers' desire for representation. Finally, we include a dummy equal to 1 if management feels that product market competition is high. On the one hand, a council may be specifically important for building trust and loyalty in firms that face high competitive pressure (Jirjahn 2009, 2010). On the other hand, this is not likely to occur without conflict.

### 5. Results

# 5.1 Initial Probit Regressions

Table 3 provides the basic regression results. Column (1) shows the estimates of the determinants of works council incidence. For those firms having a works council, column (2) presents the results on the determinants of a cooperative relationship between management and works council. As the dependent variables are dichotomous, the probit procedure is used. Firm size emerges as a significantly positive determinant of both the incidence of a works council and works council-management cooperation. Firm age, collective bargaining coverage, and innovativeness are significantly positive covariates of works council incidence.

Most importantly in our context, the variable for a foreign-owned subsidiary plays a significant role in both the incidence of a works council and the industrial relations climate. Foreign ownership is associated with a higher probability of works council incidence and a lower probability of a cooperative works council-management relation. The variable for a domestic-owned subsidiary does not emerge as significant determinant. This suggests that the influence on industrial relations is not a general phenomenon of subsidiary companies, but a specific phenomenon of foreign-owned subsidiary companies. The estimated magnitude of the influence of foreign ownership is quite substantial. Foreign-owned firms have a 26 percent higher probability that a works council is present. They have a 54 percent lower probability that the relationship between works council and management is based on cooperation and partnership.

Our finding of a positive link between foreign ownership and works council incidence confirms the results of previous studies. This link may be explained by a high

degree of uncertainty and ambiguity for the employee of a foreign-owned firm. This uncertainty and ambiguity increases workers' desire for a representation in order to protect their interests. However, the negative link between foreign ownership and works council-management cooperation suggests that works councils in foreign-owned firms do not play the trust-building role they play in domestic-owned firms. A high degree of opacity and the foreign owners' propensity to unilaterally implement unified management practices complicate negotiations and aggravate conflicts between works council and local management. This tendency is reinforced if the foreign owners are more volatile and the threat to transfer production abroad weakens the council's power to play a productive role.

# 5.2 Bivariate Probit Regression with Sample Selection

Estimation (2) in Table 2 is based on a truncated sample of firms that have a works council. If there are unobserved factors influencing both the incidence of the works council and the works council-management relationship, the estimation may suffer from a sample selection bias. We use a bivariate probit model with sample selection to account for the potential bias introduced by the truncated sample (Van de Ven and Van Pragg 1981). The determinants of works council incidence and the determinants of works council-management cooperation are jointly estimated by maximum likelihood. We achieve identification by excluding insignificant variables from the cooperation equation.

Table 4 presents the results. The model provides no indication of a sample selection bias. A Wald test does not reject the null hypothesis of independent equations and the correlation between the error terms of the incidence and the cooperation equation is statistically insignificant. Most importantly, the model confirms the basic pattern of

results. Foreign ownership is positively associated with works council incidence and negatively associated with works council-management cooperation.

# 5.3 Multinomial Probit Regression

As a further check of robustness we define a new dependent variable y that combines the information on the incidence of a works council and the quality of industrial relations: y = 0 if no works council is present; y = 1 if a works council is present and the relationship between works council and management is not based on cooperation and partnership; y = 0 if a works council is present and the relationship between works council and management is based on cooperation and partnership. We use the multinomial probit model as estimation method. The multinomial probit model generalizes the standard probit model by allowing more than two categorical, unordered outcomes.

Table 5 provides the estimates. Column (1) shows the results on the determinants of the incidence of a works council that has no cooperative relationship with the management. Column (2) presents the findings on determinants of the incidence of a works council that has a cooperative relationship with the management. The reference group consists of firms that have no works council. Firm size is a positive determinant of both works council incidence not coupled with cooperation and works council incidence coupled with cooperation with the influence on latter industrial relations regime being stronger. Firm age is positively associated with the incidence of a council that has no cooperative relationship with management. Innovativeness and collective bargaining coverage are positive covariates of the incidence of a council that has a cooperative relationship with management.

Most importantly, foreign ownership is a positive determinant of the incidence of

a works council that has no cooperative relationship with management. This result fits our previous finding that foreign ownership increases the probability of works council incidence and decreases the probability of works council-management cooperation. However, in the multinomial probit estimation the variable for domestic-owned subsidiaries for the first time emerges as a significant determinant. Domestic-owned subsidiaries are also more likely to have a works council that has no cooperative relationship with management. This indicates that managers and works councils of subsidiaries in general may have to some extent difficulties in building a trustful relationship. Nonetheless, the estimated magnitudes show that these difficulties are more severe in foreign-owned subsidiaries. Domestic-owned subsidiaries have a 38 percentage point higher probability that a works council is present and no cooperation between works council and management emerges. By contrast, that probability is 66 percentage points higher in foreign-owned subsidiaries. Thus, also the multinomial probit regression provides evidence that foreign ownership involves specific tensions with the German system of codetermination.

### 6. Conclusions

The consequences of globalization are a highly controversial issue. Our study provides an examination of these consequences for works councils in Germany. Previous research has shown that works councils have the potential to improve both the quality of working life and economic performance. However, whether or not a works council can in fact increase joint firm surplus depends on cooperative relationships with management. Our estimates show that foreign ownership reduces the chance that the relationship between works council and management is characterized by cooperation and partnership. This finding

conforms to the notion that the activities of foreign MNCs entail tensions with institutional framework of the host country. Interestingly, despite the negative influence on works council-management cooperation, foreign ownership is associated with a higher probability that a works council is present in the firm. To the extent foreign ownership involves a greater uncertainty and ambiguity for the workforce, employees may adopt a works council even though a council in a foreign-owned firm may aggravate conflicts with management and may provide only some minimum protection.

On a broader scale, our study contributes to the ongoing discussion on the erosion of industrial relations institutions in Germany. That discussion largely focuses on the declining trend in collective bargaining and works council coverage (e.g., Addison et al. 2010). Our study suggests that the discussion should also take into account the quality of industrial relations. If we would have considered only the link between foreign ownership and works council incidence, we would have concluded that foreign ownership does not contribute to the erosion of codetermination in Germany but even works against the process of erosion. Considering the quality of industrial relations yields a completely different picture of the role of foreign ownership. Foreign ownership contributes to the erosion of codetermination by reducing the chance of works council-management cooperation. Works councils may be more likely to be present in foreign-owned firms. Yet, in foreign-owned firms, they do not play the trust-building and co-managerial role they often play in domestic-owned firms.

We recognize the need for continued research within the theme. Future research might fruitfully examine the dynamics of the interaction between foreign ownership and codetermination. Jirjahn et al. (2011) suggests that learning can play an important role in

the functioning of codetermination and that the likelihood of cooperation between works councils and management increases with the age of the relationship. Firms with foreign ownership may have shorter relationships. Hence, it could be interesting to examine whether or not the quality of the relationship improves as both parties accumulate experience with each other. This would also provide an answer to the question whether the influence of foreign ownership on the erosion of codetermination is only a temporary or rather a permanent phenomenon.

 Table 1: Distribution of Industrial Relations Regimes

Industrial Relations Regime	Percent
There is no works council in the firm.	42.7
A works council is present in the firm and works council and management have no relationship based on cooperation and partnership.	26.3
A works council is present in the firm and works council and management have a relationship based on cooperation and partnership.	31.0

N = 213

 Table 2: Variable Definitions and Descriptive Statistics of the Explanatory Variables

Variable	Definition	Mean, std.dev.
Foreign-owned subsidiary	Dummy equal to 1 if the firm is majority-owned by a foreign company.	0.108, 0.311
Domestic-owned subsidiary	Dummy equal to 1 if the firm is majority-owned by a German company.	0.235, 0.425
Ln(firm size)	Log of the number of employees in the firm.	5.011, 1.270
Ln(firm age)	Log of the time span between the year 2006 and the year of foundation of the firm.	3.549, 1.072
Stock corporation	Dummy equal to 1 if the firm is a stock corporation.	0.066, 0.248
Limited company	Dummy equal to 1 if firm is a private limited liability company.	0.460, 0.500
Quality-based strategy	Ordered variable for the importance of the quality of products and services for the firm's market strategy. The variable ranges from 1 "not that important" to 4 "extremely important".	3.178, 0.762
Product innovation	Dummy equal to 1 if the firm has launched new products or services in the last three years.	0.761, 0.428
Share of managerial performance pay	Average percentage share of performance pay in total pay of a manager.	11.99, 13.89
Managerial share ownership	Dummy equal to 1 if firm provides share ownership for managers.	0.146, 0.353
Collective Bargaining	Dummy equal to 1 if firm is covered by a collective bargaining agreement.	0.563, 0.497
High competition	Dummy equal to 1 if management feels that product market competition is high.	0.808, 0.395
Industry dummies	8 industry dummies (chemistry, mechanical engineering, automobile, construction, retail, logistics, service, financial service). The reference group consists of firms in the metal industry.	

N = 213

**Table 3:** Initial Probit Estimates

	(1)	(2)
	Works council incidence	Cooperative relationship
		between management and
		works council
Explanatory variables		
Foreign-owned subsidiary	0.779** [0.263]	-1.569*** [-0.545]
	(0.391)	(0.512)
Domestic-owned subsidiary	0.487 [0.178]	-0.485 [-0.187]
	(0.303)	(0.314)
Ln(firm size)	0.759*** [0.284]	0.325** [0.129]
	(0.130)	(0.128)
Ln(firm age)	0.217* [0.081]	-0.122 [-0.048]
	(0.119)	(0.142)
Stock corporation	0.598 [0.191]	0.294 [0.107]
-	(0.562)	(0.657)
Limited company	-0.078 [-0.029]	-0.506 [-0.200]
	(0.246)	(0.326)
Collective bargaining	0.403* [0.151]	0.181 [0.155]
	(0.244)	(0.332)
Product innovation	0.481* [0.185]	0.390 [0.155]
	(0.254)	(0.376)
Quality-based strategy	-0.005 [-0.001]	0.049 [0.019]
	(0.137)	(0.201)
High competition	-0.243 [-0.088]	-0.368 [-0.143]
	(0.259)	(0.372)
Share of managerial performance pay	-0.002 [-0.001]	0.016 [0.007]
	(0.008)	(0.013)
Managerial share ownership	-0.094 [-0.035]	-0.194 [-0.077]
	(0.312)	(0.509)
Constant	-4.786***	-1.025
	(1.072)	(1.190)
Industry Dummies	Yes	Yes
Pseudo R <sup>2</sup>	0.38	0.19
Observations	213	111
The table shows the estimated coefficient	D 1 1 1	4 35-5-5-0 1 1

The table shows the estimated coefficients. Robust standard errors are in parentheses. \*\*\*Statistically significant at the 1% level; \*\*at the 5% level; \*at the 10% level. Marginal effects are in square brackets. Marginal effects of dummy variables are evaluated for a discrete change from 0 to 1. The marginal effects of foreign-owned and domestic-owned subsidiaries are changes in probability compared to the reference group of domestic-owned firms that are no subsidiaries.

Table 4: Bivariate Probit Regression with Sample Selection

	(1) Works council incidence	(2) Cooperative relationship between management and works council
Explanatory Variables		
Foreign-owned subsidiary	0.818** [0.275]	-1.250*** [-0.300]
	(0.404)	(0.374)
Domestic-owned subsidiary	0.485 [0.178]	-0.441 [-0.049]
Y (C'	(0.301)	(0.277)
Ln(firm size)	0.725*** [0.273]	0.117 [0.177]
Y (C	(0.143)	(0.220)
Ln(firm age)	0.164 [0.062]	
G. 1	(0.154)	
Stock corporation	0.615 [0.195]	
Timited commons	(0.547) -0.123 [-0.047]	
Limited company		
Product innovation	(0.256) 0.501** [0.193]	
Product innovation	(0.243)	
Quality-based strategy	0.011 [0.004]	
Quanty-based strategy	(0.139)	
High competition	-0.253 [-0.092]	
The competition	(0.250)	
Share of managerial performance pay	0.001 [0.001]	
Share of managerial performance pay	(0.010)	
Managerial share ownership	-0.096 [-0.036]	
Trimingerim same s watering	(0.319)	
Collective bargaining	0.467* [0.176]	
<i>5</i>	(0.252)	
Constant	-4.473***	-0.043
	(1.215)	(1.498)
Industry Dummies	Yes	No
Rho	4614 (0.576)	
$\chi^2$ (Wald test of independent equations)	0.47	
Log likelihood	-166.81	
Observations	213	
Uncensored Observations	122	

The table shows the estimated coefficients. Robust standard errors are in parentheses. \*\*\*Statistically significant at the 1% level; \*\*at the 5% level; \*at the 10% level. Marginal effects are in square brackets. Marginal effects of dummy variables are evaluated for a discrete change from 0 to 1. The marginal effects of foreign-owned and domestic-owned subsidiaries are changes in probability compared to the reference group of domestic-owned firms that are no subsidiaries.

**Table 5:** Multinominial Probit Estimation

	(1)	(2)
	Works council is present	Works council is present
	&	&
	no cooperation	cooperation
Explanatory Variables	1	1
Foreign-owned subsidiary	1.462*** [0.661]	0620 [0.039]
	(0.494)	(0.651)
Domestic-owned subsidiary	0.901** [0.378]	0.325 [0.146]
•	(0.428)	(0.443)
Ln(firm size)	0.833*** [0.376]	1.131*** [0.495]
	(0.176)	(0.199)
Ln(firm age)	0.366** [0.159]	0.216 [0.100]
	(0.169)	(0.180)
Stock corporation	0.633 [0.223]	0.949 [0.396]
	(0.805)	(0.822)
Limited company	0.138 [0.048]	-0.404 [-0.161]
	(0.353)	(0.395)
Product innovation	0.452 [0.221]	0.843** [0.355]
	(0.388)	(0.393)
Quality-based strategy	-0.118 [-0.048]	0.076 [0.029]
	(0.210)	(0.208)
High competition	-0.078 [-0.150]	-0.559 [-0.246]
	(0.403)	(0.377)
Share of managerial performance pay	-0.011 [-0.005]	0.010 [0.004]
	(0.012)	(0.013)
Managerial share ownership	-0.033 [-0.020]	-0.256 [-0.105]
	(0.438)	(0.510)
Collective bargaining	0.448 [0.204]	0.626* [0.273]
	(0.372)	(0.370)
Constant	-6.309***	-7.304***
	(1.427)	(1.627)
Industries Dummies	Yes	
Log likelihood	-160.73	
Observations	213	

The table shows the estimated coefficients. Robust standard errors are in parentheses. \*\*\*Statistically significant at the 1% level; \*\*at the 5% level; \*at the 10% level. Marginal effects are in square brackets. Marginal effects of dummy variables are evaluated for a discrete change from 0 to 1. The marginal effects of foreign-owned and domestic-owned subsidiaries are changes in probability compared to the reference group of domestic-owned firms that are no subsidiaries.

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### Endnotes

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- <sup>2</sup> Recent examinations typically obtain neutral to positive effects of works councils on employee retention, family friendly practices, training, flexible working time arrangements, capital utilization, performance pay, innovation, investment, environmentally friendly production processes, and productivity. (e.g., Addison et al. 2001, Askildsen et al. 2006, Backes-Gellner and Tuor 2010, Ellguth and Promberger 2004, Frick and Moeller 2003, Gerlach and Jirjahn 2001, Heywood and Jirjahn 2002, 2009, Huebler 2003, Huebler and Jirjahn 2003, Jirjahn 2008, Jirjahn and Kraft 2011, Smith 2006, and Wagner 2008). However, those studies do not take into account that the effects of works councils may differ between domestic- and foreign-owned firms.
- <sup>3</sup> Finally, we recognize that a handful of case studies have examined the tensions foreign ownership entails for the industrial relations system in Germany (e.g., Raess and Burgoon 2006, Royle 1998, Tempel et al. 2006, Wever 1995). These studies yield very important exploratory insights calling for econometric studies that provide a systematic and generalizable analysis on the role of foreign ownership.
- <sup>4</sup> Note that codetermination through works councils is entirely separate from the system of board-level codetermination (Fauver and Fuerst 2006).
- <sup>5</sup> Even rent sharing across borders appears to play a role (Budd and Slaughter 2004, Budd et al. 2005).
- <sup>6</sup> Martinez Lucio and Weston (1994) provide an example showing that such distrust can be justified. They describe a US company exploiting the lack of information among workers at a Belgian plant and at a German plant. Workers were told that future investment depended on

<sup>&</sup>lt;sup>1</sup> In the U.S., the interest in nonunion worker representation has been spurred by a sharp decline in union density and the growth of a substantial 'representation gap' in the workforce (Freeman and Rogers 1999). Much of the political discussion has centered on the idea of mandating German-style works councils.

changes in working practices. They did not know that the decision to invest in the Belgian plant had already been made.

<sup>&</sup>lt;sup>7</sup> Evidence from Britain indeed suggests that strong worker organizations are more likely to play a productive role than weak worker organizations (Bryson 2004, Fernie and Metcalf 1995).

<sup>&</sup>lt;sup>8</sup> However, Buch and Lipponer (2010) fail to find evidence that MNCs are more volatile.