

Müller, Steffen; Stegmaier, Jens

Working Paper

Why is there resistance to works councils in Germany? An economic perspective

IWH Discussion Papers, No. 23/2017

Provided in Cooperation with:

Halle Institute for Economic Research (IWH) – Member of the Leibniz Association

Suggested Citation: Müller, Steffen; Stegmaier, Jens (2017) : Why is there resistance to works councils in Germany? An economic perspective, IWH Discussion Papers, No. 23/2017, Leibniz-Institut für Wirtschaftsforschung Halle (IWH), Halle (Saale), <https://nbn-resolving.de/urn:nbn:de:gbv:3:2-81123>

This Version is available at:

<https://hdl.handle.net/10419/171262>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Discussion Papers

No. 23

November 2017



Why is there Resistance to Works Councils in Germany? An Economic Perspective

Steffen Müller, Jens Stegmaier

Authors

Steffen Müller

Halle Institute for Economic Research (IWH) –
Member of the Leibniz Association,
Department of Structural Change and
Productivity, and Otto von Guericke University
Magdeburg
E-mail: steffen.mueller@iwh-halle.de
Tel +49 345 7753 708

Jens Stegmaier

Corresponding author
Institute for Employment Research (IAB)
Nuremberg
E-mail: jens.stegmaier@iab.de

The responsibility for discussion papers lies solely with the individual authors. The views expressed herein do not necessarily represent those of IWH. The papers represent preliminary work and are circulated to encourage discussion with the authors. Citation of the discussion papers should account for their provisional character; a revised version may be available directly from the authors.

Comments and suggestions on the methods and results presented are welcome.

IWH Discussion Papers are indexed in RePEc-EconPapers and in ECONIS.

Editor

Halle Institute for Economic Research (IWH) –
Member of the Leibniz Association

Address: Kleine Maerkerstrasse 8
D-06108 Halle (Saale), Germany
Postal Address: P.O. Box 11 03 61
D-06017 Halle (Saale), Germany

Tel +49 345 7753 60
Fax +49 345 7753 820

www.iwh-halle.de

ISSN 2194-2188

Why is there Resistance to Works Councils in Germany? An Economic Perspective*

Abstract

Recent empirical research generally finds evidence of positive economic effects of works councils, for example with regard to productivity and – with some limitations – to profits. This makes it necessary to explain why employers' associations have reservations against works councils. On the basis of an in-depth literature analysis, we show that beyond the generally positive findings, there are important heterogeneities in the impact of works councils. We argue that those groups of employers that tend to benefit little from employee participation in terms of productivity and profits may well be important enough to shape the agenda of their employers' organisation and even gained in importance within their organisations in recent years. We also discuss the role of deviations from profit-maximising behaviour like risk aversion, short-term profit maximisation, and other non-pecuniary motives, as possible reasons for employer resistance.

Keywords: employers' association, plant level employee participation, works council

JEL Classification: J5

* We wish to thank Claus Schnabel, Peter Ellguth and the participants in the SAMF annual conference 2015 for valuable tips.

1 Introduction

Works councils are an integral part of the industrial and labor relations system in a number of industrialized countries. In Germany, they provide a highly developed mechanism for employer-employee communication and negotiation at the plant level. Their potential to improve worker representation and increase plant productivity has directed considerable attention to German-style works councils in countries where the union density has declined and international competition has increased. In fact, recent research on the economic consequences of (German) works councils increasingly presents a cautiously positive overall picture. Despite these positive findings, employers have considerable reservations about or even resistance toward works councils. Our paper aims to explain why employers oppose an institution that is beneficial for firms. We also propose avenues for future research.

Less than ten percent of all establishments in Germany that meet the legal requirements for a works council actually have one (Ellguth and Kohaut, 2015). This finding indicates a considerable area in which employee participation would be possible but – for a variety of reasons – is not put into practice. It would be wrong to assume that in all of these establishments, there is no reasonable balance of interests between the employers and the workforce. Particularly in smaller establishments, reference is repeatedly made to the fact that a works council does not necessarily have to be set up to enable an exchange of information between employees and management (Schnabel and Wagner, 2001).

Still, workers in firms without councils obviously believe that the benefits of running one do not outweigh the costs. Because council members enjoy a particular employment protection and the time they spend as a works councilor is counted as regular working time, the costs for employees may include the fear of sanctions from and conflict with the employer. Moreover, some establishments lack works councils due to active resistance on the part of management.

Schlecker, Lidl and *Aldi* – all large retailers – are especially well-known cases of employer resistance in Germany.

Employers typically note that works councils yield substantial economic drawbacks due to direct costs or decreasing the efficiencies of managerial actions. The most important German employer organization, the *Confederation of German Employers' Associations* (Bundesvereinigung der deutschen Arbeitgeberverbände – BDA) criticizes – in spite of its fundamental commitment to employee participation – the fact that works councils are currently provided with too much and overly extensive rights, such as the right to propose firm-sponsored training or codetermination rights regarding operation or opening hours. More generally, employers argue that employee participation currently extends to a multitude of economic issues in a way that goes well beyond the original concept of codetermination, which focused only on social and personnel issues (Kommission Mitbestimmung, 2004).

Thus, the BDA has called for extensive modifications to the rights of works councils, e.g. demanding that full-time equivalents and not heads should be counted when determining how many employees a firm must have to set up a works council, which would equate to raising the current threshold of five employees. There are also demands for works council elections to have a minimum quorum of a third of employees who are entitled to vote, which is also likely to make it more difficult to set up such a body. Furthermore, based on the costs associated with employee participation, arguments have been advanced for decreasing the size of the works council in terms of personnel and reducing the number of works council members who are given time off work to perform their works council duties (BDA, 2014; Kommission Mitbestimmung, 2004). All in all, these modifications aim at higher thresholds to establish works councils as well as smaller works councils with fewer rights, all of which reflect that employers are resisting the current system of works councils.

If this attitude of employers' associations is based on actual and anticipated economic disadvantages for employers¹ as a result of setting up a works council, as the argument generally goes, the question arises as to the economic consequences of employee participation at a plant level. Since at least the 1980s, an ongoing debate about this topic has continued in labor and personnel economics. Although this research has drawn a largely differentiated picture over the years (see Section 3), more recently, a cautiously positive overall impression of the economic impact of works councils appears to be forming, which raises the question of how reservations about or even resistance to works councils can be explained, given employers' opposition to an institution that benefits them.

Employer associations' reservations can be grounded in economic and non-economic reasons.² We define economic reasons as any circumstances in which profit-maximizing employers resist councils because they expect pecuniary disadvantages from having a council. We cannot credibly infer the reasons for resistance directly from employer associations; even if their resistance is rooted in non-economic reasons, employers will use economic arguments to convince the public and policymakers.³ In other words, employer associations will probably not admit that their members fear for their managerial prerogatives or derive disutility from having to address works councils (both non-economic arguments), even if these are the actual reasons.

The employer association is assumed to resist councils if the median voter in the association resists councils. Our main hypothesis is that the *median* voter may suffer economic

¹ The Confederation of German Employers' Associations argues that while possible gains of works councils like lower transaction costs are uncertain, works councils undoubtedly have direct costs of up to several hundred Euros per worker per year (BDA, 2014).

² A third possible reason for resistance is misjudgment about the economic effects of works councils. While generally acknowledging this possibility, we assume that employer associations know the economic effects of works councils on the associations' member firms; e.g., through the experience of their members or by surveying the relevant economic literature.

³ One could ask individual employers instead of the employer association and aggregate their answers. However, such a survey would be very challenging as the codetermination law prohibits and severely penalizes actions and sanctions against works councils including their formation. Therefore, surveyed employers may shy away from disclosing hostile attitudes toward councils at all.

disadvantages from councils even if the economic effects of councils are on *average* positive for German firms. This is possible because strong positive effects for a minority of firms and moderate adverse effects for the majority may yield a situation where a majority resists councils despite, on average, positive effects. This novel reasoning opens the possibility that an association of profit-maximizing employers resists works councils despite the councils' *on average* positive effects. To scrutinize this potential explanation further, we survey the economic literature to ask whether several negatively affected subgroups form a group that is plausibly important enough to organize resistance at an association level.

Prior research on works councils has already looked at employers' attitudes to works councils (and the works councils' attitudes to employers) and the consequences of the actions of works councils. Typology research on works councils delivered major contributions at an early stage in the context of qualitative sociology. Formative examples of this include studies by Kotthoff (1981, 1994; see also Frege, 2002), who addressed the quality of the relationships between works councils and firms, although his typology cannot be directly related to the economic effects of works councils, which are the topic of interest in this paper.⁴ Other studies adopt a quantitative perspective. Some aim to explain or differentiate the effects of works councils on the basis of different types of works councils (e.g., Dilger, 2002; Frick, 2002; Nienhüser, 2009); others aim to describe the quality of the relationships between different forms of employee representation and firms on the basis of firm-specific characteristics (Jirjahn and Smith, 2006). Finally, Behrens and Dribusch (2014) provide some information about the intensity of the resistance of single establishments. However, this research does not indicate how the finding that works councils have beneficial economic effects can be reconciled with employers' critical or hostile attitudes toward them. No systematic overview has yet been

⁴ Our paper concentrates on the debate surrounding works councils from the viewpoint of quantitative economic research. A review of the more recent research into sociological and qualitative aspects of works councils can be found in Kotthoff (2013).

conducted to identify and evaluate the available empirical findings from the latest economic research on this topic.

Given the vast and sometimes contradictory literature on works councils' economic effects, the field needs a new impetus to stimulate scientific debate on employers' resistance to works councils. Against this background, this is the first paper to provide a comprehensive review of the economic literature, thereby aiming to examine how employers' continuing skepticism and resistance can be reconciled with the positive economic evaluations of works councils. We discuss two perspectives that may help understand this puzzle. First, despite the average positive effects, important subgroups of employers may experience negative economic effects of works councils. Our review notes that smaller firms in particular and firms that are not covered by collective wage agreements may indeed oppose works councils because of economically unfavorable outcomes. We discuss the membership structure of employers' organizations and show that smaller and uncovered member firms may well be important enough to organize resistance. Second, we recall and examine in more detail that resistance may occur if employers deviate from profit-maximization. Examples include short-term oriented and risk-averse employers and those deviating from profit-maximization due to other non-monetary incentives, e.g., employers who wish to maintain the managerial prerogative.

Our contributions are to deliver a novel economic explanation for employer resistance and to examine it in an up-to-date review and analysis of the mainly economic literature. Thereby, we improve our understanding of employers' resistance against works councils and point at existing gaps and future research opportunities.

The rest of this paper is divided into three parts. The next section introduces the institutional and theoretical background. The current state of research is then described. This overview first addresses the development of empirical economic research into works councils in general and then concentrates on more recent findings in three key fields of business success:

productivity, wages and profitability. This is followed by an extensive discussion of studies and approaches that are suitable for explaining resistance to works councils from an economic point of view, and we highlight research questions that remain open.

2 Institutional and theoretical framework

The German system of industrial relations is primarily characterized by its dual structure. The first pillar of this system constitutes the collective agreements negotiated by the employers' associations and the trade unions. The second major pillar of industrial relations can be found at an establishment level and is shaped above all by works councils and company management. For the issue at hand here, the characterization of the fundamental difference between these institutionalized forms of collective conflict by Frege (2002) and Kotthoff (1981) is of particular interest. Collective bargaining is based on the principle of power and countervailing power and the collective agreements are the result of negotiations between two autonomous actors, whereby the management's right to manage the company is not called into question. In contrast, codetermination on the basis of the Works Constitution Act (Betriebsverfassungsgesetz – BetrVG), which is the legal background of works councils, formally curtails the prerogatives of the managers.⁵

According to the Works Constitution Act, workers are entitled to initiate a works council election if an establishment has at least five permanent employees. However, the law does not prescribe the existence of works councils, and there are eligible establishments with and without works councils. Works council incidence increases with plant size. Notably, works councils in Germany formally depend only on employees' initiatives. Moreover, the law also prohibits and penalizes any actions and sanctions (with jail sentences of up to one year)

⁵ While the de-jure situation very clearly defines two distinct spheres of influence with different mechanisms and purposes it should also be acknowledged that members of works councils are often members of unions as well. Similarly, some studies argue that in practice, works councils are sometimes able to exert influence on issues that are formally excluded from works councils' purview.

against workers who want to initiate a works council or against works councils' action once established (BetrVG §20, 119). More details can be found in Addison (2009), who provides a good overview of the history and the functioning of German works councils. The law confers on works councils a number of legal rights, including the right of information, consultation and, most importantly, codetermination. The number of rights increases with plant size. Employers and works councils meet frequently in order to discuss a broad range of topics, including working conditions.

As a “boundary institution”⁶ (Fürstenberg, 1958) among the workforce, management and effectively also the trade unions, works councils depend on a certain amount of cooperation among all actors.⁷ This propensity to cooperate is not only a result of the practical perspective; the Works Constitution Act (BetrVG §2) also demands that employers and works councils cooperate in a spirit of mutual trust for the good of the workforce and the firm while considering valid collective agreements. Despite all of the rights that the Works Constitution Act confers on the works council regarding working conditions, personnel issues, vocational training and economic matters, the act simultaneously restricts the scope of works council activities by referring wage negotiations to the trade unions and employers' associations. The works council is also obliged to maintain industrial peace; it is not allowed to call for industrial action according to §74. Cumulatively, the Works Constitution Act provides works councils with both foundational rights and limits. Freeman and Lazear (1995) argue that the fundamental division between establishment and industry level and the possibility to shift distribution issues into the industry-level arena of collective bargaining play an important role in shaping the impact of works councils, as wages that are set at an industry level limit any possible redistribution activities by works councils and direct the attention of the works

⁶ This notion (“*Grenzinstitution*” in German) expresses that works councils have a particular place in the institutional set-up of the German IR system, where their interests and those of other stakeholders intersect.

⁷ In fact, while works councils are formally independent from unions, works councilors are often also union members; thus, both institutions can often be expected to cooperate closely.

councils more toward increasing the size of the pie that is to be shared – in other words, increasing productivity.

From a theoretical viewpoint, and particularly relevant to this paper, the question arises as to why works councils require a legal mandate. Why should they not be formed, even without a mandate, if they have economically desirable effects? The classic reply to this question can be traced back to Jensen and Meckling (1979). They assume that firms can conclude any kind of contract with their employees and could therefore voluntarily grant them any form of rights that legislators provide to works councils. Jensen and Meckling (1979) presume that firms would do precisely that if the expected returns outweighed the costs. Assuming further that employees desire a works council, they go on to say that the observation that works councils are not formed without a legal mandate leads to the conclusion that works councils must be inefficient.

The argument put forward by Jensen and Meckling (1979) has at least two shortcomings. First, it is assumed that contracts concluded in the private sector of the economy lead to the same effects as legal constraints; second, the employers' profit maximization calculations are used as arguments when assessing the efficiency of an institution. Contracts concluded in the private sector can be terminated, which therefore makes it difficult for both of the contracting parties to assure credibly that they will stand by the contract in the longer term, particularly if it leads to severe disadvantages for one party. The associated inefficiency of such incomplete contracts can be countered by means of state regulation.

Assessing the efficiency of works councils on the basis of employers' profit maximization calculation (costs vs. benefits) leads Jensen and Meckling (1979) to the inconsistent conclusion that an institution that lowers its profits cannot increase efficiency. Freeman and Lazear (1995) develop a model in which works councils increase productivity (efficiency) and *simultaneously* reduce profits. They argue that in the case of employee participation the

production of economic performance cannot be decoupled from the distribution of the same; they say that productivity effects can only exist as a result of the works council having certain rights, but as soon as the works council has rights, it will use them for a redistribution in favor of the employees. From these considerations, Freeman and Lazear (1995) deduce that employers and employees cannot agree on the productivity-maximizing amount of rights and that a legal mandate is therefore required for this purpose. One implication is that employers refuse to agree to an institution that is beneficial to society as a whole if this institution reduces their profits. The fact that even this logically consistent view does not adequately explain German employers' actual resistance can be attributed to the empirical findings on the profitability effects of works councils that are addressed later in this paper.

3 Current state of empirical economic research: do works councils harm or benefit firms?

The research conducted on the impact of works councils meanwhile encompasses an extensive body of different topics, approaches and findings from diverse disciplines. Even if – as is the case here – only quantitative empirical research is examined, a multitude of studies are available. The broad field of economic research into works councils has already been classified and evaluated coherently in other review articles, such as those by Frege (2002), Addison et al. (2004), Franz (2005), Jirjahn (2006, 2011) and Addison (2009). We do not aim to summarize the existing literature again in such a comprehensive way. Instead, our paper concentrates on three central areas that are key to understanding employer resistance, i.e. productivity, wages and profitability. We focus in each case on the most recently published studies that could not have been considered by the authors listed above. Some of the earlier,

often critical, findings no longer hold in the light of more recent research. Instead and with all due caution⁸, works councils seem to be rather beneficial for workers and employers.

3.1 Phases of research into works councils

While Frege (2002) can be credited not only with discussing the economic effects of works councils but also addressing the nature of the institution and examining typologies of works councils, Franz (2005) compares the costs and possible efficiency gains. He finds that works councils involve substantial costs and considers their effects inadequately understood. Against this background he assesses positive net returns to employee participation as improbable. Accordingly, he calls works councils into question from an economic point of view, at least with regard to its current form. Franz's (2005) conclusion can probably be attributed in part to the state of the literature at that time, which was also examined, not without criticism, by Frege (2002). On the basis of the report by the Commission on Codetermination, Frege (2002) concluded that, in view of inconsistent econometric evidence, research had reached an impasse and required a new direction. At approximately the same time, such a new impetus came from the increasing number of studies that were able to use the growing IAB Establishment Panel as their data basis. The researchers obtained an increasingly differentiated picture, assessing on the whole the impact of works councils more favorably.

Addison's (2009) extensive review classifies the economic research conducted since the 1980s according to the databases used. He splits the literature into three phases. In the first phase, beginning with the studies by FitzRoy and Kraft (1985, 1987), researchers worked with smaller samples of usually fewer than 100 firms or establishments. The studies generally reported a negative correlation between works councils and productivity, profitability and innovations. Addison (2009) notes that the studies conducted during this phase are likely to

⁸ It is not always possible to interpret the findings causally. Furthermore, micro-econometric studies do not consider any general equilibrium effects, i.e., effects resulting from the fact that firms without works councils also behave differently than they would in the absence of a legal mandate for works councils.

have diverse problems due to the small numbers of observations and the cross-sectional nature of the data. It can be assumed that the small samples not only affect the precision of the estimates but also call into question their representativeness. It is therefore unclear whether the results are generalizable to the German economy as a whole.

Analyses based on the Hannover Firm Panel (1994-1997) and the NIFA Panel (1991-1998) mark the second research phase. This phase differs from the first one due to the use of considerably larger datasets and, therefore, to a differentiation of the empirical research. With the larger sample size, it was now possible to examine heterogeneities in the mechanisms of works councils. The possibility of differentiating by establishment and considering whether an establishment is covered by collective bargaining proved particularly important (we return to this below). The studies conducted during this second phase provide far more favorable assessments regarding the consequences of works councils. Unlike the early studies, the findings indicate a higher level of productivity, lower staff turnover and stronger employment growth in establishments with a works council. Although the data have a panel character in principle, Addison (2009) observes that the studies frequently fail to go beyond cross-sectional analyses and therefore disregard important issues of causality.

The first studies to exploit the econometric potential better emerge in the third phase, which Addison (2009) defines by the use of the IAB Establishment Panel that was first gathered in 1993 and is ongoing. The IAB Establishment Panel is the first establishment-level dataset that permits representative statements for all of Germany and across all sectors of the economy. Given its larger number of cases and its long panel character, the third research phase is also characterized by a certain methodological plurality, as noted by Jirjahn (2011). However, this does not always contribute to a consistent picture, creating new problems when evaluating the impact of work councils. Since the early studies using the IAB Establishment Panel found very large productivity effects in some cases and therefore often reach opposite findings from

what was obtained in the first phase, it has become clear that, in part due to the diverse econometric approaches for dealing with the endogeneity of works councils, the effects of works councils must be evaluated in a very differentiated manner considering a variety of possible moderator variables. In contrast, the occasionally very large positive effects found in some studies in the third phase have no causal interpretation; works councils can instead be assumed to have a smaller impact on productivity but one that is nonetheless positive on average (see also the next section). The fact that the average productivity effects are not large is sometimes weighted more strongly in the overall evaluation (Addison, 2009), whereas other literature reviews ascribe greater significance to the positive sign and conclude that “employee participation clearly has the potential to increase economic performance” (Jirjahn, 2011: 45).

Irrespective of these nuances, however, researchers agree that the early findings on negative effects as well as the later findings on sometimes very large positive effects have to be regarded as out-of-date. Without needing an explicit cost-benefit calculation similar to that of Franz (2005), the picture that seems to be emerging is that works councils on the whole produce positive economic effects in a variety of ways. This picture does not rule out the fact that in the 1970s and 1980s, works councils did indeed have less favorable economic effects than later became the case. Kotthoff (1994), for instance, uses case studies to note that, between 1975 and 1990, an initially highly ideological confrontation between works councils and management transformed into a generally cooperative and professional relationship.

Empirical research has subsequently addressed a broad spectrum of topics including the relationships between works councils and staff turnover (e.g., Addison et al., 2001), human resources policy (e.g., Heywood and Jirjahn, 2009), further training (e.g., Stegmaier, 2012), job satisfaction (e.g., Grund and Schmitt, 2013), investment (e.g., Addison et al., 2007) and working time (e.g., Jirjahn, 2004, 2008). Of the many research subjects, three - productivity,

wages and profitability – are especially suitable for the topic addressed in this paper. The following sections look at these aspects.

3.2 Productivity

More recent studies published since the last comprehensive literature review (Jirjahn, 2011) support the conclusion that correlations between the works council and productivity are largely positive (Brändle, 2013; Hübler, 2015; Jirjahn and Müller, 2014; Müller, 2012, 2015; Pfeifer, 2011). To obtain a complete picture, however, two points must be taken into account: substantial effect heterogeneity related to context factors and the causal interpretability of the results.

Effects of works councils differ based on contextual factors. These include, for example, whether employees or members of the management are paid a share of the profits in establishments, the degree of (wage) inequality among the employees in an establishment and, in more recent studies, the ownership structure of the establishment (Jirjahn and Müller, 2014). However, collective bargaining coverage and the size of the establishment are particularly important. In smaller establishments having less than 100 employees, partly due to the smaller scope of powers conceded by law for these establishments, the positive effect cannot always be substantiated (Addison et al., 2001). More recent studies (Müller, 2011; Jirjahn and Müller, 2014), in contrast, find smaller but still positive effect in smaller establishments. In addition, great importance is attached to collective bargaining coverage. The argument formulated by Freeman and Lazear (1995) and supported empirically by Hübler and Jirjahn (2003) maintains that works councils boost productivity in particular when distributional conflicts have already been regulated in collective agreements at the industry level. This relationship has been confirmed by other studies (including Wagner et al., 2006; Wagner, 2008; Jirjahn and Müller, 2014; Brändle, 2013). Some studies also substantiate this interaction effect even when the samples comprise only smaller and medium-sized

establishments (e.g., Jirjahn, 2003a; Wagner, 2008), though in a more recent study by Jirjahn and Müller (2014), the interaction was no longer significant for small firms.

In addition to these heterogeneities, possible endogeneity problems are another important issue when examining productivity effects. Endogeneity occurs when the dependent and explanatory variables are affected by unobserved factors, such as the quality of the management. Such endogeneity problems can lead to biased results, thereby compromising the causal interpretability of some of the results presented to date. For example, the effect of works council on firm performance is underestimated if works councils are introduced in crisis situations or during unfavorable economic conditions (Jirjahn, 2009; Addison et al., 2009). Studies using econometric approaches that require a time variation in the variables of interest are sometimes unable to identify any productivity effects of works councils (Addison and Teixeira, 2006). However, this is unsurprising, given that firms rarely establish or abandon works councils; moreover, some changes may also be due to misreporting in the data. For this reason, more recent studies also draw on other methods to account for possible biases. Müller (2012), for instance, uses econometric techniques that under some assumptions allow causal inference and finds a positive productivity effect amounting to approximately 6%. Furthermore, he concludes that this result represents rather a lower bound of the true effect of works councils on productivity.

3.3 Wages

Analyses of wages emerged as a topic of research into works councils at a comparatively late stage. Overall, studies based on the Hannover Firm Panel frequently find that works councils only have a positive effect on wages in establishments that are not bound by collective agreements (Jirjahn and Klodt, 1999; Hübler and Jirjahn, 2003) or that the wage effect is

positive on the whole but is higher in establishments that are not covered by collective agreements (Jirjahn, 2003b).⁹ In contrast, studies that use the IAB Establishment Panel find more positive wage effects (Gürtzgen, 2009a, 2010; Addison et al., 2010; Blien et al., 2013; Brändle, 2013). Whereas Brändle (2013) discovers surprisingly high wage effects, the studies by Gürtzgen (2009a) and Addison et al. (2010) identify approximately 3% to 6% higher wages when taking possible sources of endogeneity into account.

As was the case with the analyses of productivity, significant differences are also recorded for wage effects with regard to collective bargaining coverage and establishment size. Fewer studies look at establishment size, although it should be noted that Addison et al. (2000) only find positive wage effects for smaller establishments, whereas Addison et al. (2010) do not detect any differences between establishments of different sizes. Studies based on the Hannover Firm Panel find more positive wage effects in establishments that are not bound by collective agreements. In contrast, analyses using the IAB Establishment Panel reveal corresponding effects only in establishments that are bound by collective agreements (Gerlach and Meyer, 2010, Gürtzgen, 2010) or find that the wage effect is positive on the whole but higher in establishments covered by collective agreements (Blien et al., 2013), which underlines the idea that the datasets tend to differ considerably. Müller (2011) shows that the proportion of the gross value added accounted for by the wage bill is lowest in establishments that both have a works council and are bound by collective agreements.

There are two possible explanations for this mixed evidence. First, Jirjahn (2014) advances theoretical arguments and extends the influence of collective bargaining coverage, according to which distribution conflicts are shifted to the industry-level arena, to include an additional mechanism in which trade unions support works councils in practice with expertise and know-how. As the reduced bargaining power should lead to a negative wage effect but the provision

⁹ In this section, we examine only the effects of works councils on the wage level. Studies that are available on wage inequality or performance-related pay are not discussed.

of expertise, which boosts productivity, is likely to have a positive wage effect the net effect is a priori not clear which might explain inconsistent findings.

Second, as the inconsistency in the wage estimates also has a time component, another possible explanation expressed by Jirjahn (2011) could apply. He argues that the ongoing trend toward decentralizing the system of industrial relations, for example, due to the increasing use of opening clauses or company alliances (Ellguth et al., 2014), can contribute to works councils gaining in importance in matters of distribution in establishments bound by collective agreements. This is consistent with the results obtained by Gürtzgen (2009b), who argues that certain economic shocks do not have a negative effect on the employees' wages in establishments with a works council. Gartner et al. (2013) find that works councils only increase wage growth in establishments bound by collective agreements. Furthermore, Ellguth et al. (2014) demonstrate that the use of opening clauses is associated less frequently with wage reduction in establishments with a works council.

3.4 Profitability

Neither productivity nor wages alone is sufficient for understanding employer resistance. On the whole, works councils influence both factors in the same direction, so it is therefore necessary to look at profitability. As was the case with wages, no consistent picture is initially visible with regard to profitability, as both negative and positive effects are reported. Here, the divide is caused not by differences between the datasets but due to a methodological issue concerning the way that profitability is operationalized. A number of studies use a subjective measure reported by the respondents themselves, for example classifying the profit situation on a scale from "very good" to "unsatisfactory". The available studies that use subjective measures generally find works councils to have negative effects (Addison and Wagner, 1997;

Addison et al., 2001; Dilger, 2002, 2003). In this respect, Müller (2011) is critical of the fact that the questions used to assess profitability have no known point of reference that the respondents could use to orientate themselves in their assessments. It is therefore conceivable that a respondent from a firm with an objectively good profit situation may deliver a poor assessment because he evaluates the situation on the basis of an objectively better profit situation in the previous year, while a different respondent may make his evaluation by comparing his firm with a competitor. Furthermore, Müller (2011) notes objective implausibilities according to which, for example, eastern German managers more frequently report a good profit situation that is unlikely to mirror the objective profit situation.

Conversely, various objective measures calculated from operational data are also used. Hübler and Jirjahn (2001) use the difference between value added and wage costs (a capital rent) as a profit measure and find a positive but insignificant effect on works councils. Müller (2011) also uses the capital rent but additionally controls for the capital stock and finds a positive significant correlation. When the results are differentiated according to the collective bargaining status, it becomes clear that this correlation can only be found in establishments bound by collective agreements – establishments with a works council exhibit an annual profit per employee that is approximately € 11,700 higher – whereas the coefficient is close to zero and insignificant in establishments that are not covered by collective agreements. Differentiating further by firm size, he shows that the council effect is by far highest in large firms covered by collective agreements. Finally, Müller (2011) employs the subjective measure used in previous studies and replicates the negative council effect found in previous studies, arguing that the objective measure should be preferred.¹⁰

4 On resistance to works councils

¹⁰ Older studies used also objective measures (e.g. FitzRoy and Kraft, 1985; Addison et al., 1993), but as mentioned above they are based on small samples which limits the generalizability of the results strongly (Addison, 2009).

The current state of research suggests that works councils have, on average, mostly beneficial economic effects for firms. Still, employers continue to oppose works councils; thus, the question arises of how these two findings can be reconciled. Why should employers fend off an institution that has positive economic effects for the firm? In what follows we show two ways to think about this apparent inconsistency. The first, and more novel, perspective argues that the *median* voter in the employer association may suffer economic disadvantages from councils even if the economic effects of councils are on *average* positive for German firms. Strong positive effects for a minority of firms and moderate adverse effects for the majority would yield a situation where a majority resists councils despite on average positive effects. We therefore survey the literature to ask whether several negatively affected subgroups identified in this literature form a group that is plausibly important enough to organize resistance at the association level. We further demonstrate that recent changes in the IR system, such as the internal erosion of employers' organizations or the emergence of opening clauses in collective agreements, may have fostered the position of resisting firms within employer organizations. Second, we recall and examine in more detail that resistance may occur if employers deviate from profit-maximization. We show that there are studies on works councils implying that certain deviations from profit-maximization, such as short-term orientation, risk aversion and non-monetary incentives, are plausible explanations for employer resistance.

4.1 Looking beyond mean effects

The first way to look at works councils' economic effects and employers' resistance is to put more emphasis on the details of the current state of research. Section 3.1 highlighted that research into works councils has only recently started to take important firm heterogeneities into account in its analyses, a product of the larger samples in extant datasets. Establishment size and collective bargaining status in particular demonstrate that examining average effects

across all establishments is not sufficient and may mask some important differences. In the case of establishment size, for example, the argument for different legal provisions for works councils, which is likely to result in more assertive and professional works councils in larger establishments, is often advanced. As far as collective bargaining is concerned, the pacifying character of collective agreements with regard to possible distributional conflicts for the activity of works councils is emphasized (Freeman and Lazear, 1995). On the whole, the findings presented above indicate that although works councils have a positive effect on average, there are still groups of establishments that have a works council but do not benefit from higher productivity or higher profits, or do so only to a small extent. This affects both firms that are not bound by collective agreements and smaller establishments.

Müller (2015) makes another argument based on the considerations put forward by FitzRoy and Kraft (1985). The latter argue that, especially in inefficiently managed firms, works councils could have a positive effect on productivity by enhancing communication, whereas firms that have competent¹¹ managers probably found another way to enhance their performance without establishing formal works councils, e.g., by using substitutes such as round tables or grievance procedures. Against this background, Müller (2015) examines the effects of works councils on productivity along the productivity distribution. His analyses indicate that the positive effect of works councils is largest in unproductive establishments and then declines over the productivity distribution. The impact of works councils on productivity is always positive, implying that the group of negatively affected firms is rather small. As Müller (2015) does not examine the profit situation - which should be decisive for the profit maximizing employer - his findings still leave room for the existence of quantitatively important subgroups of firms that suffer reductions in profit and therefore resist councils. It seems worthwhile to follow Müllers' (2015) approach and to check effects on

¹¹ FitzRoy and Kraft (1985: 542f) broadly define managerial competence as actions for organizing optimal worker participation while imposing only a minimum of formal constraints on their own operation.

wages and profits over the distribution; it could be the case that works councils have a small productivity effect in competent managed firms but at the same time may redistribute rent to employees, which would imply adverse economic effects for many plants.

To understand whether the group of establishments that is expected not to gain much from works councils (i.e. small firms, firms uncovered by collective wage agreements) is large enough to organize resistance at the level of employer associations, we will document the composition of employer association and changes therein in what follows. The development of Germany's industrial relations system over the last 20 years indicates an "external erosion", namely, a decline in collective bargaining coverage rates. The same period has also seen a possible "internal erosion" of employers' associations (Behrens, 2013), i.e., a decline in membership compared to the overall number of firms that are potential members of employers' associations. This erosion can be explained by the exit or non-entry of smaller firms (Haipeter and Schilling, 2006; Köhler et al., 2015). The employers' associations responded to this process by changing the collective bargaining policy and the structure of the organization.

The latter change is characterized by the increasing prevalence since the mid-1990s of members of employers' associations that are not covered by collective bargaining. It is estimated that meanwhile more than half of all the associations permit firms to opt out of the collective bargaining mechanism (*OT-Mitgliedschaft*) so these firms can nonetheless remain members of the association, pay membership fees and take part in association events or make use of its range of services (Behrens, 2011, 2013; Haipeter and Schilling, 2006). Hence, employers' associations organize a substantial number of firms that are members without collective bargaining coverage¹²; therefore, the interests of these firms will also be reflected in

¹² For example, in the field covered by *Gesamtmetall* (Federation of German Employers' Associations in the Metal and Electrical Engineering Industries), almost half of the firms in the member associations currently have a membership without a collective bargaining option (Gesamtmetall, 2015).

the work of the associations. In recent years, this has led to an increase in the number of smaller firms that are not covered by collective bargaining but are members of the employers' associations (Behrens, 2011; Haipeter and Schilling, 2006).

Behrens and Helfen (2009) surveyed employer associations and document that most of them are dominated by small and medium-sized firms having less than 100 employees. A prominent case in point is *Gesamtmittel* – one of the most powerful German employer associations –currently reporting that 70% of its members have less than 100 employees (Gesamtmittel, 2016). Behrens and Helfen (2009) report that large firms have a strong or very strong influence on the associations' decisions in only about 15 percent of all employer associations and, accordingly, Behrens (2011) documents the rule of 'one member, one vote' in most employer associations. This evidence yields a picture where small firms and those not bound by collective agreements have a strong influence on employer associations' decisions. Taken together, the importance of these firms in the employers' associations and the lack of positive economic effects of works councils for these firms provide an economically grounded explanation for the resistance of employer associations against *on average* beneficial works councils.

In short, we hypothesize that the increasing influence of smaller firms and uncovered firms may push employers' associations toward the "small firm standpoint" i.e., opposition against works councils. We acknowledge, however, that qualitative studies exploring how employers' organizations develop their agenda regarding works councils and related issues would be helpful to refine this idea further.

Finally, another change in the IR system might also be related to the observed effect heterogeneity. In addition to the aforementioned organizational changes, employers have also endeavored to change collective bargaining policy by decentralizing industry-wide collective agreements. This process, which is also described as "organized decentralization" (Traxler,

1995), is characterized above all by the introduction of collective bargaining policy instruments that open the possibility to diverge from the statutory provisions of collective bargaining at a plant level or to make them more flexible. This began with the introduction of hardship or reorganization clauses and restricted such opening clauses in collective agreements to establishments with more or less pronounced economic difficulties. In the meantime, opening clauses provide the possibility to vary or undercut collectively agreed standards – including wages – at an establishment level even without the existence of economic difficulties, simply to maintain or improve competitiveness (Bosch, 2004; Köhler et al., 2015; Schnabel, 2003). Providing exceptions to industry-wide collective agreements – which is another hypothesis – could lead to works councils having to deal more intensively with distributional conflicts, a scenario that, according to Freeman and Lazear (1995), would weaken their positive effect on productivity.

Although some studies investigate the interaction between works councils, collective agreements and opening clauses, the understanding of the consequences of this decentralization for the economic effects of works councils remains underdeveloped. However, as a case in point, Hübler (2015) reports that the productivity advantage of works council firms has declined in recent years. Moreover, Ellguth et al. (2014) find that wage cuts as a result of opening clauses occur more often in firms without works councils, which might indicate that works councils increase worker rent.

4.2 Looking beyond the profit-maximizing employer

So far, we have discussed ideas that reconcile beneficial works councils with employers' resistance based on economic arguments. In what follows, we highlight other explanations for why firms oppose the institution despite its economic advantages. Theoretical explanations include deviations from profit-maximizing behavior such as short-term orientation in decision-making, risk aversion and non-monetary incentives.

4.2.1 Short-term orientation

One argument for why employers resist works councils could be rooted in the fact that establishing works councils brings instant costs and probably frictions in decision making but positive productivity effects will take some time to unfold. Although not directly related to the puzzle of employers' resistance against works councils, Jirjahn et al. (2011) assume that improvements in communication and information structures do not occur immediately after council introduction and that there is a learning phase on the part of both the works council and the management, during which time the parties involved have to establish an exchange of communication and the works council has to familiarize itself with management issues in the establishment. Once this initial phase is over, conflict is less likely, and the positive effects should increase. Using a dataset provided by the *Institut für Mittelstandsforschung* in Bonn, Jirjahn et al. (2011) identify a positive effect of council age on productivity, though strictly speaking the cross-sectional analysis conducted does not permit a distinction between age and cohort effects.¹³ Furthermore, the findings obtained by Jirjahn et al. (2011) point to a reduction in the productivity effect for very old works councils.

Müller and Stegmaier (2016) address this idea again on the basis of the more extensive IAB Establishment Panel and test the thesis by using panel data, which makes it possible to consider time-constant unobserved firm heterogeneity and age vs. cohort effects. The analysis also finds a positive long-run age effect, thereby indicating possible learning effects. However, they find that in the first several years of their existence, works councils exhibit a negative productivity effect. This suggests difficulties experienced by the works council when taking up the work. However, Müller and Stegmaier (2016) also conclude that works councils are set up in establishments that previously demonstrated poor economic development. It

¹³ Cohort effects" originate in the year that works councils are founded. They may be persistent as organizations may be imprinted by the circumstances of their foundation (Hannan and Freeman, 1977) or because firms benefiting from works councils most frequently adopted them first.

cannot be ruled out that the learning phase may be short and that the initially negative effect is spurious and is primarily a product of the critical situation in the establishment. Regardless of the reason for the initially negative productivity effect, a substantial and steady increase in productivity can be identified five years later. In contrast to the findings of Jirjahn et al. (2011), no reduction of the productivity effect at older ages has been found.

The fact that positive productivity effects of works councils emerge only gradually and are not immediately of high quality – especially the initially negative effect reported by Müller and Stegmaier (2016) – suggests a new potential explanation for why employers fear the introduction of works councils. It could be that resistance may seek to avoid the short-run costs involved in setting up a works council. We hypothesize that the resistance of employers is greater as the management's decision horizon becomes more short-term. It would be fruitful to extend the dynamic analysis by Jirjahn et al. (2011) and Müller and Stegmaier (2016) to other fields, such as profitability and wages, to obtain a more complete picture.

4.2.2 Risk aversion

So far, we have argued that employers know whether the group of firms they belong to, e.g., small firms and firms uncovered by collective agreements, on average benefit or suffer from works councils and that this knowledge shapes the attitude of profit-maximizing employers. However, even within narrowly defined subgroups of firms with positive *average* effects of councils, there will be firms where councils decrease productivity, which constitutes a risk for the employer. Hence, risk-averse managers may oppose the introduction of councils, even if their firm belongs to a subgroup of firms with positive effects. Risk aversion therefore increases the number of firms that resist council introduction. This line of reasoning can further be related to firm size. If there is uncertainty regarding the actual effect of works councils, larger firms can better cope with such risks because they can diversify their investments (Markowitz, 1952) more easily than can smaller firms, which usually have fewer

investments and are less diversified. Similarly, risk spreading (Arrow and Lind, 1970) among a larger number of firm owners is more prevalent in large firms. Both mechanisms provide another argument why smaller firms are more likely to oppose works councils.

We therefore hypothesize that resistance to the introduction of a works council will increase if the degree of risk aversion is larger, if the council effect varies more strongly within certain groups of firms or if the management expects a works council to have a smaller average positive effect.

4.2.2 Entrepreneurial freedom

If the utility function of firm owners contains motives such as freedom in decision-making and managerial prerogative in addition to the consumption utility derived from firm profits, works councils will reduce owners' utility as soon as the loss in managerial freedom is larger than the gains in profits. Recent work by Fehr et al. (2013) underlines that principals retain authority even if they (and others) would experience pecuniary advantages from delegating authority. Similarly, Bartling et al. (2014) show that decision rights carry an intrinsic value, which may explain why managers value power.

While the above mentioned studies by Fehr et al. (2013) and Bartling et al. (2014) use experiments to test their hypotheses, Jirjahn and Mohrenweiser (2015) approach a similar question empirically and directly in the context of works councils. They assume that active owners – compared to managers – are more resistant to the formation of works councils and show that for the likelihood of introducing a council in an owner-led plant, it makes no difference whether introduction would be in a favorable environment in which the economic consequences of works councils can be presumed to be mainly positive or in an environment in which the council is expected to have no role or more of a redistributive role. From these findings, Jirjahn and Mohrenweiser (2015) indirectly deduce that in owner-managed firms,

the issue of introducing a works council is linked less to economic calculations and more to the desire to maintain the managerial prerogative (“being the ultimate boss”). The empirical findings of Behrens and Dribbusch (2014), according to which resistance to the introduction of works councils does indeed occur somewhat more often in owner-managed firms, are in line with this argument, as are the results of other studies that find works councils occur less frequently in owner-managed establishments (Jirjhan, 2010; Schlömer-Laufen, 2012).¹⁴

5 Discussion and future research needs

Our assessment of the current state of research is that our knowledge on the economic effects of works councils has greatly improved over time. The aim of this paper is to reconcile the findings of economically beneficial works councils as reported by this literature and the fact that employers simultaneously oppose this institution. To this end, our paper evaluated the literature and worked out possible explanations and strategies for future research on this topic.

First, we argue that it is necessary to look more thoroughly “beyond the mean”, as the empirical literature reveals significant heterogeneities with regard to works council effects, particularly with respect to characteristics such as establishment size and collective bargaining coverage. For smaller firms and establishments that are not bound by collective agreements, works councils have been empirically proven to have only small positive effects or no effects at all. We discuss that employer associations are typically dominated by rather small firms and observe a further increasing number of smaller firms that are not covered by collective bargaining but are nevertheless members of employers’ associations. We argue that these groups may well be important enough to organize resistance at the level of employer associations, which opens the possibility that such resistance is indeed driven by profit-maximizing agents. In addition, decentralization trends in collective bargaining (e.g., ‘opening

¹⁴ Jirjahn and Smith (2006) add that owner-managed establishments do not automatically rule out other forms of employee participation. Still, corresponding research on the effects of alternative forms of representation is far scarcer than research into works councils.

clauses') bring distributional conflicts back into the firms, even though the firms are bound by an industry-wide collective agreement, thereby possibly changing the economic effects of works councils in such firms. However, examining the structure, functioning and agenda formation of employers' organization is not an easy undertaking, given the scarcity of data in this field. Case studies that try to assess if and how the organizational changes are related to employers' standpoints toward works councils could therefore provide us with a more nuanced theoretical understanding. Firm-level effects of opening clauses have also not yet been sufficiently explored, although there are some data sets, such as the IAB Establishment Panel that allow testing some initial thoughts on this issue.

Second, we showed that there is some work that directly reconciles positive effects of works councils with employers' resistance by emphasizing deviations from profit-maximizing behavior. The results on the dynamics of works council's productivity effects can be used as a starting point for an explanation according to which employers' resistance occurs because employers are too short sighted or not willing to interpret the foundation of a works council as an investment that pays off later. Again, we must emphasize that this explanation needs further theoretical refinement and that it would be helpful to have a more complete empirical picture. Future studies should use already available data to clarify whether there are also dynamic effects of works councils regarding wages and profits. Finally, we highlighted the work of Jirjahn and Mohrenweiser (2015) and discussed the idea that non-monetary incentives such as "being the boss" might also contribute to employers' opposition.

In addition to these theoretical and empirical issues, it should be noted in concluding that many existing findings often fail to meet the standards of causal analysis. Still, it is easier to deliver criticism than to address it. It has been shown, for instance, that procedures requiring time variance in employee participation at an establishment level often have too few council introductions/closures at their disposal and that data quality itself is not always

unimpeachable. Too little information is available about whether the observed changes in the council existence are genuine changes in the status of the works council, an expression of temporary inactivity on the part of the works council, or simply measurement error. Moreover, improved measures of worker quality are needed to fully assess whether positive effects of works councils are driven by the council or unobserved differences in worker quality. Exogenous variation in the existence or non-existence of works councils, which is necessary for estimating causal effects, is rarely available in current datasets. As long as this does not change, today's assessments of the economic effects of works councils at the establishment level and the attempts to explain employers' resistance on the basis of these assessments can presently be considered the best possible assessment, even if not the final one.

References

- Addison JT, Kraft K, and Wagner J (1993) German Works Councils and Firm Performance. In: Kaufman BE and Kleiner MM (eds) *Employee Representation. Alternatives and Future Directions*. Wisconsin: pp. 305 – 338.
- Addison JT, and Wagner J (1997) The Impact of German Works Councils on Profitability and Innovation: New Evidence from Micro Data. *Jahrbücher für Nationalökonomie und Statistik* 216: 1 – 20.
- Addison JT, Schnabel C, and Wagner J (2000) Die mitbestimmungsfreie Zone aus ökonomischer Sicht. *Hamburger Jahrbuch für Wirtschafts- und Gesellschaftspolitik* 45: 277 – 295.
- Addison JT, Schnabel C, and Wagner J (2001) Works Councils in Germany: Their Effect on Firm Performance. *Oxford Economic Papers* 53: 659-694.
- Addison JT, Schnabel C, and Wagner J (2004) The Course of Research into the Economic Consequences of German Works Councils. *British Journal of Industrial Relations* 40: 221 – 248.
- Addison JT, and Teixeira P (2006) The Effect of Works Councils on Employment Change. *Industrial Relations* 45: 1 – 25.
- Addison JT, Schank T, Schnabel C, and Wagner J (2007) Do Works Councils Inhibit Investment? *Industrial and Labor Relations Review* 60: 187–203.
- Addison JT (2009) *The Economics of Codetermination: Lessons from the German Experience*. Palgrave: Macmillan.
- Addison JT, Bryson A, Teixeira P, Pahnke A, and Bellmann L (2009) The Extent of Collective Bargaining and Workplace Representation: Transitions between States and their Determinants. A Comparative Analysis of Germany and Great Britain. *CEP Discussion Paper* No. 954.
- Addison JT, Teixeira P, and Zwick T (2010) Works Councils and the Anatomy of Wages. *Industrial and Labor Relations Review* 63: 250 – 274.
- Arrow KJ, and Lind RC (1970) Uncertainty and the evaluation of public investment decisions. *The American Economic Review* 60:364–378.
- Bartling B, Fehr E, and Herz H (2014) The Intrinsic Value of Decision Rights. *Econometrica* 82: 2005 – 2039.
- BDA (2014) *Betriebliche Mitbestimmung. Kompakt*.
- Behrens M (2011) *Das Paradox der Arbeitgeberverbände. Von der Schwierigkeit, durchsetzungsstarke Unternehmensinteressen kollektiv zu vertreten*. Edition sigma, Berlin.
- Behrens M (2013) Arbeitgeberverbände – auf dem Weg in den Dualismus? *WSI-Mitteilungen* 66: 473-481.
- Behrens M, and Dribbusch H (2014) Arbeitgebermaßnahmen gegen Betriebsräte. Angriffe auf betriebliche Mitbestimmung. *WSI Mitteilungen* 67: 140-148.
- Behrens M, and Helfen M (2009) Innerverbandliche Heterogenität und die Vertretungswirksamkeit deutscher Arbeitgeberverbände. *Industrielle Beziehungen* 16: 5-24.
- Blien U, Dauth W, Schank T, and Schnabel C (2013) The Institutional Context of an Empirical Law: The Wage Curve under Different Regimes of Collective Bargaining. *British Journal of Industrial Relations* 51: 59-79.

- Bosch G (2004) The Changing Nature of Collective Bargaining in Germany. In: Katz HC, Lee W and Lee J (eds.) *The New Structure of Labor Relations and Decentralization*. Ithaca NY: Cornell University Press, pp. 1–9.
- Brändle T (2013) Flexible Collective Bargaining Agreements: Still a Moderating Effect on Works Council Behaviour? *IAW Discussion Papers* No 96: Tübingen.
- Dilger A (2002) Ökonomik betrieblicher Mitbestimmung. München und Mering.
- Dilger A (2003) Payment Schemes, Returns and Work Councils. *Schmollers Jahrbuch* 123: 385-95.
- Ellguth P, and Kohaut S (2015) Tarifbindung und betriebliche Interessenvertretung: Ergebnisse aus dem IAB-Betriebspanel 2014. *WSI Mitteilungen* 68: 290-297.
- Ellguth P, Gerner HD, and Stegmaier J (2014) Wage Effects of Work Councils and Opening Clauses: the German Case. *Economic and Industrial Democracy* 35: 95-113.
- Fehr E, Herz H, and Wilkening T (2013) The Lure of Authority: Motivation and Incentive Effects of Power. *The American Economic Review* 103: 1325-1359.
- FitzRoy FR, and Kraft K (1985) Unionization, Wages and Efficiency-Theories and Evidence from the U.S. and West Germany. *Kyklos* 38: 537-54.
- FitzRoy FR, and Kraft K (1987) Efficiency and Internal Organization: Works Councils in West German Firms. *Economica* 54: 493 – 504.
- Franz W (2005) Die deutsche Mitbestimmung auf dem Prüfstand – Bilanz und Vorschläge für eine Neuausrichtung. *Zeitschrift für Arbeitsmarktforschung* 38: 268 – 283.
- Frege CM (2002) A Critical Assessment of the Theoretical and Empirical Research on German Work Councils. *British Journal of Industrial Relations* 40: 221-248.
- Freeman RB, and Lazear EP (1995) An Economic Analysis of Works Councils. In: Rogers J and Streeck W (eds) *Works Councils – Consultation, Representation and Cooperation in Industrial Relations*. Chicago: pp. 27 – 52.
- Frick B (2002) High Performance Work Practices und betriebliche Mitbestimmung: Komplementär oder substitutiv? Empirische Befunde für den deutschen Maschinenbau. *Industrielle Beziehungen* 9: 79 – 102.
- Fürstenberg F (1958) Der Betriebsrat. Strukturanalyse einer Grenzinstitution. *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 10: 418-429.
- Gartner H, Schank T, and Schnabel C (2013) Wage cyclicalities under different regimes of industrial relations. *Industrial Relations* 52: 516-540.
- Gerlach K, and Meyer W (2010) Wage Effects of Works Councils and Collective Agreements in Germany: The Anatomy of Wages and Productivity. In: Brown C, Eichengreen B, and Reich M (eds) *Labour in the Era of Globalization*. Cambridge: University Press, pp. 295-316.
- Gesamtmetall (2015) Geschäftsbericht 2014/2015. Berlin.
- Gesamtmetall (2016) Geschäftsbericht 2015/2016. Berlin.
- Grund C, and Schmitt A (2013) Works Councils, Wages and Job Satisfaction. *Applied Economics* 45: 299–310.
- Gürtzgen N (2009a) Rent-Sharing and Collective Bargaining Coverage – Evidence from Linked Employer-Employee Data. *Scandinavian Journal of Economics* 111: 323 – 349.

- Gürtzgen N (2009b) Wage Insurance within German Firms: Do Institutions Matter? *ZEW Discussion Paper* No. 09 – 043.
- Gürtzgen N (2010) Rent-Sharing and Collective Wage Contracts – Evidence from German Establishment-Level Data. *Applied Economics* 42: 2835 – 2854.
- Haipeter T, and Schilling G (2006) Von der Einfluss- zur Mitgliedschaftslogik: die Arbeitgeberverbände und das System der industriellen Beziehungen in der Metallindustrie. *Industrielle Beziehungen* 13: 21-42.
- Hannan M, and Freeman J (1977). The Population Ecology of Organizations. *American Journal of Sociology*, 82: 929–964.
- Heywood JS, and Jirjahn U (2009) Family Friendly Practices and Worker Representation: German Evidence. *Industrial Relations* 48: 121 – 145.
- Hübler O (2015) Do Works Councils Raise or Lower Firm Productivity? *IZA World of Labor* 137.
- Hübler O, and Jirjahn U (2001) Works Councils and Collective Bargaining in Germany: the Impact on Productivity and Wages. *IZA Discussion Paper* No. 322.
- Hübler O, and Jirjahn U (2003) Works Councils and Collective Bargaining in Germany: The Impact on Productivity and Wages. *Scottish Journal of Political Economy* 50: 1 – 21.
- Jensen MC, and Meckling WH (1979) Rights and Production Functions: An Application to Labor-Managed Firms and Codetermination. *Journal of Business* 52: 469-506.
- Jirjahn U (2003a) Produktivitätswirkungen betrieblicher Mitbestimmung – Welchen Einfluss haben Betriebsgröße und Tarifbindung? *Zeitschrift für Betriebswirtschaft* 73: 63-85.
- Jirjahn U (2003b) Betriebsräte, Tarifverträge und betriebliches Lohnniveau. *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung* 36: 649 – 660.
- Jirjahn U (2004) Welche Betriebe nutzen Schichtarbeit? In: Bellmann L and Schnabel C (eds) *Betriebliche Arbeitszeitpolitik im Wandel*. Nürnberg: pp. 67 – 85.
- Jirjahn U (2006) Ökonomische Wirkungen der Mitbestimmung in Deutschland: Überblick über den Stand der Forschung und Perspektiven für zukünftigen Studien. *Sozialer Fortschritt* 55: 215 – 226.
- Jirjahn U (2008) On the Determinants of Shift Work and Overtime Work: Evidence from German Establishment Data. *British Journal of Industrial Relations* 46: 133 – 168.
- Jirjahn U (2009) The Introduction of Works Councils in German Establishments – Rent Seeking or Rent Protection? *British Journal of Industrial Relations* 47: 521 – 545.
- Jirjahn U (2010) Works Councils and Employment Growth in German Establishments. *Journal of Economics* 34: 475 – 500.
- Jirjahn U (2011) Ökonomische Wirkungen der Mitbestimmung in Deutschland: Ein Update. *Schmollers Jahrbuch* 131: 3–57.
- Jirjahn U (2014) Works Councils and Collective Bargaining in Germany: A Simple but Crucial theoretical Extension. Universität Trier: *Research Papers in Economics*.
- Jirjahn U, and Klodt T (1999) Lohnhöhe, industrielle Beziehungen und Produktmärkte. In Bellmann L, Kohaut S and Lahner M (eds) *Zur Entwicklung von Lohn und Beschäftigung auf der Basis von Betriebs- und Unternehmensdaten*. Nürnberg: pp. 27 – 54.
- Jirjahn U, and Müller S (2014) Nonunion Worker Representation, Foreign Owners and Firm Performance. *Oxford Economic Papers* 66: 140-163.

- Jirjahn U, and Smith SC (2006) What Factors Lead Management to Support or Oppose Employee Participation – With and Without Works Councils? Hypotheses and Evidence from Germany. *Industrial Relations* 45: 650–680.
- Jirjahn U, and Mohrenweiser J (2015) Owner-Managers and the Failure of Newly Adopted Work Councils. *British Journal of Industrial Relations*. DOI: 10.1111/bjir.12148.
- Jirjahn U, Mohrenweiser J, and Backes-Gellner U (2011) Works Councils and Learning: On the Dynamic Dimension of Codetermination. *Kyklos* 64: 427-447.
- Köhler C, Sesselmeier W, and Struck O (2015) Der Einfluss industrieller Beziehungen auf die Arbeitsmarktstruktur – Ein Essay. *Industrielle Beziehungen* 22: 201-206.
- Kommission Mitbestimmung (2004) Mitbestimmung Modernisieren. Bericht der Kommission Mitbestimmung.
- Kotthoff H (1981) Betriebsräte und betriebliche Herrschaft. Eine Typologie von Partizipationsmustern im Industriebetrieb. Frankfurt a.M./New York.
- Kotthoff H (1994) Betriebsräte und Bürgerstatus: Wandel und Kontinuität betrieblicher Mitbestimmung, München.
- Kotthoff H (2013) Betriebliche Mitbestimmung im Spiegel der jüngeren Forschung. *Industrielle Beziehungen* 20: 323-341.
- Markowitz H (1952) Portfolio Selection. *The Journal of Finance* 8:77–91.
- Müller S (2011) Betriebsräte und betriebliche Produktivität. *Schmollers Jahrbuch* 131: 73-89.
- Müller S (2012) Works Councils and Establishment Productivity. *ILR Review* 65: 880-898.
- Müller S (2015) Works Councils and Labour Productivity: Looking beyond the Mean. *British Journal of Industrial Relations* 53: 308-325.
- Müller S, and Stegmaier J (2016) The Dynamic Effects of Works Councils on Labour Productivity: First Evidence from Panel Data. *British Journal of Industrial Relations*. DOI:10.1111/bjir.12200.
- Nienhüser W (2009) The Effects of Different Types of Works Councils on Bargaining Outcomes: Results of an Empirical Study. *Economic and Industrial Democracy* 30: 372–340.
- Pfeifer C (2011) Works Councils, Union Bargaining, and Quits in German Firms. *Economic and Industrial Democracy* 32: 243–260.
- Schnabel C (2003) Tarifpolitik unter Reformdruck. Gütersloh.
- Schnabel C, and Wagner J (2001) Verbreitung und Bestimmungsgründe verschiedener Formen der Arbeitnehmerpartizipation in Industriebetrieben. *Industrielle Beziehungen* 8: 445-462.
- Schlömer-Laufen N (2012) Die Entstehung von Betriebsräten in kleinen und mittleren Familienunternehmen. Wiesbaden.
- Stegmaier J (2012) Effects of Works Councils on Firm-Provided Further Training in Germany. *British Journal of Industrial Relations* 50: 667-689.
- Traxler F (1995) Farewell to Labour Market Associations? Organized Versus Disorganized Decentralization as a Map for Industrial Relations. In Crouch C, and Traxler F (eds) *Organized Industrial Relations in Europe: What Future?* Avebury: pp. 3–19.

Wagner J, Schank T, Schnabel C, and Addison JT (2006) Works Councils, Labour Productivity and Plant Heterogeneity: First Evidence from Quantile Regressions. *Jahrbücher für Nationalökonomie und Statistik*. 226: 505-518.

Wagner J (2008) German Works Councils and Productivity: First Evidence from a Nonparametric Test. *Applied Economics Letters* 15: 727 – 730.

Halle Institute for Economic Research –
Member of the Leibniz Association

Kleine Maerkerstrasse 8
D-06108 Halle (Saale), Germany

Postal Address: P.O. Box 11 03 61
D-06017 Halle (Saale), Germany

Tel +49 345 7753 60
Fax +49 345 7753 820

www.iwh-halle.de

ISSN 2194-2188