Nordic Journal of Political Economy

Volume 32 | 2006 | Pages 139-167

Productivity Puzzles – should employee participation be an issue?

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Abstract

In this paper we review econometric efforts aiming to identify whether employee participation adds to productivity growth. The overall picture is mixed. Participation may lead to significant but not substantial higher productivity. The theoretical predictions, pointing to the importance of institutional setting and a need to establish quality cooperation and long-term commitment from both management and workers, seem to be supported by the empirical results. An emerging hypothesis is that both the intensity of involvement and a combination of involvement, economic rewards and participation in decisions significantly influence productivity.

Keywords: productivity, cooperation, participation

JEL classification: J5, L23

1. Introduction

Employee involvement and participation are promoted for different reasons and embedded in various institutional settings across industries and countries. Some involvement arrangements are initiated mainly in order to improve productivity, and these are well described in the literature. Other arrangements have productivity improvements as one of several objectives, for instance, codetermination or profit sharing.

In this paper we examine econometric contributions that aim to identify possible connections between employee participation and productivity growth with particular focus on representative participation.

The paper proceeds as follows. In Section 2 we present key terms as well as theoretical explanations for possible connections between participation and performance. Methodological issues are addressed in Section 3. In Section 4 we summarize empirical work and previous reviews. Section 5 presents our conclusions.

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1 This paper is financed by the Norwegian Research Council (VS 2010—project number 146095/240; and ABU—project number 156035/510). We are grateful to an anonymous referee, Jon Erik Dølvik, Eivind Falkum and Gudmund Hernes for valuable comments to an earlier draft. The authors are responsible for any remaining errors or misinterpretations.

2. Involvement and participation, theoretical contributions

Ownership is characterized by responsibility, risk taking, control rights as well as rights on return. Employee participation may be seen as fully or partly reflecting all of these features (Grimsrud et al. 2003). The way production is organized and remunerated is a question of both joint interests and different forms of conflicting interests between employers and employees. There might be, for instance, a joint interest in increased value added. With respect to the conflicting interests there is, firstly, a principal–agent problem and a conflict inherent in the relationship between the company (represented by owners and management) and its employees about the input of work and distribution of the value created. The management, for instance, will be concerned about how to achieve improved labour productivity and higher value added without paying higher salaries. Employees, on the other side, will want to share the higher income, which is due to improved productivity, with the company's owners.

Second, there is the free-rider problem among employees. A free-rider problem may arise when it is difficult to monitor a single person's contribution and any one person's reward depends on every else's efforts. The employer/manager will therefore seek to introduce systems enhancing the work input from employees, while the employees probably would like to combine this with arrangements distributing control and return rights. In this paper we will distinguish between three categories of employee involvement and participation:

- *Management-led employee involvement in daily work practice.*[2] Management-led involvement may give employees the opportunity to bring their experiences with the working process to bear through information sharing and consultations and to express their opinions before changes are carried out. Management-led employee involvement falls short of sharing control or return rights.
- *Financial participation*. Financial participation is mainly in the form of employee ownership or profit-sharing schemes. Such arrangements are associated primarily with return rights. However, in the case of ownership they include control rights as well.[3]

2 Much of the high performance work system literature and other human resource management literature describe such management-led employee involvement.

3 See, for example, Pendelton et al. 1995.

- *Representative participation*. By representative participation we understand representative arrangements whereby the views of employees are expressed in a coordinated manner and where the institutional arrangement influences the control rights of management. Furthermore, it is assumed that this arrangement cannot be unilaterally altered or determined solely by either the employer or the employees.[4]

The above categorization may cause some challenges. How representative participation differs from the management-led involvement practices of human resource management (HRM) is a matter of ongoing debate (see Taylor and Ramsay 1998). As noted by Marsh (1992), for instance, although companies allow workers to present ideas and suggestions by means of management-led involvement, employees may be denied the power to make decisions. Generally, it is not easy to draw clear conceptual distinctions among the practices ranging from management-led employee involvement via information sharing, joint work groups to codetermination and co-ownership. According to Cable and FitzRoy (1980:163–164):

> *[N]o single, simple definition of worker participation or industrial partnership can readily be given. But essentially, participation involves some form of post-contractual worker involvement, embracing at least access to information which is normally confined to management and, in most cases, some involvement in the decision-making which traditionally defines the managerial function. It in general falls short of full workers' control.*

Representative participation may be organized internally or embedded in external institutional frameworks. Examples of representative participation are work councils,[5] joint work/management committees, local unions, non-union workers' representatives, and workers' representatives on company boards of directors. Much of the theory on operational aspects of representative participation is focused on local unions or workers councils. Limiting representative participation to formal codetermination or unionized companies would, however, be too narrow. Obviously, other forms of structured involvement entail transfer of power

4 For similar considerations, see, for example, Ben-Ner and Jones (1995) or Mizrahi (2002). Representative participation is widely described in the literature, but under different names reflecting different features of participation. One term is *partnership*, referring to the cooperation between employer and workforce, which may take place informally or through a formal structure (Guest and Peccei 1998). Another term is *indirect participation* (Hyman and Mason 1995).

5 Rogers and Streeck, for example, (1995:6) define work councils as "institutionalised bodies for representative communication between a single employer ('management') and the employers ('workforce')."

from owners/managers to employees. Hence, we try to identify those involvement practices that include some sort of participation through collective representation.

Establishing processes

An important feature of representative, as well as some forms of financial, participation is that it may not have been established primarily for improving productivity. For example, representative participation often results from overall democratic principles about workers' rights to codetermination in the workplace. Representation may also be linked to health and safety committees or to grievance mechanisms for negotiating wage and working conditions. This means that productivity improvement is only one of several potential outputs from representative participation and that its implementation is not contingent on success in this field. Financial participation may partly be, for instance, driven by opportunities for tax deductions.[6] Management-led involvement, on the other hand, probably would be terminated if not found to improve productivity.

Performance

Performance may be divided into productivity and pay-offs. Growth in value added or gross production (with unchanged volumes of input), higher innovative capacity, faster technical development, better quality of products and services may all indicate productivity growth. Pay-offs are connected to profits, improved job security, employment growth (or fewer lay-offs), higher salaries, more job satisfaction and employee well-being. Improved productivity produces higher pay-offs for one or more stakeholders (owners, management or employees).[7] If the work force is able to take out total productivity growth in higher wages, there will of course be no rise in owners' returns. Equally, if owners and management receive the total growth in the form of enhanced profits, employees will not experience any improvements in nominal pay-offs. From a social point of view the involvement effects on productivity are the most interesting, but for the different stakeholders their individual pay-off will probably be the motivating factor and the basis for involving actively in participatory processes.

Voice

Management-led employee involvement is assumed to induce employees to greater efforts as work is experienced as being less tiring, more interesting and as having better feedback. Employees may become more committed. Furthermore,

6 Such as introducing share option programmes etc.

7 On the other hand, higher pay-offs for one or more stakeholders may emerge without enhanced productivity. This is the case, for instance, if the prices of the company's product rise.

employees may have more complete knowledge and information about their work tasks and processes than do managers and hence may be in a better position to plan and schedule work, to organize work tasks and work flow, and to otherwise identify and resolve obstacles to achieve optimal performance. Employees may provide technical information to management that would otherwise be costly or time-consuming to obtain. However, recognizing or understanding how productivity could be improved does not mean that suggestions are routinely brought forward to management.

Aspects like the above-mentioned principal–agent and free-rider problems might lead to employee underperformance. Furthermore, communication between employees and management is governed by several factors other than just productivity improvements. Seeking to institutionalize employee involvement in the form of participation may be the answer to such challenges. The *voice theory* (Freeman and Medoff 1984) argues that institutions like those created for representative participation provide workers with a platform and means of communicating with the management beyond that of management-led involvement and other channels for day-to-day information flow through the hierarchy of an organization. Freeman and Lazear (1995:27:50) present a *representative participation specific model* that is an extension of the collective voice argument arguing that the structure of the representative participation facilitates information exchange and participation in ways that increase the value added in the company. Consultations through representative participation allow for new solutions to production and workplace problems because of the non-overlapping information sets of the two parties as well as the creativity of discussions. Furthermore, participation generates value added by encouraging workers to take a long-term view of the company's prospects. Along the same line, Blasi et al. (1996) and Brown et al. (1999) argue that representative participation increases information flow at lower costs. Furthermore, workers' commitment improves through effects like employee identification with the company and co-workers. Workers may be better able to motivate and monitor each other than management. Hence—in theory—potentially improved performance through representative participation can be explained through at least two mechanisms: firstly, through more informed decisions made at different levels in the enterprise and secondly, through higher commitment to the decisions made.

According to McNabb and Whitfield (1998), offering workers increased involvement in decision-making, a financial stake in the performance of the company, disclosing information about future investment plans and the company's financial situation, and the development of communication channels between management and workers are all seen as central to encouraging loyalty, motivation and commitment to organizational goals and thereby to reducing the need to invoke close monitoring.

Nevertheless, potential performance gains due to representative participation can be offset, at least in part, by the associated costs. In addition to being time consuming, participation may cause delays in decision-making (Freeman and Lazear 1995) and therefore represent a comparative disadvantage for the company. Furthermore, employees may negotiate less productive work practices, which require lower additional effort and in the end even endanger jobs (Frick 2002). Therefore, both the positive collective voice effect and the negative restriction of management effect may affect the impact that representative participation has on productivity (Cooke 1994).

According to the voice theory, the employees will improve their bargaining position through the participation processes, given their increased information and coordinated participatory actions. It is therefore predicted that employees will be able to reap more of the productivity gain from representative participation than other stakeholders. From the perspective of the employer/manager, assuming that they have the power to initiate or decide upon the shape of participation programmes, two considerations will determine the extent to which employee participation should be introduced in the company: first, potential effects on productivity and second, potential effects on the distribution of enhanced value added.[8] From such considerations Freeman and Lazear (1995) predict that representative participation will be underprovided in a regular market, unless some way can be found to separate such channels of involvement from the arenas of factor distribution (wage negotiation). Some scholars (for example, Addison et al. 2000) indicate that when wages are mainly regulated outside the company (as in Germany), the optimal level of participation is more likely to be realised because more involvement has no distributional effect between owners and workers. On the other hand, improving their negotiation power could be one reason for workers to engage in participation arrangements. Hence, if establishing representative participation also depends on the consent of the employees, the optimal level may not be realized by splitting involvement and distribution.

Operation features and links

An emerging theoretical debate, stimulated—as we shall return to later—by a growing number of empirical studies, is concerned about the potential performance effects of different combinations of involvement issues, including responsibility,

8 It is worth mentioning that in all types of employee involvement the key question is who manages to take out the gains from productivity improvements: the employer or the employees (as can be seen from the empirical result presented below).

risk taking, control rights and return rights. One postulate is that to be successful, increased involvement by employees in decision-making must be linked to a gain-sharing mechanism that offers workers financial incentives to take on the extra responsibility (see, for instance, Levine and Tyson 1990).[9] On the other hand, profit sharing or employee ownership without direct employee involvement (for instance, through control rights) may not yield higher productivity (see, for example, Kruse et al. 2004). Generally, theory on financial participation is ambiguous when it comes to predicting output. With employee stock ownership, each worker is a minor stakeholder and has no individual influence on central decisions. Employee ownership per se in a company with many workers therefore does not give individual workers control rights and their own work effort will not necessarily yield higher dividends. With profit-sharing plans, which provide pay-offs in accordance with individual performance, it is easier for each worker to separately achieve higher rewards for enhanced efforts. Profit-sharing plans, however, do not give workers control rights and may give incentives for individualistic behaviour rather than for acting as a member of a group with common interests.[10] This, again, may not favour productivity development within companies with profit-sharing systems. According to Brown et al. (1999), all group incentive plans have implications for worker participation in management and control. Requiring workers to bear more risk may open the door to demands for codetermination. Blasi et al. (1996:63) claim that existing theory provides no clear prediction of the relationship between employee ownership and economic performance:

> *[The] impact of employee ownership may be highly dependent on the situation in which it is implemented: company size, employee composition, decision-making structure, technology, and employee relations history are some of the factors that may determine whether there is an impact, and whether that impact is positive or negative.*

9 All plans that tie pay to performance expose workers to unwanted risk. Sharing in returns introduces a risk to the income of employees since returns are uncertain due to market or other volatilities.

10 The output of a work team might exceed the sum of individual contributions. However, ownership arrangements that improve individual productivity do not necessarily increase organizational productivity (Ben-Ner and Jones 1995). Rewarding workers individually may disrupt productive interaction among employees. Another problem with individual compensation schemes based on the relative positions or rankings in an organization is that they can promote unhealthy competition among employees, which again contributes to reduction in output levels (Lazear and Rosen 1981). Furthermore, particularly in jobs involving human capital, it seems difficult to disentangle each individual's contribution to production (FitzRoy and Kraft 1987a).

Summary

We have identified three main categories of participation: management-led employee involvement in daily work practice, representative participation and financial participation. The two latter include control rights and return rights and are also channels for involvement in daily work practice. In contrast to management-led techniques, they may have been established for other or additional purposes than simply increasing productivity and may not always be established based on joint local decisions but rather by one party's demands, based on national legislation or agreements. This will especially be the case for most kinds of formal collective representation, often rooted in arguments for workplace democracy and embedded in national formal and informal frameworks like taxation incentives, labour codes, collective agreements, national union policies, corporate governance ideologies, etc.

Given the fact that representative participation (and also financial participation) may be established and maintained for reasons other than productivity improvements, we expect to find a mixed relationship between these forms of participation and productivity. In addition, all systems and techniques of employee participation are associated with establishing and maintaining costs.

3. Some methodological issues

The first challenge for empirical investigation of a possible connection between employee participation and productivity is to identify relevant measurable variables. According to Marshall and Stohl (1993:137), "complex, dynamic, interactive processes are the very essence of participation." Often it is not sufficient to measure participation by a dichotomous variable such as *yes* or *no*. Instead it would be of interest to have data on the quality of the relationship between management and employees. Furthermore, organizational changes associated with employee involvement make it difficult to isolate any single causal mechanism that affects performance. Most companies implement a mix of work practices among their multiple workplaces, making it difficult to determine the particular impact of practices that may be employed in only some of the workplaces.

When it comes to the measurement of performance, two different approaches are common. First, performance is measured as perceived by management, employees, customers, etc. Second, hard data are used (financial records, rates of absenteeism, etc.).

The perception studies are based on self-reported data. It is observed that hard data tend to produce smaller measures of effects than those indicated by the questionnaire methods (Wagner 1994:326). According to Addison and Belfield

(2000:572–573), managers tend to overstate profitability, and such self-reporting data should consequently be used with great care.

Several analyses on productivity changes or productivity differences between companies apply a product function approach. That is, output is assumed to be a function of different inputs of which some are tangible (for instance, labour and capital) and some are intangible (for instance, specific participation practices). Productivity growth is either measured in terms of output per worker-hour or as growth in total factor productivity (TFP). In the first case, total output is divided by total labour input. In the second case, TFP growth is defined as the portion of output growth, which is not accounted for by an increase in tangible factor inputs. Productivity growth may be a result of several factors internal or external to the company, for instance more intensive competition, knowledge diffusion, etc. To identify productivity growth, which occurs as a result of participation policies, all these other factors should be controlled for. In practice this is difficult to accomplish due to lack of relevant data.

Possible selection and simultaneity bias should be considered. Selection bias comes about if a relatively high share of companies that do not apply some form of participation policy have had to close down and only survivors are covered by the survey. Even if an appropriate sample is selected, if survey respondents and non-respondents differ in important ways, the results may be biased (see, for instance, Ichinowski et al. 1996).

Simultaneity bias occurs, for instance, when companies that decide to implement some kind of participation policies are the ones that are relatively more productive in the first place. Organizations that adopt innovative work practices may have workers of better quality and/or management teams of higher quality, which may introduce both new workplace practices and pursue more imaginative marketing, financial, and R&D strategies. In such cases it is difficult to point out the endogenous variable. Hence it is an open question in which direction causality runs.

Although representative participation does not depend on whether an enterprise is unionized, the two are correlated. The potential monopolistic power effect of a unionized company may also affect the selection of companies practicing employee participation. *Monopolistic power effect* describes a situation in which unions manage to raise wages above the market level and in that way induce organized companies to hire fewer workers. Although overall productivity as such is not changed, output per employee will be higher than before. The reason is that the remaining employees are more efficient on the margin than the ones laid off. Higher wages would then be matched with higher productivity through intensified use of capital in production or through strengthened employee competencies (investment in learning programmes). The end result of workers monopoly power would then be more efficient employees and eventually a more technically advanced industry (Schnabel 1991). Reynolds (1986:447) emphasizes this flaw in the production function approach when it comes to the impact of unions on productivity:

> *If all firms maximize profits and trade unions impose higher than competitive wage rates on unionized firms, then the marginal productivity of unionized firms is necessarily greater than that of non-union labour. This is simply a restatement of the familiar first-order conditions.*

An important warning, which Reynolds mentions, is that simply comparing labour productivity between companies reveals little about effects of employee participation. It is necessary to control for changes in all relevant inputs when comparing changes in productivity. For instance, we have to ask whether higher salaries eventually induce higher levels of technology in unionized companies. As a result more capital-intensive production would yield higher labour productivity from the same stock of employees.[11]

FitzRoy and Kraft (1985, 1987b) offer another explanation of higher productivity in unionized companies. According to their management push theory, hard driving managers are said to elicit relatively more output from their workers and generate comparatively higher value added. The workers react by joining unions, which results in the observed positive correlation between profitability/productivity and unionism.

Hence, it is not only a question of identifying a positive relationship between participation and productivity at company level. As we have argued, because participation is correlated with unionization and because participation in itself is believed to strengthen the negotiation position of employees, it is necessary to make sure that observed correlations between employee participation and productivity cannot be accounted for as a wage effect, i.e., higher remuneration requires productivity improvements.

11 In regard to this question, it should also be noted that in Europe the wage differences between unionized and non-unionezed companies tends to be low because wage agreements are normally made for industry-wide standards. It is primarily in the US that high wage differences are to be found. Secondly, several datasets are based on perception, i.e., management is asked whether employee involvement has lead to higher productivity; see, for instance, Schnabel (1991).

4. Review of empirical contributions

Empirical research on the economic effects of representative participation has primarily taken place in Germany, the United Kingdom and the USA, but there are also several contributions from Australia, Canada, other EU countries and Japan. Small open economies with a tradition of union–management cooperation are not well represented. Nevertheless, this gives us data from at least two very different institutional settings, namely the Anglo-American (where the establishment of representative participation is mainly decided on locally) and the continental European (where representative participation is embedded in national labour codes). Empirical contributions are based on several data sets with a majority of enterprise surveys covering at least the manufacturing industry. Most of the data reported here are from the 1990s with a couple of more recent as well as some earlier contributions. Cross-sectional data are mainly used, but there are also a few panel data studies.

The majority of the surveys are so-called perception studies in which the respondents are asked to indicate whether different participation initiatives are believed to have an impact on different output measures. The respondents are mainly managers of enterprises. In a few cases, information from managers is combined with information from employees or employee representatives.

4.1 General findings

First, we note that although labour codes and/or nationwide agreements provide for setting up of local representative participation structures, the actual formation needs some sort of local initiative. Who decides whether to establish participation structures varies from country to country, between industries and according to enterprise size. It is, however, common that one party (in most cases, the employees) will demand the establishment of local structures on the basis of legislation or nationwide collective agreements. For example, the German Works Constitution Act (WCA) mandates that councils can be elected by the workforce in establishments with five or more employees. However, as their creation depends on the initiative of an establishment's employees, by no means all eligible establishments have councils. This variation between establishments concerning the implementation of works councils allows an empirical assessment of the productivity impact of works councils (Zwick 2003).

Second, when an enterprise is covered by a collective agreement and/or partial union membership, it does not automatically imply representative participation. For instance, in the United Kingdom, 40 per cent of workplaces with 10 or more workers—which are covered by collective agreements—had no on-site/local union representatives in 1998 (Bryson and Wilkinson 2001). In Norway the similar figure was 10 per cent in 2003 (Kvinge et al. 2005). On the other hand, in Anglo-American systems, local representative participation is frequent far beyond unionized companies. In the US only 8 per cent of employees in the private sector are unionized, while an additional 15 per cent are covered by non-union representative participation; in Canada 18 per cent of the employees in the private sector are members of unions and an additional 14 per cent are covered by non-union representative participation (Tara and Kaufman 2006). In Australia the corresponding figures are 38 per cent and 14 per cent (Pyman et al. 2006).[12]

In general, we cannot assume that initiatives establishing participatory structures are motivated by considerations of local productivity. However, the fact that they are more widespread than unionization might indicate some local demand for them.

Germany

Some of the richest literature is based on the German experience, where the work councils in particular have attracted interest. The work councils provide a formal and ongoing channel of labour management communication and cooperation that goes beyond the collective voice institutions in Anglo-American practice. The empirical literature from Germany starts with several studies based on relatively small cross-sectional data sets. FitzRoy and Kraft (1986) find a significantly negative effect of (estimated) work councils on productivity, while (estimated) productivity has a barely significant effect on the probability of a council being established. Gurdon and Rai (1990), Addison et al. (1996) and Addison and Wagner (1997) all conclude that there is no support for the proposition that works councils favourably influence outcome indicators. Schnabel (1991) as well as Schnabel and Wagner (1994) review the German literature on trade unions and productivity and report positive voice effects.

More recent contributions—based on larger data sets, including panel data—seem to be more in support of voice effects. Addison et al. (2000, 2004) and Fitzroy and Kraft (2005) both conclude that mandatory work councils do not impair, and may even improve, the productivity of German establishments. Then again, these findings are not always significant for all types of establishments, especially not for smaller German companies with less than 500 employees.

Frege (2002) focuses on more indirect measures of the effects of work councils on turnover and training and refers to the work of Backes-Gellner et al.

12 These facts challenge the use of union recognition as a dummy indicator for representative participation.

(1997), which shows a significant negative correlation between work councils and turnover. Frick and Möller (2002) and Frick and Lehmann (2003) conclude that the existence of work councils seems to have clear-cut consequences for company performance. First, the presence of a work council has—other things being equal—a significantly positive influence on labour productivity and a significantly negative influence on profitability. Second, work councils have no effect on investment behaviour and/or on innovations (neither product nor process innovations). However, here attention should be drawn to methodological considerations, as most empirical studies are unable to control for the capital stock of the companies. These studies are thus incapable of ruling out the possibility that it is capital intensity rather than the presence of a works council that fosters the level of economic performance.

Britain

In Britain, two forms of bipartite employee involvement have been examined, the Joint Consultative Committees (JCCs) and union recognition. The latter includes many forms of cooperation based on agreements and traditions differing from industry to industry. The JCCs are not mandatory and are not given any co-determination power through national legislation as the work councils in Germany are. JCCs exist in both unionized and non-unionized companies, and hence are seen by some (see Frege 2002) as being qualitatively different from mandatory work councils. However, in respect to participation these committees perform some of the same functions described as voice effects, given that employee representatives are either elected or appointed by workers, and that management cannot unilaterally terminate the committee's work.

Most of the published research over the last decade is based on one of the two data sets: the third (1990) Workplace Industrial Relation Survey (WIRS3) and the Workplace Employee Relation Survey from 1998 (WERS98). Neither includes panel data, but the design is relatively similar. Both are representative across industries at the time of the survey and include approximately 2000 enterprises each. Fernie and Metcalf (1995) sum up the literature prior to WIRS3 as suggesting that union presence tends to be negatively associated with economic outcomes but might be associated with lower turnover rates. Using the WIRS3 to examine links between employee involvement, contingent pay, different forms of collective representation and six different outcomes (productivity levels, productivity growth, change in employment, climate of relations between management and labour, quit rate, and absenteeism rate) they found that trade unions are negatively associated with productivity growth and climate of industrial relations at the workplace, i.e., negative voice effects. JCCs were found to have either no association or only weak links with any of the outcomes, including a weak favourable association with productivity growth and climate of industrial relations. The authors emphasize that it is very difficult to establish causality in cross-sectional studies like this and it may be best to think of the results as evidence of patterns in the data—of association among variables –rather than as a clear-cut causes and effects. By means of WIRS3, Addison et al. (2000) find that the establishment of JCCs is positively associated with productivity changes in non-unionized companies. There is no significant association between JCCs and profit or with wage level. Using WERS98, Addison and Belfield (2000 and 2001) find no significant impact of JCCs on profits, but unions did not have any negative impact on profits either. JCCs are found to be negatively associated with productivity, while unions are positively associated, i.e., the opposite of Fernie and Metcalf's results cited above. Two explanations are offered for this: first, that the reality on the ground has changed,[13] and second, that the data, methodology and/or theoretical foundation used for research into participation and performance can be questioned.

United States

In the United States most research on representative participation has concentrated on local union management cooperation. Voos (1987, 1989), based on a survey of Wisconsin companies, finds that in-house joint management–union committees contribute to improvements in company performance, but less than gain-sharing, profit-sharing and employee involvement programmes do. Local area community-wide union management cooperation committees had, however, no effects. Addison and Hirsch (1989) as well as Mishel and Voos (1992) offer overviews of US literature examining union effects on economic performance. Product function studies indicate small overall impacts of unions on productivity. Positive effects, when they exist, appear to result from management responses to decreased profit expectations. To put this finding in perspective; there is a comprehensive literature in the US describing the effects of management-led involvement[14] as well as the effects of financial participation. With both participation arrangements, a very

13 This refers to events like that during the 1990s in which the British Trade Union Council (TUC) changed its attitude towards participation. During the same period there was a strong swing away from separate bargaining to single table bargaining at unionized workplaces.

14 There is an established tradition focusing on how employee involvement programmes (EI) and other Human Resource Management (HRM) techniques influence productivity. See, for instance, Arthur (1994), Becker and Gerhart (1996), Capelli and Neumark (1999), Cooke (1992, 1994), Cutcher-Gershenfeld (1991), Dyer and Reves (1995), Edwards and Wright (2001), Freeman et al. (2000), Godard (2001), Guest et al. (2003), Huselid (1995), Ichniowski and Shaw (1999), Ichniowski et al. (1996, 1997), MacDuffie (1995), Miller and Monge (1986), Ohkusa and Ohtake (1997), Verma and McKersie (1987), Voos (1987, 1989), Wagar (1997), and Wood (1996, 1999). Data are mainly provided for the United States and the UK.

mixed picture is revealed. When analysing US data for the period 1983–1993, Freeman and Kleiner (2000), for instance, find that—contrary to common belief—management-led programmes do not statistically improve productivity but do increase workers well-being. The authors suggest two explanations for their finding. First, methodically it may be difficult to discern a productivity effect due to sample size limitations, unexplained variation or measurement problems. The second explanation is that in fact management-led programmes are an innovation, in which economic gain accrues largely to workers (and managers) rather than to the company and its shareholders.[15] Blasi and Kruse (1996 –using a dataset on employee-hold stock in U.S. public companies for the period 1980–1990 –find no automatic connection between employee ownership and performance, suggesting that company-specific factors such as employee relations climate, human resource policies, and workplace governance structures might play an important role in determining whether employee ownership has positive effects.

Japan

In Japan, research on representative participation is based around unions that, unlike those in many other countries, are company-based. This organizational form provides direct links between the company's position and the union's prosperity. Nevertheless, findings are also mixed in Japan. Benson (2006) summarizes the Japanese literature as documenting positive relations between unions and productivity and negative relations between unions and profit. On the other hand, Brunello (1992) finds that productivity in unionized Japanese companies is 15 per cent lower than in similar non-unionized companies. An explanation offered by Marsh (1992) is that employee involvement in Japan is not followed by the same decentralization of power and decisions as it is, for example, in the UK.

4.2 What explains the mixed picture?

With such a mixed picture regarding the connection between productivity and all three forms of participation, several papers try to go behind the data and point to factors that can explain the findings. The literature shows some interesting cross-national understanding of how participation contributes to productivity growth.

15 Why might this be? One possibility is that an increasingly educated and knowledgeable work force wants more independent decision-making in their jobs. Modern information technologies may also be complementary with employee decision-making, so that the growth of management-led programmes reflects technological change embodied in workers rather than managerial innovation.

Institutional settings

The national institutional setting is crucial and determines the conditions under which representative participation can be created, who should participate and the areas of competence. Regulations vary substantially across nations and industries and over time. In both Britain and Germany, recent studies seem to report a more positive connection between representative participation and productivity than earlier studies. In both countries the legislation has changed over time and this might explain the diverse findings. However, they might also be as a result of learning to adopt and use representative participation as a mean for improving productivity. For the employer, employee participation may not be a chosen road in the first place, but when the representative participation has already been established it becomes a question of how to utilize it in a productive manner.

In Britain, there are, as mentioned, two possible arrangements: a) union involvement and b) involvement through JCCs.. Empirical results point in different directions for both types. The institutional setting and the development in regard to national influence on the local agenda seem to be more important. Structural changes took place between 1990 and 1998, including a more positive attitude by trade unions towards representative participation and the development of integrative rather than distributive collective bargaining strategies (terminology from Taylor and Ramsay 1998). The change (and even paradigm shift) in union–management relations during the 1990s was a result of changes in legislation as well as in union policies. Stronger product market competition and increased globalization might also have contributed to limiting the power of central unions. As a result, unions are generally less politicized and centralized today than 20 years ago, and this could explain why involvement programmes are now more likely to bring positive results. Along the same line, Voos (1987, 1989)—based on a survey of US companies—finds that in-house joint union management committees contribute to improvements in company performance, while local area community-wide union management cooperation committees had no effect. Some argue the reverse, namely that successful participation programmes may lead to decentralization of union power. According to Levinson (2000), the introduction of board representation and the Codetermination Act have probably contributed to decentralization of the Swedish unions.

In all sorts of representative participation the ability to work constructively with employers is critically dependent on the representatives' ability to deliver worker support for change. These considerations may explain why employers are less likely to listen to the representatives if only a minority of employees back them (Cully et al. 1999). Fernie and Metcalf (1995) find that strong union representation has better outcomes than weaker representation. Green and McIntosh

(1998) use interviews with manual workers' representatives (shop floor stewards) in WIRS3 (UK data) to determine that there are no statistically significant direct relationships between union density and workers' efforts. However, strong unions accompanied by good employee relations have a positive influence on worker productivity.

Operation of representative participation

The way in which representative participation operates in practice is shaped locally. Several studies point to the climate of cooperation and management attitude as key factors to explain the productivity outcome of participation (as for example Cutcher-Gershenfeld 1991). This climate is shaped by elements like the parties' attitude and the link to local conflict resolution mechanisms.

In regards to attitude, it is clear that one party cannot create a harmonious relation alone. No matter how constructive employees wish to be, or how well they are organized, a cooperative environment is likely to require that management work constructively together with employees. Only when both employees and management have a supportive attitude may the space for collaboration be created (Hyman 1997: 323). Similarly, the actions of one party may be responsible for poor financial performance. However, as Denny and Muellbauer (1988: 6) argue in the case of this one party being a union, "it is not the independent effect of trade unions but the interaction of unions and management that can cause improved economic performance." Cutcher-Gershenfeld (1991) finds that, if the enterprise is unionized, a positive management attitude towards unions yielded higher profit. This is confirmed by Wagar (1997) who reveals a positive relation between labour management climate in unionized companies and productivity, based on interviews with both managers and shop floor stewards in Canada. Bemmels (1987), analysing 46 US manufacturing plants, discovers a negative union impact on productivity. Unions, which reduce the effects of managerial productivity improvement practices and poor labour management relations, may to a large extent explain this result. Bryson (1999) shows that in workplaces with strong unions with on-site representation, a good climate was best achieved where employees thought that management encouraged union membership. Climate was poorest when management opposition to union membership met strong unions. However, among non-unionized workplaces encouragement of union membership was very rare and employees were most likely to view employee relations positively when union membership was not considered an issue.

In regards to links to local conflict resolution mechanisms Deery and Iverson (2005) construct –by the use of panel data on the Australian Finance Industry—a causal relationship between a fair and just system of organizational decision-making (combined with a positive management attitude towards unions) and higher productivity and service quality, in line with voice theory.

Complementary and combination effects

Using cross-sectional data from the Danish private sector, Nielsen and Lundvall (2003:28) uncover a strong correlation between representative participation and innovation and learning organizations. McNabb and Whitefield (1998) find that UK companies with both unions and a management initiated employee involvement scheme are positively associated with profits, while those enterprises with unions but no employee involvement scheme are negatively associated with profits. Based on data from the US, Cooke (1994) finds that employee involvement programmes contribute substantially more to performance in unionized companies than in non-union companies, whereas profit and gain sharing programmes contribute substantially more to performance in non-union companies than in unionized companies. The existence of representative participation may increase the general level of involvement. Union presence affects the scope and depth of the work council agenda and work councils and unions influence the direct involvement agenda (see, for example, Woods et al. 2005). Based on German panel data, Zwick (2003) finds that works councils have a positive impact on the productivity effects of management lead involvement. Eaton (1994), using data from managers and trade union officials in Midwestern states, finds support for the potential positive role unions might play in employee participation programme.

Concerning the combination of representative participation with financial participation, there is likewise an extensive literature.[16] Doucouliagos (1995) offers a meta-analysis of 34 published and statistically independent studies on the effects of participation on productivity while discriminating between labour-managed companies and participatory capitalist companies. He finds that profit sharing, worker ownership and worker participation in decision-making are all positively associated with productivity, while mandated codetermination is negatively associated with productivity. The average correlations are small, although many are statistically significant. Moreover, the correlations are stronger among labour-managed companies (companies owned and controlled by workers) than among participatory capitalist companies. The author stresses that the results do not

16 See, for instance, Bhargava (1994), Blanchflower and Oswald (1988), Blasi et al. (1996), Brown et al. (1999), Cable and Wilson (1989, 1990), Conyon and Freeman (2000), Cooke (1994), Estrin et al. (1997), FitzRoy and Kraft (1986, 1987a, 1995), Gregg and Machin (1988), Jones (1987), Jones and Kato (1993, 1995), Kim and Voos (1997), Kruse (1992), Kruse and Blasi (1995), Long (2000), Ohkusa and Ohtake (1997), Sesil et al. (2002), Voos (1987, 1989), and Wadhwani and Wall (1990), Weitzman and Kruse (1990).

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necessarily mean that there is a causal relationship between the different forms of participation and productivity. Doucouliagos (1995) also finds that profit sharing has a more positive association with productivity than has worker participation in decision-making, but only in labour-managed companies. These deviating findings may be explained by the fact that workers in labour-managed companies are actually workers-entrepreneurs who are likely to be more interested in profits and the companies' survival than ordinary employees would be. Also from Japan (Kato and Morishima 2002) and Australia (Taras and Kaufman 2006) it is reported that clustering of participation practices is associated with a higher level of productivity.

5. Summary and conclusions

Participation structures are often embedded in national labour codes (mandatory), regulations or nationwide collective agreements. Mandated voice systems, like work councils and other forms of codetermination, are mostly found in continental Europe.

Notwithstanding different institutional settings and arrangements for establishing employee participation, actual practice will be decided upon locally in each company. What characterizes participation practices with positive impacts on productivity? Theory offers some guidelines through describing structural conditions (commitment, long-term view, focus on collective interests) for value-adding participatory systems in the company.

In this paper we have reviewed econometric efforts to map the possible connection between representative participation and productivity. A very mixed picture is emerging. Many of the empirical contributions demonstrate no or insignificant correlations between the independent variables and productivity while other studies report positive, but small, productivity gains from participation. Several studies find positive effects of combinations of different types of involvement. The results can point to a potential learning or adoption process where representative participation may come in as a part of a national agenda of workplace democracy, but in addition, over time develops into productivity-promoting local voice mechanisms.

The majority of the surveys are so-called perception studies, in which the respondents are asked to indicate whether different participation initiatives are believed to have an impact on different output measures. Such studies are found to over-report effects. Furthermore, a major obstacle in all studies of this type is to identify clear-cut and measurable explanatory variables and to control for selection bias and simultaneity bias.

The theoretical predictions point to the establishment of quality cooperation and long-term commitment from both management and workers as an explanation of why representative participation may enhance productivity growth. This seems to be supported by the empirical results that emphasize the institutional setting and the relationship between labour and management as critical factors explaining how involvement and participation affect productivity. Those who manage to establish well-structured local institutions separate from—but in conjunction with—other labour institutions (such as wage settlement and grievance) and fill these with commitment-creating processes seems to make the best of employee participation.

For future research some sort of measure of the cooperation structure, intensity and climate in the specific companies seems to be warranted in order to explain the productivity outcome of employee participation.

Complementarity and even combination effects between different types of involvement like financial, management-led and representative participation seem to be supported by the empirical studies. Notably, management-led involvement techniques are more often reported to strengthen rather than to weaken representative participation when both are present, and the presence of representative participation seems to improve the productivity performance of management-led involvement. Furthermore, productivity gains from financial participation appear to be strengthened through the existence of the two other measures. This differs from that part of the management literature that argues for establishing participation programmes in which control rights and return rights are excluded.

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