VII. THE RELATIONSHIP BETWEEN FINANCE, CORPORATE GOVERNANCE, AND LABOR

Mandated Codetermination and Firm Performance: The Productivity Effects of German Works Councils Revisited

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Introduction

The recent political debate about the latest reform of the German "Works Constitution Act" has led to an unprecedented increase in the public interest regarding the relative impact of alternative forms of worker participation on firm performance. Moreover, the academic discussion by labor and personnel economists has been spurred by a number of different, though closely related developments:

• The increasing globalization of product and labor markets has led to a resurgence in academic interests regarding the German system of industrial relations. On the one hand it has been argued that the German system may have to surrender to the pressures of competition. On the other hand, it has been argued that specific German idiosyncrasies (like the influence of large banks and the existence of mandated works councils) may be a source of competitive advantage that is unlikely to be eradicated by globalization. Although most of the arguments discussed in this context are well known,

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it is interesting to see how the formerly incompatible theoretical positions seem to have converged recently.

• The availability of several large and representative firm panels has fostered empirical analyses that have been impossible to conduct before. These data sets have been widely used to document the influence of mandated works councils on various dimensions of firm performance. However, the main finding of most of the available research—that, other things equal, the existence of a works council has no pronounced influence on the performance of firms (positive effects on labor productivity and personnel turnover are compensated by a negative influence on profits)—is problematic for at least one reason: most authors concentrate their attention on investments in physical capital, thereby neglecting investments in human and organizational capital which, in turn, may be of paramount importance for the works councils. Thus, the findings presented so far may lead to inadequate policy implications.

The following contribution to the growing body of literature has three different goals. First, I want to review the theoretical arguments that have been raised in the more recent discussion. In this context I show that the formerly incompatible positions have converged to a considerable degree. Second, I look at the impact of works councils on firms' investments in human and organizational capital and then present different production function estimates that have been augmented by, inter alia, a works council dummy. I conclude with a summary of the main findings and some implications for further research.

Works Councils: Welfare Reducing Cartels or Efficiency Enhancing Institutions?

Assuming that ownership accompanied by secure property rights is the most effective institution for providing individuals with incentives to create, maintain, and improve assets, it is argued that it is also essential that the residual rights of control, i.e., the rights to make any decisions concerning an asset's use, are exclusively controlled by a single party. The economic importance of residual control follows from the difficulty of writing contracts that specify all the control rights. This, however, implies that the parties to a contract are able to foresee all future developments and can write down and enforce a complete contract—one that specifies what each party has to do in every relevant eventuality at every future date and how the resulting income in each such event should be divided. However, complete contracts are generally impossible for transactions of any significant complexity that occur over a period of more than just a few days (Milgrom and Roberts 1992, 288–89).

Consequently, arrangements that leave all control rights—that are not otherwise assigned—to a single party (eliminating the need to negotiate and reach agreement for every unanticipated development) may result in significant cost advantages. While the notion of ownership as residual control is relatively clear for a simple asset, it gets increasingly fuzzy when applied to a (large) firm. Decisions by the owner or the management may be especially controversial when not only the physical capital of the firm but also the human capital of the firm (employees) is affected.

Jensen and Meckling (1979), for example, suggest that when the party having residual control rights is also entitled to receive the residual returns, then the residual decisions made tend to be efficient ones. More specifically, they argue that in a firm, where the workers receive contractually agreed upon fixed wages in exchange for the effort they supply, the residual claimant will, just by pursuing his own interests and maximizing his returns, make efficient decisions. Under these assumptions, a redistribution of control rights will necessarily lead to an inefficient resource allocation, because those who bear the residual risks are not the only party to decide on the use of the firm's assets. These arguments, in turn, form the basis of their market-oriented case against mandated codetermination published more than twenty years ago: "If codetermination is beneficial to both stockholders and labor, why do we need laws which force firms to engage in it? Surely, they would do so voluntarily. The fact that stockholders must be forced by law to accept codetermination is the best evidence we have that they are adversely affected by it" (Jensen and Meckling 1979, 474).

More recently, this orthodox position has been challenged by a number of economists, be they proponents or critics of property rights theory. First, it has been argued that decisions made by the residual claimant may not always be efficient: if only part of the costs of a decision accrue to the party making the decision, then that party will find it in its interest to ignore some of the external effects, sometimes leading to inefficient decisions. If, for example, efficient production requires that workers invest in firm-specific skills, then institutions that protect their investments make them more likely to invest in acquiring those skills. According to Furubotn (1988, 167), "Workers who undertake durable reliance investments commit themselves to the firm for some time into the future and are, therefore, vulnerable. The distribution of the firm's quasi-rents and the value of the labor assets can be affected by the behavior of other members of the coalition. Hence, the possibility exists that worker-investors, if unprotected by institutional or contractual safeguards, may be exploited and suffer serious economic injury." Thus, if workers are not protected by institutional or contractual safeguards against the opportunistic

behavior of other members of the coalition, they will either be unwilling to invest in the acquisition of firm specific skills or may risk serious economic loss in the case of dismissal. In a situation, where not all of the coalition-specific resources are owned by a single party, codetermination is likely to be a governance structure that is capable of dealing with maximizing agents with conflicting interests. However, irrespective of this generally favorable view of voluntary codetermination, legal intervention by the state is unequivocally rejected (Furubotn 1988, 178).

Second, the Jensen-Meckling argument has recently been challenged by, among others, Freeman and Lazear (1995), who argue that codetermination is likely to be underprovided by the market. Cooperative solutions to the prisoner's dilemma are assumed not to occur as long as there is no exogenous regulation by some third party. However, although mandated works councils have the potential to foster an increase in the joint surplus, firms are most likely to oppose them, according to Freeman and Lazear (1995, 29), because "institutions that give workers power in enterprises affect the distribution as well as amount of joint surplus. The greater the power of works councils, the greater will be workers' share of the economic rent. If councils increase the rent going to workers by more than they increase total rent, firms will oppose them. It is better to have a quarter slice of a 12-inch pie than an eighth slice of a 16inch pie." Given these seemingly incompatible positions, theory offers no definitive guidance as to the likely effects of mandated codetermination. The beneficial and detrimental effects must be demonstrated empirically. The following section discusses some recent evidence.

Codetermination, Organizational Capital, and Economic Performance

Until recently, the number of studies analyzing the influence of works councils on firm performance was rather low and their quality tended to be poor. With the availability of different firm panels, the situation has changed quite dramatically; the number of studies has been—and still is—increasing rapidly, and the more recent studies suffer less from methodological problems than the ones that had been published up to the mid- and late 1990s.¹ The more recent studies have used a variety of measures, including productivity levels and growth, financial performance and profitability, investment in research and development, and job generation. Summarizing these studies, it appears that works councils seem to have no clear cut consequences for firm performance. On the one hand, the presence of a works council has—other things being equal—a significantly positive influence on labor productivity, but a significantly negative influence on labor costs and profitability. On the oth-

er hand, works councils seem to have no influence on investment behavior or on innovations (neither on product nor on process innovations) (Addison et al. 2001; Jirjahn 2003; and Dilger 2002).

These findings are neither compatible with the notion of works councils as "rent-seekers" that tend to ignore the interests of owners and managers nor with the argument that firms would benefit from the existence of a legally mandated plant-level representation. Given these results, it is worth extending the analysis of the impact of works councils to some "intangible assets" that—although of paramount importance for the short- and the medium-term performance of the firm—are very often neglected by economists: the credibility of long-term career promises, the readiness to finance and to participate in further training, and the acceptance of organizational change.

Works Councils and Personnel Turnover

In order to maximize worker effort, loyalty, and motivation, firms usually implement specific incentive mechanisms to avoid opportunistic behavior. Since the deposition of bonds or "entrance fees" is neither feasible nor legally enforceable, workers are initially paid less than their marginal product, but eventually are paid a wage exceeding their marginal product. Over the expected tenure with the firm, workers receive an expected present value of compensation equal to the present value of their productivity (Lazear 1981). However, once a worker has posted a bond in the form of a wage below his productivity, the firm has a strong incentive to label him a "shirker" and to claim his bond. When workers are uncertain of the trustworthiness of firms, they are unlikely to be willing to post such bonds. In this context, a works council may serve as a credible institution that can be relied upon by both parties to determine whether a worker has shirked.

Using different representative samples of large numbers of private sector firms in (East and West) Germany, Frick (1996); Frick and Möller (2003); Dilger (2002); and Addison, Schnabel, and Wagner (2001) find that firms with a works council have significantly lower dismissal and quit rates than observationally similar firms without plant-level interest representation. Additional estimates reveal that works councils neither oppose dismissals in shrinking firms nor inhibit hirings in growing firms. Moreover, works councils seem to exert no influence on the structure of the dismissed worker population, suggesting that the interests of the firm are usually taken into account by the workers' representatives (who are often said to unequivocally favor the interests of older workers with long tenure and poorer opportunities in the external labor market).

Works Councils and Training Expenditures

Depending on the transferability of the acquired skills, training increases a worker's productivity roughly to the same extent in his current firm only or in a number of alternative employment relationships. Depending on the type of human capital acquired, the party that has to amortize the initial training costs (or the larger share thereof) may incur serious economic losses, which, if anticipated would cause the party not to invest at all (Gerlach and Jirjahn 2001). Thus, a hold-up problem arises when one party can ex post expropriate parts of the surplus of a specific investment undertaken by the other party, thus causing disincentives for investing in specific human capital. Moreover, there exists a serious poaching problem; irrespective of the transferability of general skills, many firms invest in the training of their workers. This behavior is due to information asymmetries resulting from the deficiencies of imperfect labor markets. In this case, firms may withhold investments because they fear that other firms may try to hire their trained workers without incurring any training costs themselves.

Irrespective of the specific sharing rule according to which the training costs have to be borne by employer and employee, a works council can monitor both parties' potentially opportunistic behavior. Moreover, the poaching problem can be mitigated. Using a representative panel of firms located in Lower Saxony, Gerlach and Jirjahn (2001) show that the presence of a works council has a significant positive influence on the probability that firms invest in the training of their respective workforces as well as on the training expenditures per employee. Thus, the positive impact of works councils on further training is in accordance with the hypothesis that mandated codetermination promotes cooperative and trustful industrial relations, which alleviate many of the market failure problems resulting from employer-provided further training.

Works Councils and Organizational Flexibility

Using data from a representative longitudinal survey of engineering firms, Dilger (2002) analyzes the influence of works councils on working-time arrangements. The data used in this study are novel insofar as they not only allow a distinction between firms that have a works council and those that do not but also permit a closer characterization of the works council as viewed by the respective firm's management. Dilger finds that only two out of five "types" of works councils are beneficial to the firm with regard to the introduction of flexible working-time arrangements. While works councils that are considered to be a "tough" or a "cooperative" partner seem to foster such arrangements, this is not the case when they are "antagonistic," "disinterested," or when they are not involved by management in the decision-making process. Thus, although works councils may be seen as an institution that reduces the firm's external flexibility (however, the empirical findings quoted above do not seem to support that assumption), they apparently increase internal flexibility by promoting the introduction of working time arrangements that deviate from "standard" working hours among their constituents.

Moreover, a study by Frick (2002)—also using the above mentioned panel from the machine tool industry—finds that it is not the presence of a works council per se that influences the adoption of high performance work practices but its "level of activities"—measured by the number of firm-level agreements concluded during the last three years—and the "type" of the works council as viewed by the management of the firm. In firms with an "antagonistic" works council, the number of high performance work practices is higher than in otherwise similar firms that have either a "disinterested" or even an "excluded" works council. Looking at the performance effects of such practices, it becomes apparent why the works councils often reject their introduction: other things being equal, the adoption of these practices increases expected as well as actually realized firm performance (measured by changes in product demand, in sales, and in profitability), but at the same time they reduce the demand for labor. This means that firms do indeed benefit from such practices—but very often at the expense of their workers.

Works Councils and Firm Performance

The fact that works councils can-under specific circumstances-act as an institution to reduce the probability of opportunistic behavior is only a necessary but not a sufficient condition to document their efficiency. In order to be able to refute the assumption that works councils lead to an inefficient allocation of resources, it is indispensable to document, inter alia, a positive influence of mandated workers' representation on labor productivity. Due to data limitations, very few of the available studies have been able to control for the capital stock of the companies in the samples used and were, therefore, unable to rule out the possibility that it is capital intensity rather than the presence of a works council that fosters the economic performance. One of the first papers to overcome this methodological problem is Frick and Möller's (2003) who used two different waves (1998 and 2000) from the largest firm panel currently available in Germany, the IAB Panel, with information from some four thousand firms in East as well as in West Germany. Assuming that financial means that have recently been invested to replace used capital goods are highly correlated with the capital stock, the authors estimate different types of production functions (Cobb-Douglas, CES, and Translog) with value added as the dependent variable. Apart from information on capital and workers employed, the production function estimates include a wide range of variables

identified as (potential) determinants of firm performance, such as the percentage of women and part-time workers, product and process innovations, exports, training intensity, product market competition, quality of technical equipment, R&D expenditures, etc.

The estimates reveal that-other things being equal-the presence of a works council has a positive and statistically significant influence on the economic performance of German firms (measured by value added). The respective coefficients of the works council dummy indicate that these effects are rather large and that they differ significantly between industry and service sectors. The values of the coefficients obtained indicate that in 1998 in West German firms the presence of a works council increases labor productivity by about 25 percent, while in East German firms the respective figure is about 30 percent. Repeating the estimates with data from the year 2000 confirms the initial findings. It is worth mentioning, however, that the positive impact of works councils on labor productivity seems to be much more pronounced in the service sector. Distinguishing between manufacturing and service firms, it appears that the point estimate for service firms in East Germany is twice the size of that for manufacturing firms. For West German firms, the works council dummy is even insignificant for manufacturing firms but highly significant for service firms. Moreover, collective bargaining coverage combined with the presence of a works councils has no impact in industry but leads to a lower labor productivity in the service industry in both parts of the country.

Summary and Implications

Based on "modern" concepts of the firm (emphasizing the importance of bounded rationality and opportunistic behavior), the perception of mandated workers' representation has changed considerably during the 1990s. To the extent that a credible works council can convince the firm's workforce to accept the implementation of measures that seem to violate their expectations, mandated codetermination is likely to overcome the problems inherent in a "prisoner's dilemma" situation, where credible commitments are impossible to be made without the support of an exogenously implemented institution, whose task is to monitor the behavior of the contracting parties.

The most important empirical findings can be summarized as follows. First, a review of the literature on the influence of works councils on investments in intangible assets (such as personnel turnover, organizational change, and further training) suggests that concentrating on investments in physical capital, on productivity, profitability, investments, and some other easy to measure indicators of firm performance may lead to a considerable underestimation of the positive effects of mandated works councils. Second, the presence of a works council has a positive and statistically significant influence on the economic performance of German firms. The respective coefficients indicate that these effects are rather large and that they differ significantly between industry and service sectors.

The major shortcomings of the available evidence are obvious. We do not yet know whether the productivity increase induced by mandated works councils is large enough to compensate firms for the associated increase in labor costs. Moreover, we cannot yet reject the hypothesis that the productivity increases associated with mandated works councils may be the result of some omitted variables, such as an especially competent management. However, the size and the significance of the works council dummy in a number of studies using different data sets and different model specifications make this argument less convincing. Moreover, given the plausibility of the theoretical arguments suggesting a positive influence of works councils on firm productivity, there are few reasons to expect that including measures of management quality would yield results significantly different from the ones summarized above.

Note

1. For an overview of recent studies see Addison et al. (2001). Studies that have been published prior to 1996 are summarized by Frick and Sadowski (1995).

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