

Participatory Employment Practices in Japan:

Past, Present and Future

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Working Paper No. 158

This paper was presented as part of a workshop, *The Changing Japanese Firm*, Dec. 11-12, 1998 at Columbia University. The workshop was sponsored by the Center on Japanese Economy and Business, Columbia Business School, with additional financial support from The Jerome A. Chazen Institute of International Business, Columbia Business School and the Center for International Business Education, Columbia University.

**Working Paper Series
Center on Japanese Economy and Business
Columbia Business School
February 1999**

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by

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January 28, 1999

ABSTRACT

In this paper we provide an overview of important aspects of the postwar Japanese experience with employee participation and labor-management cooperation. First we review the scope and nature of participatory employment practices in Japan and their diffusion among Japanese firms over time. We then turn to the evidence on the effects of such practices on company performance. Third we provide some preliminary findings from our most recent research on the responses of participatory employment practices to the economic slowdown in the 1990s and speculate on the future of participatory employment practices in Japan. The paper's key findings include: (i) as a result of favorable environments in the postwar Japanese economy, in particular in manufacturing, participatory employment practices spread widely and were established firmly; (ii) such practices are found to have positive effects on company performance in the long-run; (iii) evidence was found for the complementarities among these practices; and (iv) participatory employment practices appear to be surviving in general in the economic slowdown in the 1990s whereas subtle yet potentially important changes in various attributes of participatory employment practices are taking place.

JEL: J53, J33, J24, J41, L2, M11, M12, O53.

Keywords: Employee Participation, Human Resource Management, Information Sharing, Employee Ownership, Profit Sharing, Japan, and Productivity.

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PARTICIPATORY EMPLOYMENT PRACTICES IN JAPAN: PAST, PRESENT AND FUTURE

I. Introduction

In many countries around the world, management systems are changing away from the traditional system characterized by often adversarial collective bargaining and a fixed wage contractual payment basis. Prominent among these changes is the explosion in the use and interest in participatory employment practices or Human Resource Management Practices (HRMPs).¹ In this paper we provide an overview of important aspects of the postwar Japanese experience with these HRMPs. Our discussion is in three main parts. First we review the scope and nature of Japanese HRMPs and their diffusion among Japanese firms over time. We then turn to the evidence on the effects of such practices on company performance. Third we provide some preliminary findings from our most recent research on the responses of participatory employment practices to the economic slowdown in the 1990s and speculate on the future of participatory employment practices in Japan.

A closer look at the postwar Japanese experience of employee participation and labor-management cooperation in the 1960s, 1970s and 1980s, and their effects on work-place productivity (and, thus, competitiveness) appears to be of particular public policy interest for many countries considering participatory employment practices a way to improve their productivity performance and thus competitiveness.

First, as Levine and Tyson (1990) suggest, relatively higher job security (often ensured by intra-firm transfers and transfers to related firms) and strong group cohesiveness (supported by

¹ See, for instance, Commission on the Future of Worker-Management Relations (1994) and Levine (1995).

compression of wage and status differentials) of Japanese workers in large manufacturing firms in the postwar period point to an industrial relations system favorable to successful employee participation. Moreover, relatively more rapid and stable growth over the sample period, lower unemployment and stable financial corporate grouping (banks and institutional shareholders as stable, long-term suppliers of capital) point to an external environment favorable to successful employee participation.

Probably as a result of these favorable environments in the postwar Japanese economy, in particular in manufacturing, participatory employment practices spread widely and were established firmly as we document below. Indeed these practices became the hallmark of “Japanese management,” which has been inspiring (or necessitating in some instances) many corporations in the world to experiment with employee involvement and labor-management cooperation in recent years (see, for instance, Levine, 1995: 5). In short, the postwar Japanese economy (especially in manufacturing) clearly represents one of the most important examples of experimentation with HRMPs.

The economic slowdown in the 1990s (in particular the recent banking crisis) and a rapidly aging workforce have allegedly been eroding the aforementioned participation-friendly environments. Have participatory employment practices that we find successful for the 1960s, 1970s and 1980s been surviving in Japan in the 1990s? If so, how have they been evolving to cope with these new environments in the 1990s? Are there any differences between sectors in the survival of participatory employment practices? A closer look at the recent Japanese experience with participatory employment practices will help us understand better two key questions regarding participation: (i) what are the conditions under which participatory employment practices are best introduced and best sustained; and (ii) in what way participatory

employment practices will need to evolve when external environments change. To address these questions, we have been analyzing more recent data on some of these participatory employment practices. This paper reports some of our first findings on the responses of participatory employment practices to the economic slowdown in the 1990s.

The paper is organized as follows. In the next section, we discuss the scope and nature of participatory employment practices in postwar Japan and their diffusion over time. Section III summarizes theoretical arguments for the effects of these practices on company performance, in particular labor productivity, and reviews the evidence on such effects. Section VI presents our findings on the responses of participatory employment practices to the economic slowdown in the 1990s, followed by a concluding section.

II. The Scope, Nature and Diffusion of Participatory Employment Practices in Japan

A. Joint Labor Management Committees (JLMCs): Information sharing at the top.

One of the core mechanisms for labor-management relations within a large Japanese firm is joint labor-management committees (JLMCs). Established at the top level (corporate and/or establishment level) and involving both management and union representatives, JLMCs serve as a mechanism for information sharing at the top level on a large variety of issues ranging from basic business policies to working conditions.

Unlike German works councils, the establishment of JLMCs is not obligatory under Japanese law, and therefore, is voluntary. When there is a union, labor-side representatives are almost always union representatives, while even in the absence of unions, the majority of labor-side JLMC members are elected by employee vote (about 70%, Koike, 1978). Thus, labor-side JLMC members usually legitimately represent the interests of the firm's workforce.

According to Shimada (1992), JLMCs were one of the many labor-management institutions proposed at the beginning of 1950s by the Japan Productivity Center. After a decade of tumultuous labor-management relations between 1945 and 1955, Japanese unions and management, with the endorsement from the central government, began to implement a number of well-known human resource management techniques including JLMCs and semi-annual bonus payments to all employees. According to Kato and Morishima (1998), in 1950 about 20 percent of all firms including both manufacturing and non-manufacturing firms had standing JLMCs. During the next two decades, the institution diffused rapidly (at a rate of about 20 percentage points for each decade. Thus, by 1970 the figure had risen to close to 60 percent. For the next two decades the institution diffused steadily, and, as of 1993, fully 80 percent of all firms reported to have standing JLMCs.

Many observers attribute the peaceful firm-level labor relations observed in Japanese firms to the establishment of JLMCs (Shimada, .1992; Inagami, 1988). Within JLMCs, which meet almost once a month, a number of issues are discussed, ranging from basic business policies to social and athletic activities sponsored by the firm (see Kato and Morishima, 1998). According to a survey conducted by the Ministry of Labour in 1985 on the types of issues discussed in JLMCs and the degree of employee participation in each issue (quoted in Inagami, 1988), firms use JLMCs at least for information sharing on a wide variety of issues. In particular, more than 60% of the firms use JLMCs for information sharing for basic management decisions such as business strategies and production and sales plans. However, in many cases, the degree of employee influence with regard to these issues is small, with almost 79% of the firms only sharing information but not going any further. In contrast, when the issues more directly relate to employment conditions (such as working hours and holidays, wages and

bonuses, and layoffs and employment adjustment), a large proportion of firms use JLMCs to consult with labor and even to allow employee representatives to participate in joint decision making. For example, out of the firms that discuss wage and employment security issues, more than 87% of the firms at least consult with labor representatives prior to making these plans. Thus, for direct labor issues, JLMCs appear to go beyond simple information sharing and serve a function of labor-management consultation and occasionally even joint decision making.

B. Shop-floor Committees (SFCs): Information sharing at the grass roots

Aside from JLMCs and formal trade unions, many Japanese corporations have shop-floor committees (SFCs) in which supervisors and employees on shop floor discuss issues such as shop-floor operations and shop-floor environments. Though the potentially important role of SFCs in the Japanese industrial relations system has been suggested (see, for instance, Koike, 1978), the nature and scope of these SFCs have not been studied extensively largely due to the absence of reliable data. A recent survey conducted by Kato and Morishima (1998) reveals that the average SFC meets about nine times a year (slightly less frequently than JLMCs); and that information shared during the SFC meetings tends to go beyond standard shop-floor issues such as safety and health, fringe benefits, training and development, and grievances, and includes business and strategic plans. As such, SFCs are aimed at information sharing at the grass roots level.

Kato and Morishima (1998) also reveals the diffusion of SFCs among Japanese firms in the postwar era. In 1950, only 7 percent of all firms including both manufacturing and non-manufacturing firms had a standing SFC. During the next decade the institution did not diffuse much, reaching only 11 percent of firms by the end of the decade. Since then, however, the

institution diffused steadily; in 1993 more than 40 percent of all firms reported to have standing SFCs (for manufacturing firms, more than 50% reported to have standing SFCs).

C. Small Group Activities (SGAs): Team

SGAs are activities such as quality control (QC) circles and Zero Defects in which small groups at the workplace level voluntarily set plans and goals concerning operations and work together toward accomplishing these plans and goals. The wide use of SGAs such as QC circles by Japanese firms is, by now, quite well-known (see, for instance, Cole, 1989). In 1950 almost no firm (only 3 percent) used an SGA. In 1960 only 6 percent of firms had an SGA. The rapid diffusion of the institution began in 1960s. By the beginning of 1970s, about one in four firms were practicing an SGA, and the figure reached 44 percent in 1980. Since then the institution has grown steadily; in 1993 70 percent of firms reported practicing an SGA (Kato, 1995).

SGAs are clearly more popular among larger firms (80 percent of firms with 5,000 or more employees practice an SGA as opposed to 43 percent of firms with 299 or fewer). Moreover, SGAs are more wide-spread in the unionized sector (Kato, 1995).

D. Employee Stock Ownership Plans (ESOPs): Financial participation via stock

Japanese ESOPs are perhaps best understood by comparing their main features with the better known U.S. ESOPs. Unlike U.S. ESOPs, Japanese corporations establishing an ESOP (called mochikabukai) do not receive any tax incentive to do so. To induce individual employees to participate in the ESOP, companies offer subsidies (typically the firm matching each employee's contribution by giving 5 to 10 percent of the contribution as well as bearing administrative costs).

Whereas ESOPs elsewhere frequently are structured so as to encourage strong participation by

top management, in Japan executives (as well as part time and temporary employees) are normally ineligible for membership. As is the norm elsewhere, individual participants' shares (and dividends) in the ESOP are held in trust. Unusually, however, each participant has a right to withdraw his/her shares, and share withdrawals are privately owned. Permission to withdraw is normally subject to the following requirements: (i) employees must keep at least 1,000 shares in the trust; and (ii) withdrawals are permitted only in 1,000 shares, round lots. It takes more than 20 years for the average participant to accumulate 2,000 shares so that he/she can withdraw 1,000 shares for the first time. While members may freely exit completely from the ESOP, re-entry is restricted. Exiting employees will receive their shares in 1,000 shares, round lots, and must sell the remaining shares to the trust at the prevailing market price. Upon retirement, model rules adopted by most ESOPs require retiring workers to exit completely from the ESOP. Finally, the general director (rijicho) represents stockholders in the ESOP. The general director is chosen by other participants, on a one-participant, one-vote basis. At the general meeting of shareholders, the general director votes the stock held by the plan, deciding independently, rather than by tabulating votes of employee participants. The general director must be a participant in the ESOP and thus is not an executive (Jones and Kato, 1995).

The survey conducted by Kato and Morishima (1998) shows that ESOPs are a relatively new and the most rapidly diffused innovation among various Japanese HRMPs. Thus, in 1960 the proportion of firms that had an ESOP was only 4 percent. The proportion grew rapidly during the next decade, reaching 26 percent by 1970. In 1967, a special government committee on foreign capital advocated employee ownership as a way to help prevent foreign takeovers of domestic firms. The government, using informal channels, encouraged firms to set up new ESOP trusts to accommodate employee investments in their stock. While the fear of foreign

takeovers diminished in the 1970s, the idea of employee ownership took root. Perhaps partly due to this government initiative of 1967, the 1970s were characterized by an astonishing pace of diffusion of the institution, and over two thirds of firms came to have ESOPs by 1980. The diffusion continued even after 1980, and in 1993 it became almost a universal phenomenon (97 percent of firms reported to have an ESOP in that year and there is no significant difference between manufacturing and non-manufacturing firms).

The survey also shows that in 1993, almost 50 percent of the labor force in firms with ESOPs participated in ESOPs. Furthermore, concerning employee stakes, Jones and Kato (1995) report that, in 1988, ESOPs owned stock worth 4.1 trillion yen (about 32 billion dollars); this amounts to 1.7 million yen (about 14,000 dollars) per participant.

However, according to Jones and Kato (1995), these plans do not own large percentages of company stock. For listed companies the average proportion of stock owned by ESOPs has varied between 0.66 percent and 1.42 percent from 1973 to 1988. In 1988 the average was lower than 1 percent and holdings over 5 percent were rare.

E. Profit Sharing Plans (PSPs): Financial participation via bonus

PSPs are a pay system in which the total amount of bonuses are linked to a measure of firm performance, such as profit. The Japanese bonus payment system has attracted considerable attention and controversy (e.g. Freeman and Weitzman, 1987, Nakamura and Nakamura, 1989, Hashimoto, 1990, Hart and Kawasaki, 1995). In light of the ongoing debate between those who stress the profit sharing aspect of the Japanese bonus system (e.g., Freeman and Weitzman, 1987) and those who downplay it (e.g., Ohashi, 1989, Brunello, 1991), we consider only the least controversial (with respect to the profit-sharing aspect of the bonus payment system) types of the

bonus payment system, i.e., the bonus payment system with a formal contract stipulating the presence of the profit-sharing plan.

According to Kato and Morishima (1998), one in four firms had a PSP in 1993 (no appreciable difference between manufacturing and non-manufacturing firms). The proportion of firms with a PSP was only 5 percent in 1960 and grew steadily to 14 percent by 1980. A significant diffusion occurred during the 1980s, however, with the proportion of firms with PSPs growing to over 20 percent by 1990.

PSPs are found to be more prevalent in smaller firms. For instance, the proportion of firms with 5,000 or more employees that had a PSP was only 11 percent. The large majority (70 percent) of firms with a PSP reported separate profit-sharing plans for officers and non-officers. However, Japanese PSPs do not normally distinguish between union and non-union members (only one-third of firms with PSPs reported separate PSPs for union and non-union members). PSPs are mostly company-wide with only 12 percent of firms with PSPs reporting separate plans for different divisions and occupations. Moreover, nearly all Japanese PSPs are cash plans (98 percent), which is in sharp contrast to the U.S. where deferred plans are more popular (see Kruse 1993: 16-17). Being almost always cash plans, Japanese PSPs have no tax advantage.

The majority of Japanese PSPs (55 percent) do not have set formula (or are fully discretionary) for how the contribution should be tied to profits, which is also in contrast to PSPs in the U.S. where only 22 percent are fully discretionary (Kruse, 1993: 75).

III. The Effects of Participatory Employment Practices

In general, formal economic theory is ambiguous as to the expected effect of participatory employment practices on productivity and firm performance. (For reviews, see the essays in

Blinder, 1990). Focusing on individual motivation and performance, however, several hypotheses predict positive effects, of which the following two (Goal Alignment Effects and Human Capital Effects) are perhaps most important. In addition, there are a few hypotheses concerning the complementarities among HRMPs.

A. Goal Alignment Effects of HRMPs

Consider financial participation first as they are the easiest example by which one can understand how the goal alignment effects arise. PSPs help align the interest of the firm with the interest of its employees by linking pay for employees to firm performance such as profitability. Likewise the most direct positive effects of ESOPs result from enterprise success being reflected in a higher price of its equity, and thus higher wealth for employees who own stock in the ESOP. In such cases, the interest of the firm is more aligned with the interest of its employees.

These interest alignment effects of financial participation can be expected to be more significant in Japan than in the U.S. First, for both PSPs and ESOPs Japanese firms do not receive any tax incentive to establish financial participation. In this sense, the intent of Japanese firms to introduce financial participation can be interpreted by their employees as more "genuinely participatory" than in the U.S. Second, concerning ESOPs, normally executives are ineligible for membership in Japanese ESOPs whereas ESOPs in the U.S. often are structured to encourage strong participation by top management (Jones and Kato, 1995). U.S. ESOPs frequently are designed to prevent participation by groups of non-executive employees, especially union members (Blasi, 1988). But in Japan typically all full-time non-executive employees are eligible for membership and, based on our interviews with managers of several Japanese manufacturing corporations, it appears that blue-collar workers actively participate in ESOPs. Third, with

regard to PSPs, as Kruse (1993) show, cash plans tend to have a greater productivity effect than deferred plans, and plans without set formula (and therefore based on trust) tend to do better than other plans. As discussed above, almost all Japanese PSPs are cash plans and a substantially higher proportion of Japanese PSPs are without set formula than US PSPs. Lastly, the average ESOP participant owns a substantial amount of stock, worth 14,000 dollars on average.

The goal alignment effects of information sharing and employee involvement via JLMCs, SFCs and SGAs are more subtle (but not necessarily weaker). First, information sharing and employee involvement are expected to reduce information asymmetry between labor and management and, consequently, avoid the development of adversarial labor-management relations. In labor-management relations, employers are said to have more information about the status of the firm and business strategies. Workers, under usual collective bargaining arrangements, have no means of obtaining such information except to resort to hard bargaining often coupled with the threat of strikes (Tracy, 1986). Such behavior on the part of the unions and employees may lead to adversarial labor relations, which may, in turn, have negative consequences for productivity. Voluntary information sharing by management, via such mechanism as JLMCs and SFCs, is likely to reduce the cost of such information asymmetry and is likely to have positive effects on productivity.

Second, employers may voluntarily share information to enhance worker loyalty (Kleiner and Bouillon, 1991). Worker cooperation may also be obtained through higher workers commitment and loyalty. Enhanced worker loyalty and cooperative behavior are all predicted to have positive effects on productivity. In economic terms, sharing information on private information which has been heretofore restricted to owners and top management is likely to lead to goal alignment and trust between labor and management. Better informed via JLMCs and

SFCs, workers, while still striving for their own benefit, may be more likely to be convinced that it is in their interest to cooperate with management and improve productivity and firm performance. They may see more clearly the path from their own behavior to enlargement of the benefits through firm prosperity.

Also, information sharing is likely to curtail management's opportunistic behavior and increase the level of trust that labor has for management. In a repeated game situation where the interdependence between labor and management is likely to continue in the future, provision of private, business information is likely to enable labor to detect management's deception and curtail opportunistic behavior. Moreover, labor is more likely to develop trust in management that voluntarily shares information. Overall, by avoiding the negative consequences of management's moral hazard and increasing the positive effects of labor's cooperative behavior, information sharing is likely to have favorable effects on productivity.

B. Human Capital Effects of HRMPs

JLMCs, SFCs, and SGAs may play an important role of providing employees a voice in the firm and thus reduce the costs of exit from the firm, saving specific human capital.² In the absence of unions, these arrangements may provide the sole voice mechanism, while in the presence of unions they may supplement the direct voice mechanism of unions. Also, in order to own shares privately, the average employee participant in a Japanese ESOP must stay with the firm for a significant number of years (Jones and Kato, 1995). This vesting feature would be expected to discourage employee turnover and promote the formation of more firm-specific human capital.

² In the context of trade unions, the argument was first developed by Freeman (1976).

C. Complementary Effects of HRMPs

Information sharing and financial participation are likely to have complementary effects on productivity through goal alignment processes, with financial participation directly aligning employees' and management's goals, and information sharing indirectly aligning two parties' goals by modifying employee perceptions and expectations regarding management's behavior.

Three specific mechanisms may be proposed. First, as Levine and Tyson (1990: 209) argue that successful information sharing will require financial participation schemes that assure financial rewards for continued participation in information sharing by employees. Information sharing, which induces employees' cooperative behavior is not likely to be effective over a long haul in the absence of tangible rewards, since employees may lose interest in being cooperative and reduce their loyalty.

Second, successful financial participation may also require information sharing, in part, due to the role which information sharing plays in reducing management's moral hazard. One of the important preconditions for a successful financial participation scheme is that employees need to believe that management is honest in reporting the status of the firm to both employees and outside markets. Management, which voluntarily shares financial and other business information knowing that such information may be used to discipline their own behavior, is also not likely to engage in deceptive and opportunistic behavior in financial participation schemes.

Third, Weitzman and Kruse (1990: 100) argue that profit sharing works only when the free rider problem is effectively eased. Arguably the free rider problem will be alleviated when workers develop a strong long-term commitment to the company, so that workers face a repeated game, and/or when workers engage in active peer monitoring. As discussed above, information

sharing can be thought of a mechanism to facilitate the development of a long-term commitment to the firm by its workers.

Discussion on the complementarities among HRMPs often neglects potentially important complementarities between participation at the top level and participation at the grass roots level. It is quite possible that information sharing at the top level without information sharing at the grass roots level results in a significant gap between labor representatives (often union officials) and the rank and file in terms of their sense of goal alignment with management. The gap may not only reduce the overall goal alignment between labor and management but create a complex coordination problem of the three distinct constituencies: management, labor leaders, and the rank and file. Apathy, a sense of alienation, and hence reduced morale of the rank and file may result.

In addition, as Koike (1978: 196) suggests, information sharing at the grass roots level may complement information sharing at the top level by providing a forum for information shared at the top level to be disseminated to the rank and file. For instance, as we discussed, SFCs of Japanese firms facilitate sharing of information concerning not only standard shop-floor issues but business and corporate strategic plans which are discussed during the JLMC meetings.

D. Evidence

In spite of the importance of the postwar Japanese experience with HRMPs, there is not much systematic investigation of the economic effects of HRMPs in Japan.³ For the economic effects

³ For U.S. corporations, however, we are presently witnessing an impressive growth of evidence. See, for example, Ichniowski, Shaw and Prennushi (1997), Freeman, Kleiner, and Ostroff (1997), Black and Lynch (1997), Freeman and Kleiner (1998), Susan Helper (1998) and articles featured in a special issue of *Industrial Relations* (Vol. 35, July 1996). Many of these recent studies in the U.S. use plant-level panel data within a narrowly defined

of financial participation, the Japanese bonus payment system has attracted considerable attention and controversy, in particular the claim that it is a form of a PSP. Earlier studies focused on the effects on employment of the Japanese bonus payment system. Freeman and Weitzman (1987) use industry-level aggregate data to show the statistically significant positive correlations between bonuses and employment level. However, Brunello (1991) uses firm-level micro data, and finds no statistically significant positive correlations between bonuses and employment level for the electric machinery, car and steel industries.⁴ More recent studies turned to the issue of the productivity effects of the Japanese bonus payment system. Jones and Kato (1995) use firm-level panel data to find that there is a modest productivity gain from the bonus system. Ohkusa and Ohtake (1997) find that firms with a statistically significant positive correlation between their wages and per capita profit are 9 percent more productive than firms without such a correlation. For ESOPs, Jones and Kato (1995) use firm-level panel data to find that the introduction of an ESOP will lead to a 4 to 5 percent increase in productivity and that this productivity payoff does not appear immediately.

For the economic effects of information sharing at the top level, Morishima (1991a; 1991b) use firm-level micro data to find the statistically significant positive correlations between the extent of information sharing through JLMCs and productivity, and the statistically

industry. The benefits of using such data are probably less dramatic for Japan than for the U.S. since Japanese firms are generally substantially smaller (see, for instance, Kato and Rockel, 1992's comparative study of the 1,000 most valuable corporations between the two nations), and their management appears to be less decentralized than U.S. firms. Based on our interviews with managers in human resource at the corporate level and top managers in marketing/sales and accounting/finance at the business unit level of Japanese and U.S. corporations, the power of human resource department at the corporate level relative to top management at the business unit level appears to be much stronger in Japan than in the U.S. In addition, as Jones and Kato (1995) and Kato and Morishima (1998) show, there are substantial lags (up to 10 years) in the productivity effects of HRMPs in Japan. Plant-level data seldom provide long longitudinal data and thus may not be as useful in the context of the postwar Japanese experience as in the context of the current U.S. experimentation.

⁴ He does find, however, the statistically significant positive correlation between bonuses and employment

significant correlations between stronger JLMCs and shorter and smoother wage negotiation.

Unfortunately, for Japanese firms, there is no micro data, especially panel data providing information on groups of HRMPs such as JLMCs, SFCs, SGAs, ESOPs and PSPs. The lack of such data has limited severely the ability of prior studies to study the effects of financial participation schemes and information sharing practices of Japanese firms simultaneously.⁵ This weakness in the available empirical evidence is especially troublesome since several authors have recently developed and investigated hypotheses that some HRMPs may be more effective when used in combination with other HRMPs.⁶ Furthermore, no study has been able to distinguish information sharing at the grass roots level (SFCs) from information sharing at the top level (JLMCs).

It is against this backdrop of limited data that we conceived the idea of a survey of Japanese firms, the HRM Survey of Japanese Firms, from which such panel data can be assembled. The survey was administered in collaboration with Professor Morishima at Keio University's Keio Economic Observatory during the summer of 1993. The sample universe of

level for the textiles industry.

⁵ The lack of such data resulted in some researchers resorting to an indirect approach to identify the presence of information sharing by estimating for each firm the correlations between the profit level and the bargaining period. Thus, Ohkusa and Ohtake (1997) assume that the absence of a statistically significant correlation between the profit level and the bargaining period is an indication of the presence of information sharing, and proceed to estimate the productivity differences between firms with and without such correlations. Unfortunately, the highly indirect nature of their approach to identify the presence of information sharing sometimes makes it difficult to interpret their findings (for example, the productivity of firms with both information sharing and financial participation was estimated to be nearly 50 percent higher than other firms). Moreover, since their indirect approach required them to assume that the presence of profit sharing and information sharing are time-invariant and thus prevented them from using standard fixed effects models to account for a well-known problem of firm heterogeneity. The collection of a new panel data, which contains information on the presence of information sharing mechanisms and financial participation schemes allows researchers to measure their presence directly and use standard fixed effects model to account for the issue of firm heterogeneity. In addition, such data allow researchers to differentiate between information sharing at the top level and at the grass-roots level, which proves to be important.

⁶ See, for instance, Fitzroy and Kraft (1987); Weitzman and Kruse (1990); Levine and Tyson (1990); Jones and Pliskin (1991); Ben-Ner and Jones (1992); Kandel and Lazear (1992); Kruse (1993); Holmstrom and Milgrom (1994); Baker, Gibbons and Murphy (1994); Milgrom and Roberts (1995); Ichniowski, Shaw and Prennushi (1997),

the HRM Survey of Japanese firms was the Toyo Keizai Kaisha Shiki Ho that provides a list of all firms listed in Japan's three major stock exchanges, Tokyo, Osaka and Nagoya. In 1993 there were 2,127 firms listed in those three exchanges.⁷

The survey itself was preceded by a pilot phase in which an earlier version of the instrument was tested on human resource managers of several firms as well as on researchers of the Japan Institute of Labor, the Japan Productivity Center, and the Japan Securities Research Institute who conducted similar yet smaller surveys separately in the past. On the basis of what we learned from this, the questionnaire was revised. The final version of the questionnaires were mailed to Director of HR/Personnel (Jinji Bucho) of all 2,127 firms using a list of addresses from the Toyo Keizai Kaisha Shiki Ho in August of 1993.

We received usable responses from 371 firms (a response rate of 17%). Among those, there were 226 firms in manufacturing (a response rate of 20% for manufacturing alone). The response rate of 17% (20% for manufacturing) is comparable to most prior surveys of similar nature in Japan.⁸ We did attempt to prompt the non-respondents by phone but our effort was largely unsuccessful.

To study the representativeness of our sample, we try to compare the proportion of firms that have each HRMP in our sample and in the population. Such comparison is usually not feasible due to the absence of the data on the population. Fortunately, however, insofar as ESOPs are

Black and Lynch (1997), Helper (1998) and articles featured in a special issue of *Industrial Relations* (Vol. 35, July 1996).

⁷ Our sample universe is virtually all listed firms in Japan. The only listed firms not included in the sample universe are a very small number of firms listed only in other local stock exchanges (about three dozens).

⁸ For instance, in June of 1991, the Rengo Sogo Seikatsu Kaihatsu Kenkyu Jo (Rengo Research Institute of General Life Development) mailed their questionnaire asking questions on labor conditions and information sharing to 6,800 firms (including both public and private firms in Japan) and received usable responses from 689 firms (a response rate of 10%). In June of 1989, the Japan Productivity Center mailed their questionnaire asking questions on HRMPs to 1030 firms in Japan and received usable responses from 203 firms (a response rate of 19.7%).

concerned, all firms listed on Japan's stock exchange markets respond to the Survey of Stock Distribution (Kabushiki Bunpu Jyokyo Chosa) which has been conducted annually since 1973 by the National Conference Board of Securities Exchanges (Zenkoku Shoken Torihikijyo Kyogikai). Using the Survey of Stock Distribution, we computed that 95 percent of all listed firms had ESOPs for 1993. Reassuringly the corresponding figure from our sample is 97 percent. Moreover, we also found out that the rate of participation of employees in ESOPs in 1993 was about 50 percent both in our sample and in the population.

With regard to JLMCs, SFCs and PSPs, the pertinent information on the population is not available, and thus strict comparison between our sample and the population is not possible. Nevertheless, we did find that close to 20 percent of firms in our sample had a PSP in 1985 and that this figure is comparable to that reported by a large governmental survey called the General Survey of Wages and Hours Worked System (Chingin Rodojikan Seido to Sogo Chosa) in the same year. Finally, about 77 percent of firms in our sample were found to have a standing JLMC in 1988, the figure quite similar to the one reported by a larger governmental survey by the Ministry of Labour (the Survey of Labor-Management Communications, Roshi Komyunikeishon Chosa) in the same year.⁹

Kato and Morishima (1998) merged data from this new survey with corporate proxy statement data to create for the first time a panel data set for Japanese manufacturing firms that provides information on JLMCs, SFCs, ESOPs, and PSPs. The data are then used to estimate

⁹ Since the Ministry of Labour Survey is an establishment-level survey and includes many establishments of small private firms that are not included in our sample universe, the results are not strictly comparable to our survey results. However, the Survey reports the proportion of establishments with JLMCs for establishments of unionized firms that are probably closest to our sample universe. The Ministry reports that the figure for those establishments was 77.8 percent.

production functions augmented by variables to capture the effects of these HRMPs.¹⁰

Kato and Morishima (1998) find evidence for the importance of introducing groups of HRMPs in the following three areas: (i) information sharing at the top level; (ii) information sharing at the grass roots level; and (iii) financial participation. Specifically, moving from the traditional system of no HRMPs to a highly participatory system with HRMPs in all three areas lead to a significant 9-percent increase in productivity. The full productivity effect is, however, felt only after a long developmental phase (10 years). At the same time, they find no evidence for significant productivity gains from changing the industrial relations system from the traditional system to any intermediate systems which lack HRMPs in any one of the three key areas.

Their findings suggest that the goal alignment process needs to be supported both by direct methods (financial participation) and indirect ones (information sharing). Furthermore, information sharing needs to take place not only at the top level but at the grass roots level. In other words, the goal alignment process occurs most strongly when the interests of the two parties are aligned through financial participation and when this interest alignment is facilitated by mechanisms both at the top level and at the grass roots level; this curtails parties' opportunistic behavior.

Kato and Morishima (1998)'s findings also point to the importance of a long-term perspective in evaluating the success of HRMPs. First, it does take time for the goal alignment process to take root. It is highly unlikely that instituting a HRMP will instantly create significant interest alignment of groups of employees with the firm. Furthermore, there is substantial learning

¹⁰ Whereas the survey includes questions on SGAs, unfortunately including them in the regression analysis

by doing in the evolution of HRMPs. HRMPs “mature” over time and only matured HRMPs tend to yield significant productivity gains.

VI. Evolving Practices in the 1990s

The economic slowdown in the 1990s (in particular the recent financial crisis) and a rapidly aging workforce have allegedly been eroding Japan’s participation-friendly environments. Have participatory employment practices that we find successful for the 1960s, 1970s and 1980s been surviving in Japan in the 1990s? If so, how have they been evolving to deal with these new environments in the 1990s? Are there any differences between sectors in the survival of participatory employment practices? An examination of the recent Japanese experience with participatory employment practices will help us understand better two important questions regarding participation: (i) what are the conditions under which participatory employment practices are best introduced and best sustained; and (ii) in what way participatory employment practices will need to evolve when external environments change. To address these questions, we have been analyzing more recent data on participatory employment practices in Japan. In this section, we report some of our first findings on the evolving practices of ESOPs and JLMCs in the 1990s.

a. ESOPs in the 1990s

As described above, the National Conference Board of Securities Exchanges has been conducting annually the Survey of Stock Distribution to which all firms listed on Japan's stock exchange markets respond. The National Conference Board has recently released summary tables from

resulted in a substantial loss of observations.

their 1997 Survey. Using these most recently published summary tables as well as earlier tables, we created Figures 1 – 3.¹¹ Figure 1 shows the evolution of ESOPs in Japan over 1979-1997.

In the 1980s, the share prices of most large corporations in Japan rose steadily. It is not too surprising under such steady growth of corporate profitability that ESOPs gained increasing popularity in Japan. Thus, as shown in Figure 1, both the proportion of firms with ESOPs and the ESOP participation rate (the proportion of the labor force in firms with ESOPs who participate in ESOPs) grew steadily in the 1980s. Moreover, the real market value of outstanding shares owned by ESOPs more than quadrupled and the real market value of outstanding shares owned by ESOPs per participant (the real value of the average stake) more than doubled in the 1980s. The National Conference Board also published the average price of shares owned by ESOPs (the market value of outstanding shares owned by ESOPs divided by the total number of shares owned by ESOPs). The real value of this average price tripled in the 1980s.

The steady growth of share prices ended rather abruptly at the end of the 1980s. For instance, the average firm listed in the Tokyo Stock Exchange lost more than half its value in the early 1990s (Kang and Stulz, 1997). Reflecting this rapid asset price deflation in the early 1990s, the real market value of outstanding shares owned by ESOPs, the real value of the average stake, and the real value of the average price of shares owned by ESOPs fell sharply in the early 1990s. As shown in Figure 1, recovery from this sharp drop has been anemic.

A most natural question concerning the responses of ESOPs to this seemingly powerful adverse shock is whether this adverse shock has been discouraging employees from participating

¹¹ Although the Survey began in 1973, data on market value of outstanding shares owned by ESOPs became available only in 1979. Thus, our complete data on the evolution of ESOPs begin in 1979.

in ESOPs. Figure 1 shows a surprisingly calm response of the labor force in firms with ESOPs. The ESOP participation rate has not fallen in any significant way in the 1990s although its steady increase in the 1980s did stop in the 1990s: the ESOP participation rate rose in the 1980s by 9 percentage points from 40 to 49 percent and has remained at 49 percent level in the 1990s. It is, however, unclear whether the stagnation of the participation rate in the 1990s is caused by the adverse financial shocks. At any rate, there has not been any sign of a frenzied exit of participants from ESOPs in response to the adverse financial shock in the 1990s.

Consistent with this relatively calm response of employees, very few employers have terminated their ESOPs in response to the adverse financial shock. Thus, as shown in Figure 1, the proportion of firms with ESOPs has not fallen in the 1990s and ESOPs have continued to be a near universal phenomenon among publicly traded firms in Japan (95 percent of all publicly traded firms have ESOPs).

Overall, it appears that neither employees nor employers have panicked in the face of the adverse financial shock in the 1990s. In addition to the summary table for all publicly traded firms, the National Conference Board publishes the summary table for two-digit industries. Conceivably the adverse shock might have been hitting certain industries particularly hard and for those hard-hit industries, many ESOPs might have been terminated and the ESOP participation rate might have been falling significantly. To see if this is the case, we produced Figures 2 and 3. As shown in Figure 2, we failed to find any noteworthy example of such industries in terms of the termination of ESOPs. On the other hand, as shown in Figure 3, the ESOP participation rate has fallen to a non-trivial extent from 1988 to 1995 for mining, textiles, steel, primary metals, transportation equipment, communications, wholesale and retail trade,

finance and insurance, real estate, and service. Somewhat surprisingly, however, the ESOP participation rate has risen substantially over the same time period for a few industries, in particular oil and coal, land transportation, water transportation and transportation by air.

b. JLMCs in the 1990s

The Survey of Labor-Management Communications conducted in 1995 by the Ministry of Labour provide the most recent aggregate data on JLMCs. The same survey was conducted also in 1988 by the Ministry.¹² Using various cross tabulations published from the 1995 survey as well as those from the 1988 survey, we produced Figures 4-11.

First, Figure 4 shows how the proportion of establishments with JLMCs has changed from 1988 to 1995. For all establishments (labeled “total” in the figure), like in the case of ESOPs, the proportion of establishments with JLMCs has not fallen significantly over this time period. In other words, overall, the economic slowdown in the 1990s in general and the recent banking crisis in particular have not caused any significant dismantling of JLMCs.

Again, conceivably the adverse shock might have been hitting certain sectors of the economy particularly hard and for those hard-hit sectors, the dismantling of JLMCs might have begun. To see if this is indeed the case, we repeated the same analysis for establishments in different industries, establishments of firms of differing size, and establishments of firms with and without a union. As shown in Figure 4, the proportion of establishments with JLMCs has declined noticeably for mining, services, transportation and communications, and non-union

¹² Among all establishments in Japan that employ 50 or more employees, the Ministry of Labour selects

sectors although it is still premature to consider this an early sign of the crumbling of JLMCs for these sectors.

The absence of evidence for the formal dissolution of JLMCs is probably not too surprising since if they decide to end JLMCs, Japanese firms are likely to make them dormant by changing their attributes (for example, reducing the frequency of meetings drastically and trivializing the content of information shared) rather than formally dissolving them. To this end, we created Figures 5 – 11 which illustrate whether various attributes of JLMCs have changed from 1988 to 1995 and if so in what way.

Figure 5 shows the average number of JLMC meetings per year in 1988 and 1995. For all establishments, the frequency of JLMC meetings fell substantially from 14 times a year to 9 times a year over the time period. It appears that when news is consistently bad, JLMCs meet much less frequently. The figure also points to a considerable difference between sectors. Thus, JLMCs in transportation and communications used to hold JLMC meetings 25 times a year in 1988 while they held JLMC meetings only 11 times a year in 1995. The frequency of JLMC meetings in finance, insurance and real estate has also decreased sharply from 11 times a year in 1988 to only 6 times a year in 1995. JLMCs in larger and unionized firms experienced a sharper drop in the frequency of meetings from 1988 to 1995.

Case histories of Japanese JLMCs suggest that JLMCs tend to function well with a number of special subcommittees, such as a special subcommittee on productivity and a special subcommittee on safety and health (Japan Productivity Center, 1990). As Figure 6 shows, the average number of special subcommittees for all establishments has declined somewhat from 3.3 in

4000 of them and sends its researchers to each establishment. These experienced Ministry researchers then fill out

1988 to 2.8 in 1995. Some differences between sectors are also present. Sharp drops have occurred in manufacturing, services, and non-union sectors.

A possible way of weakening information sharing is to undermine the democratic process of selecting employee representatives. In unionized establishments, the democratic selection of employee representatives is typically ensured by union representatives participating in JLMCs as employee representatives. In non-union establishments, it is normally ensured through election by employees. Figure 7 shows the proportion of unionized establishments with JLMCs in which union representatives participate in JLMCs as employee representatives in 1988 and 1995, and the proportion of non-union establishments with JLMCs in which employee representatives are elected by employees in 1988 and 1995. We failed to find any sign of erosion of the democratic selection of employee representatives over this time period.

The nature of information sharing changes considerably, depending on: (i) the content of information shared (for example, more or less sharing of information on business and strategic plans, such as sales and production plans, and the introduction of new technology/equipment, as compared to labor issues, such as layoffs, working hours, wages and bonuses, fringe benefits, and cultural activities/sports); and (ii) the nature of “consultation” (for instance, whether labor representatives are “informed only”, or “asked for prior consent”). The Survey of Labor-management Communication selects 16 issues (plus 2 more issues in 1995), such as basic business strategies, corporate restructuring, layoffs, and mandatory retirement, and asks each establishment with JLMCs whether it discusses each of these issues during its JLMC meetings. When the establishment responds positively, it is then asked whether management asks employee

the questionnaire by asking each establishment questions from the questionnaire.

representatives for prior consent.

We selected six issues that are of particular relevance to the economic slowdown in the 1990s, especially the recent economic crisis, and created the last four figures. Figure 8 shows the proportion of unionized establishments with JLMCs that discussed each of these six issues (corporate restructuring, hiring and staffing, transfer of employees, layoffs, mandatory retirement, and severance pay/pension) in 1988 and 1995. Figure 9 shows the same figures for non-unionized establishments. Likewise, Figures 10 and 11 show the proportion of union and non-union establishments with JLMCs discussing each of these six issues that asked employee representatives for prior consent in 1988 and 1995.

For both unionized and non-unionized establishments, as shown in Figures 8 and 9, JLMCs are slightly more likely to discuss transfer of employees and layoffs in 1995 than in 1988. For unionized establishments, JLMCs are slightly more likely to discuss mandatory retirement and severance pay/pension in 1995 than in 1988 while they are slightly less likely to discuss corporate restructuring and hiring and staffing in 1995 than in 1988. The opposite pattern is observed for non-unionized establishments. Overall, it is unclear whether JLMCs are more or less likely to discuss issues of topical relevance in 1995 than in 1988.

Nevertheless, when one takes a close look at the nature of consultation on each of these six issues, a noteworthy difference between unionized and non-unionized establishments is revealed. As shown in Figure 10, JLMCs of unionized establishments discussing transfer of employees, layoffs, mandatory retirement, and severance pay/pension are more likely to ask employee representatives for prior consent in 1995 than in 1988. In stark contrast, as shown in Figure 11, JLMCs of non-unionized establishments discussing transfer of employees, layoffs,

mandatory retirement, and severance pay/pension are much less likely to ask employee representatives for prior consent in 1995 than in 1988. This contrast in the changing nature of consultation over this time period between unionized and non-unionized establishments may suggest that unions effectively prevent JLMCs from becoming dormant by keeping the strong consultative role of JLMCs. As such, unions and JLMCs may be complements rather than substitutes.

V. Conclusions

In this paper we have shown that: (i) as a result of favorable environments in the postwar Japanese economy, in particular in manufacturing, participatory employment practices were diffused widely and established firmly; (ii) they have positive effects on company performance; (iii) the full effects are, however, felt only after a long developmental phase; (iv) there exist the complementarities among them; and (v) they appear to be surviving in general in the economic slowdown in the 1990s whereas subtle yet potentially important changes in their attributes are taking place.

The complementarities of these participatory employment practices suggest that terminating a single practice will not only eliminate its own positive effect but reduce the positive effects of other practices. In the extreme case, the termination of a single practice may cause the whole system of employee participation and labor-management cooperation to halt. For example, it was found that the goal alignment process needed to be supported both by direct methods (financial participation) and indirect ones (information sharing). Removing financial participation will cause information sharing to be ineffective and vice versa. Furthermore, it was found necessary for information sharing to take place not only at the top level but at the grass

roots level. Discontinuing information sharing at the grass roots level will cause information sharing at the top level to be ineffective, and vice versa.

Moreover, research points to the importance of a long-term perspective in evaluating the success of participatory employment practices. Coupled with the importance of the long-term perspective, the complementarities of participatory employment practices will probably make individual Japanese employment practices more enduring than the popular rhetoric of “the end of Japanese employment practices” suggests. Our preliminary findings on the responses of participatory employment practices to the economic slowdown in the 1990s do point to the enduring nature of Japanese participatory employment practices. Japanese firms appear to be responding to the economic slowdown in the 1990s and the recent financial crisis in particular by fine-tuning the existing practices not by dismantling them.

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FIGURE 1 ESOPs in Japan: 1979-1997

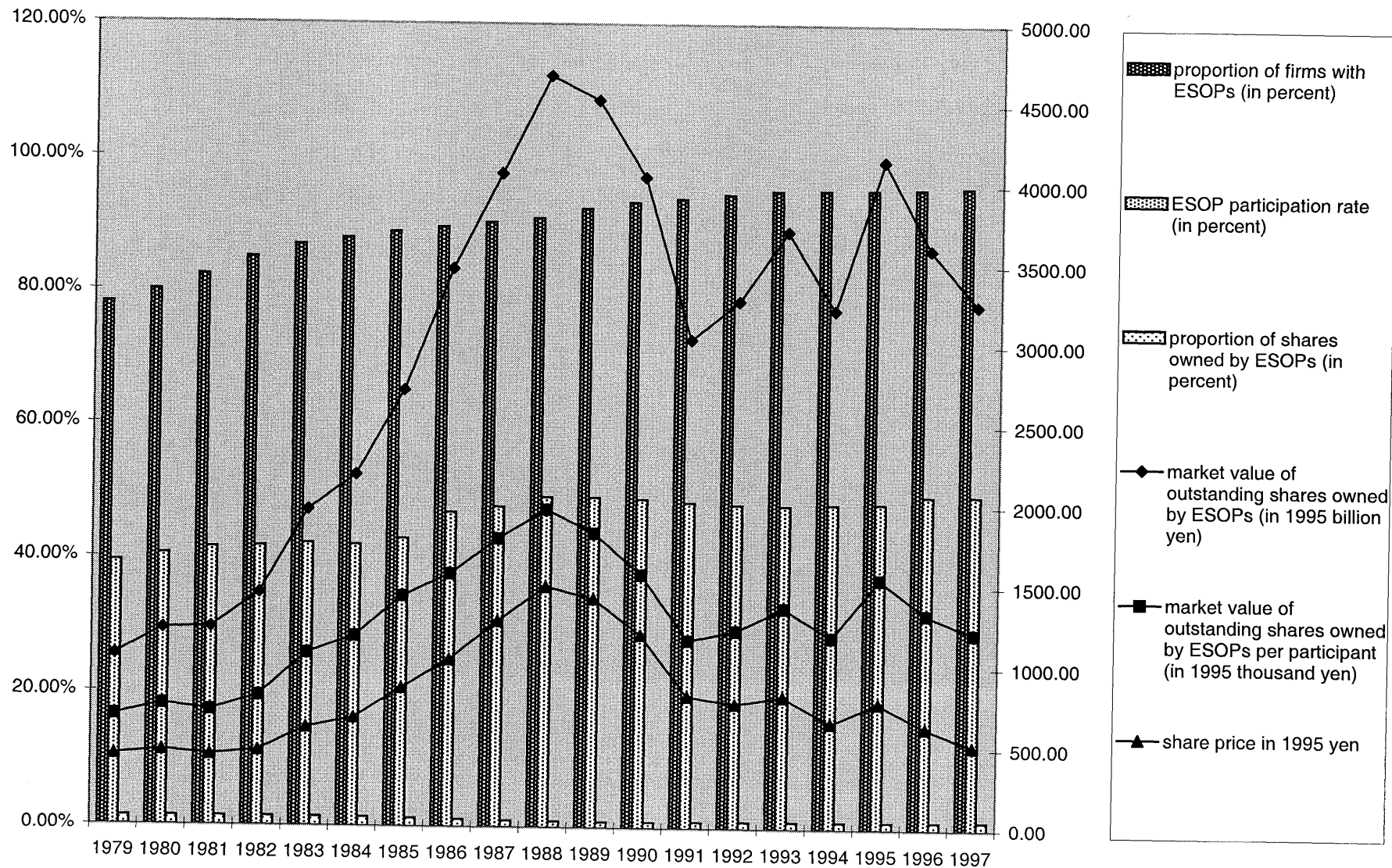


FIGURE 2 Changes in Proportion of Firms with ESOPs from 1988-95 by Industries

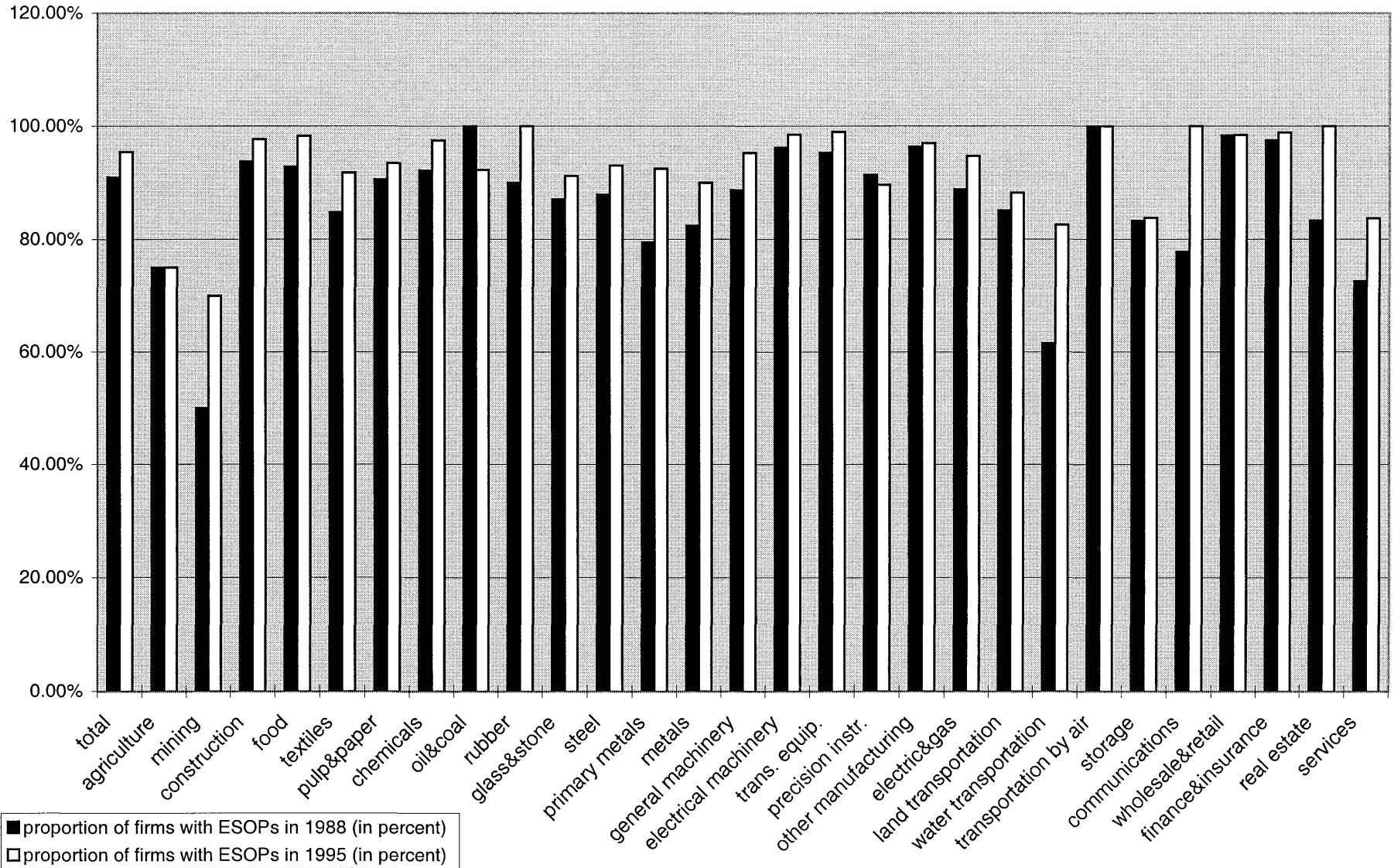


FIGURE 3 Changes in ESOP Participation Rate from 1988-95 by Industries

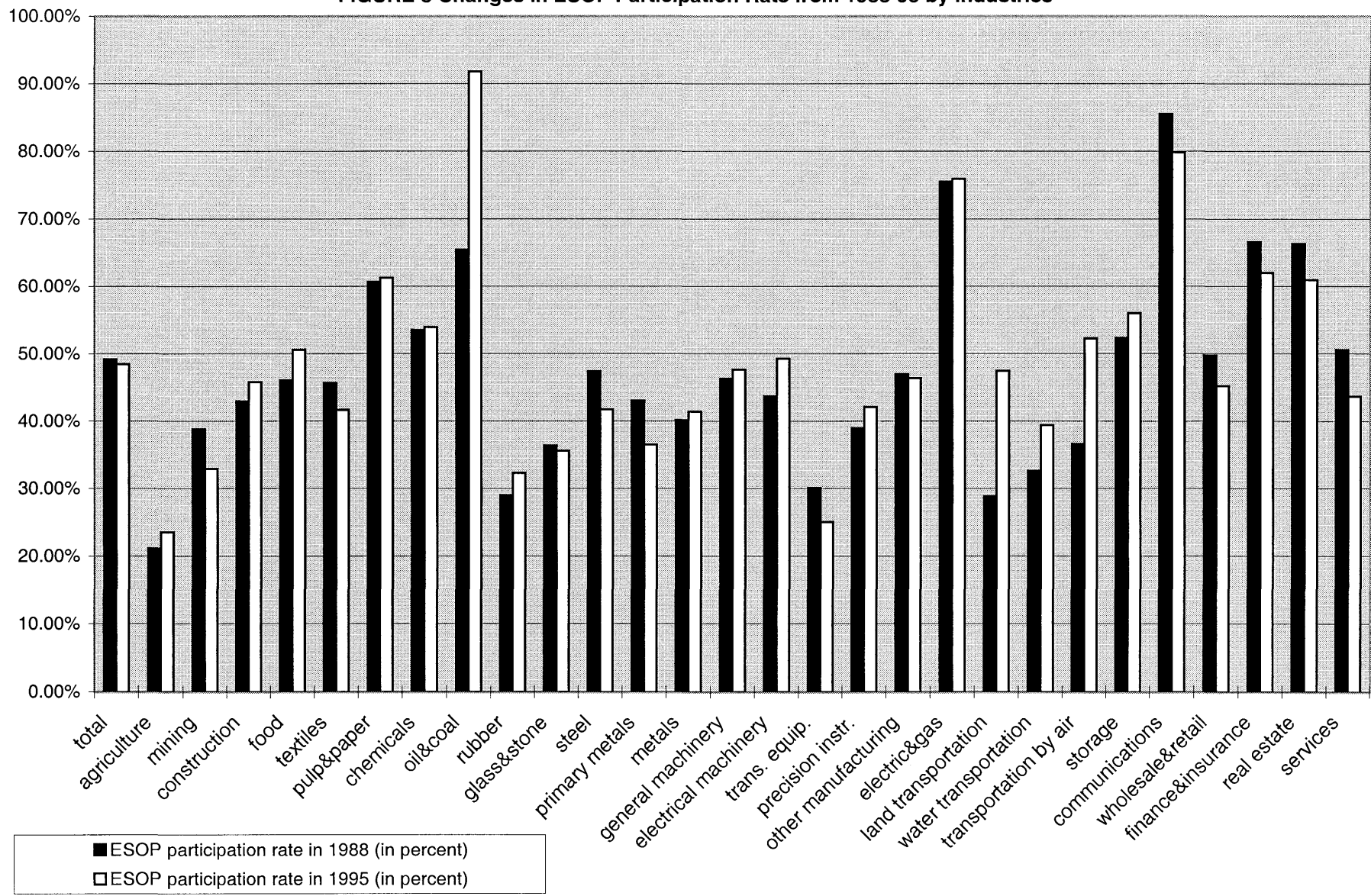


FIGURE 4 Proportion of Establishments with JLMCs in 1988 and 1995

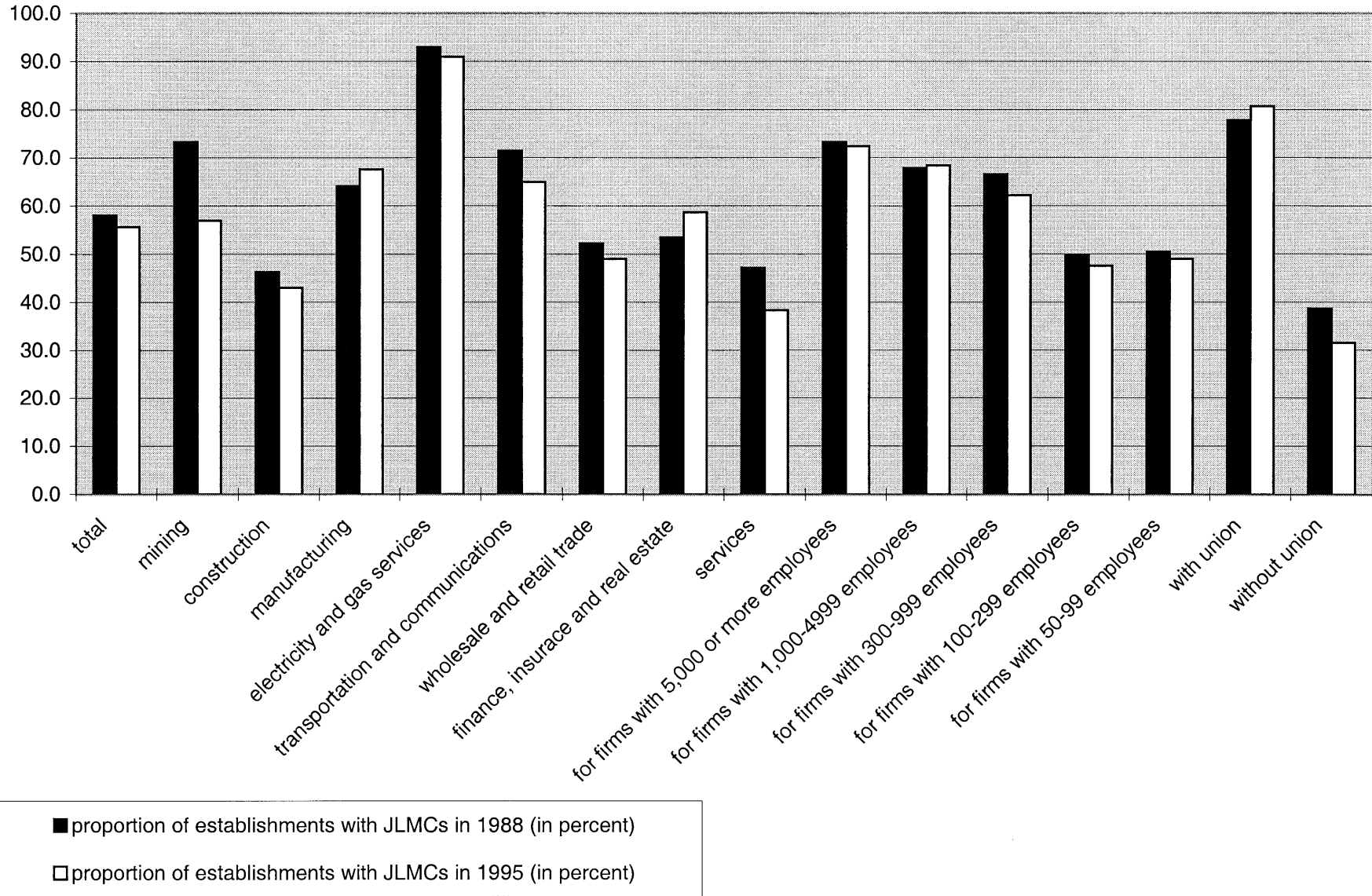
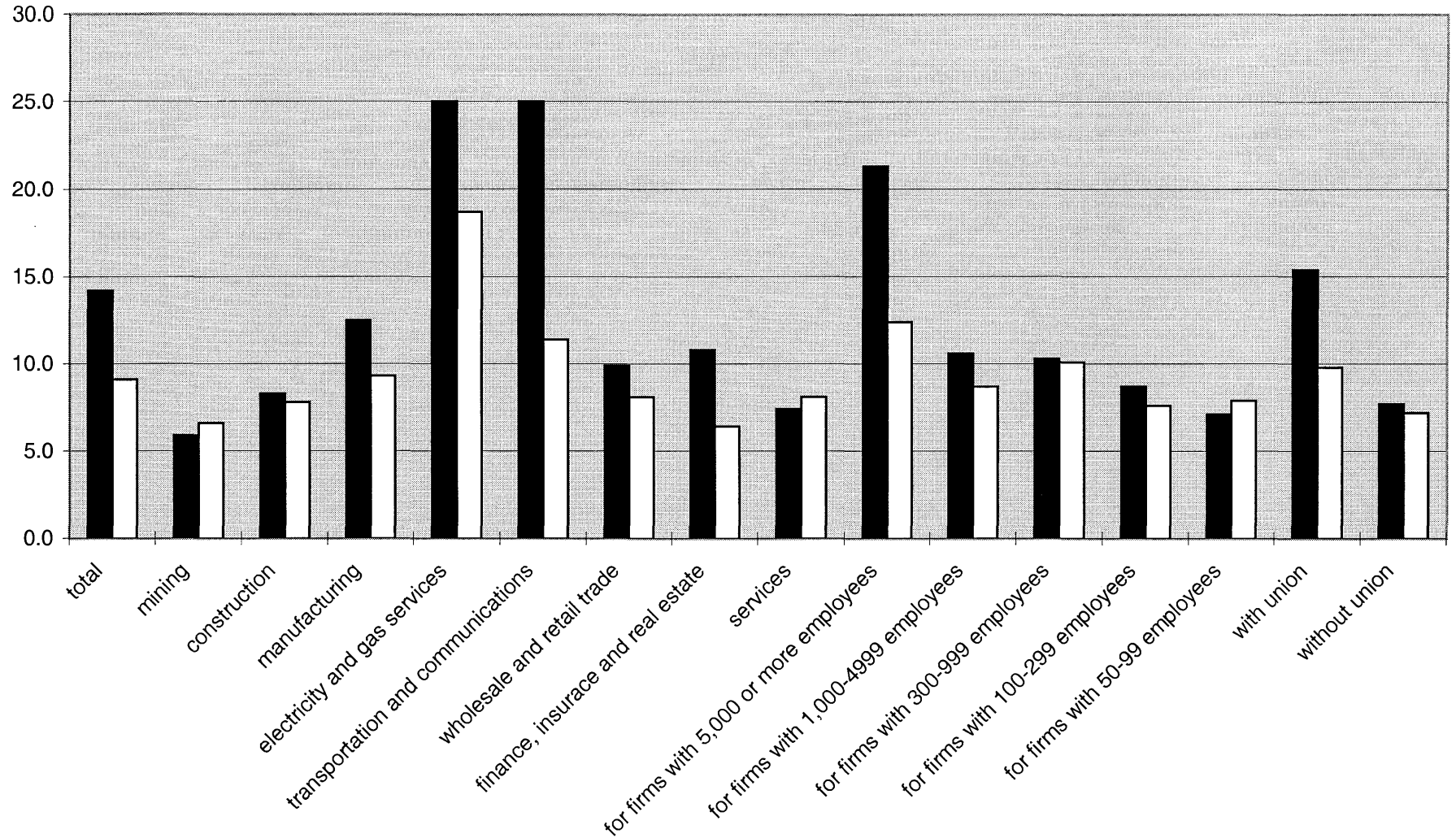


FIGURE 5 Average Number of JLMC Meetings per year in 1988 and 1995



average number of meetings per year in 1988
 average number of meetings per year in 1995

FIGURE 6 Average Number of Special Subcommittees in 1988 and 1995

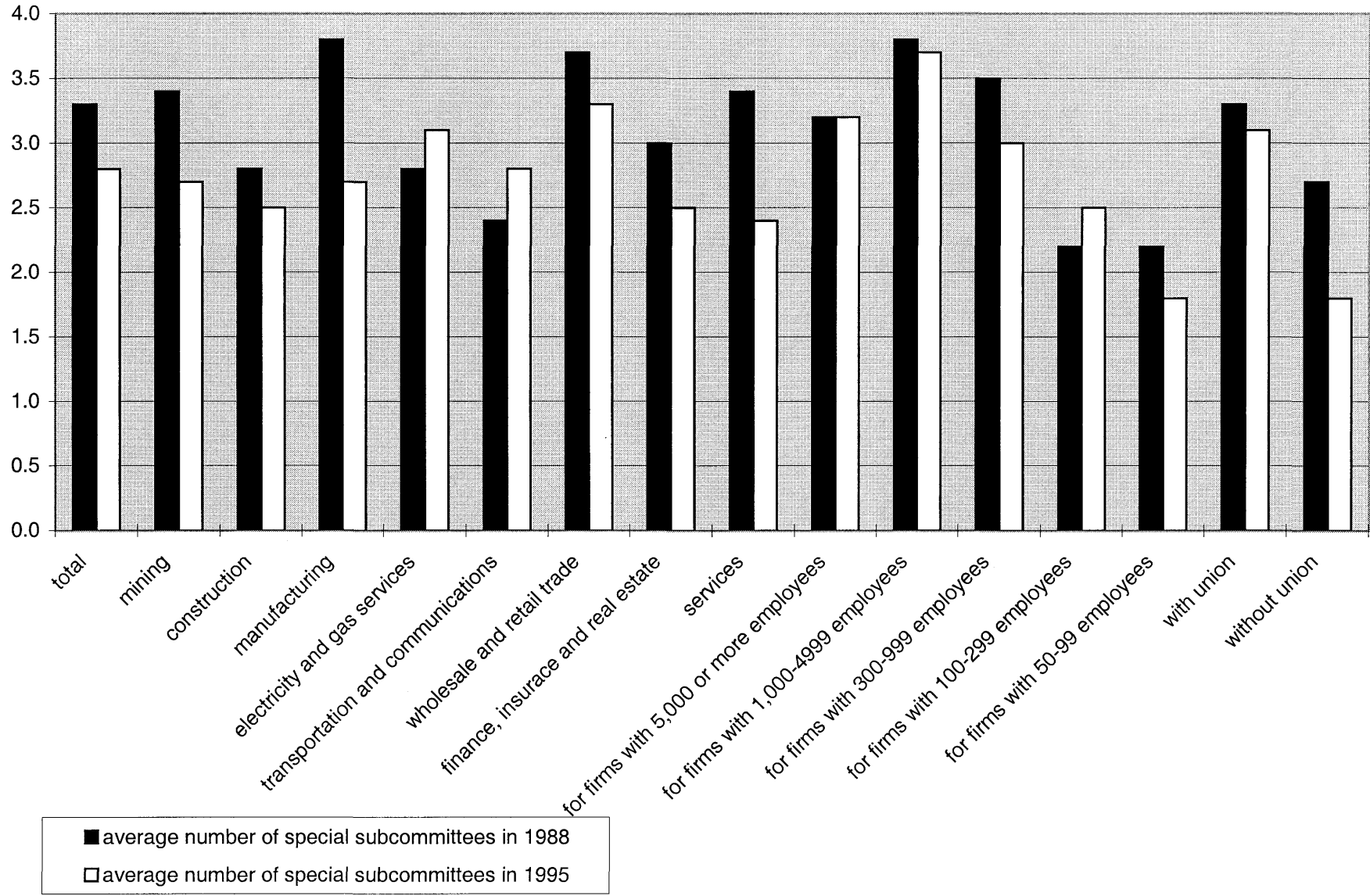


FIGURE 7 Selection of Employee Representatives in Firms with and without Unions in 1988 and 1995

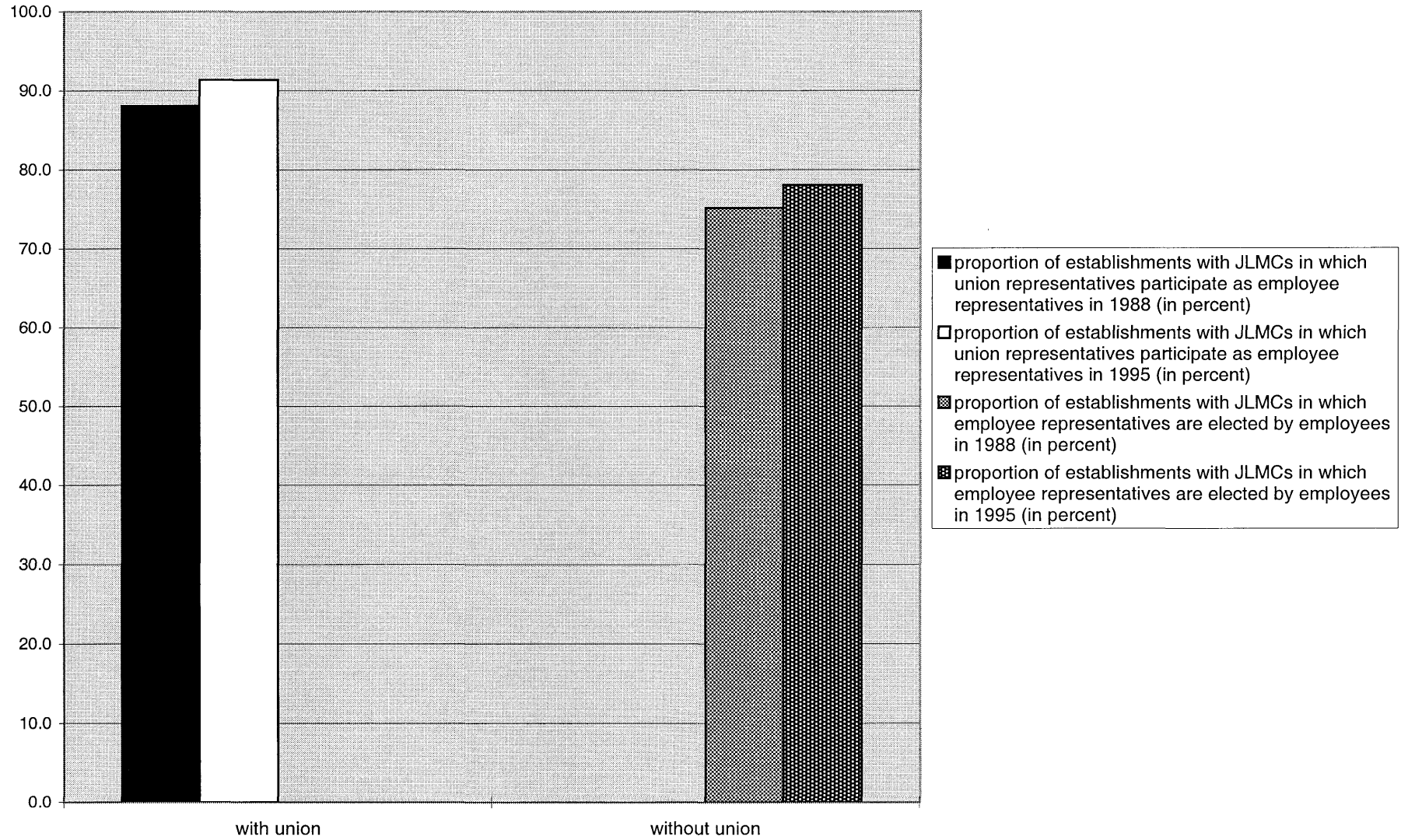
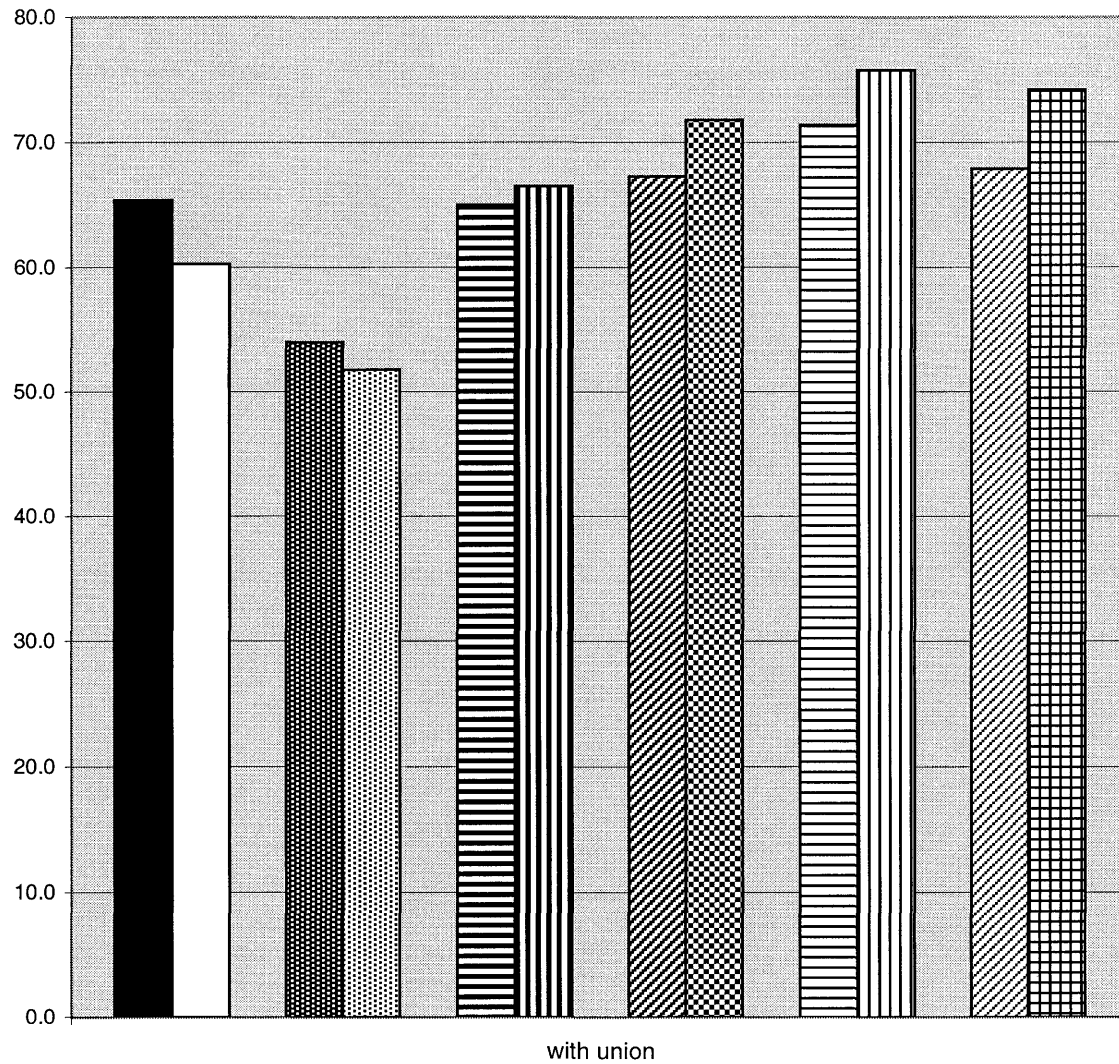
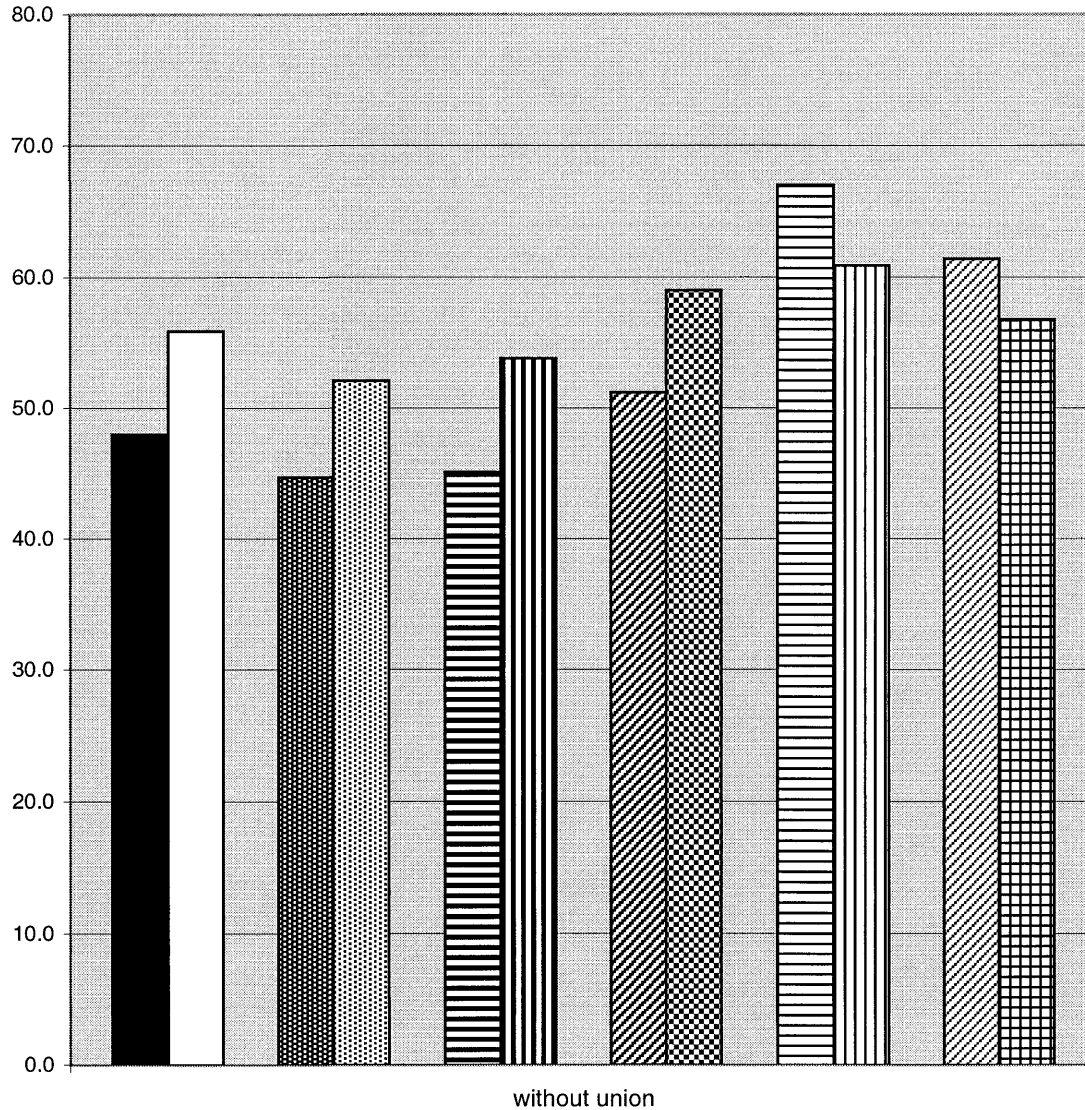


FIGURE 8 Proportion of Unionized Establishments with JLMCs that Discuss Restructuring and Other Relevant Issues in 1988 and 1995



- proportion of establishments with JLMCs that discuss corporate restructuring in 1988 (in percent)
- proportion of establishments with JLMCs that discuss corporate restructuring in 1995 (in percent)
- ▨
- ▩ proportion of establishments with JLMCs that discuss hiring and staffing in 1988 (in percent)
- ▧ proportion of establishments with JLMCs that discuss hiring and staffing in 1995 (in percent)
- ▦
- ▤ proportion of establishments with JLMCs that discuss transfer of employees in 1988 (in percent)
- ▣ proportion of establishments with JLMCs that discuss transfer of employees in 1995 (in percent)
- ▢
- proportion of establishments with JLMCs that discuss layoff in 1988 (in percent)
- proportion of establishments with JLMCs that discuss layoff in 1995 (in percent)
- ▟
- ▞ proportion of establishments with JLMCs that discuss mandatory retirement in 1988 (in percent)
- ▜ proportion of establishments with JLMCs that discuss mandatory retirement in 1995 (in percent)
- ▝
- ▛ proportion of establishments with JLMCs that discuss severance pay/pension in 1988 (in percent)
- ▙ proportion of establishments with JLMCs that discuss severance pay/pension in 1995 (in percent)

FIGURE 9 Proportion of Non-unionized Establishments with JLMCs that Discuss Restructuring and Other Relevant Issues in 1988 and 1995



- proportion of establishments with JLMCs that discuss corporate restructuring in 1988 (in percent)
- proportion of establishments with JLMCs that discuss corporate restructuring in 1995 (in percent)
- ▨
- ▩ proportion of establishments with JLMCs that discuss hiring and staffing in 1988 (in percent)
- ▧ proportion of establishments with JLMCs that discuss hiring and staffing in 1995 (in percent)
- ▦
- ▤ proportion of establishments with JLMCs that discuss transfer of employees in 1988 (in percent)
- ▣ proportion of establishments with JLMCs that discuss transfer of employees in 1995 (in percent)
- ▢
- proportion of establishments with JLMCs that discuss layoff in 1988 (in percent)
- proportion of establishments with JLMCs that discuss layoff in 1995 (in percent)
- ▟
- ▞ proportion of establishments with JLMCs that discuss mandatory retirement in 1988 (in percent)
- ▝ proportion of establishments with JLMCs that discuss mandatory retirement in 1995 (in percent)
- ▜
- ▛ proportion of establishments with JLMCs that discuss severance pay/pension in 1988 (in percent)
- ▚ proportion of establishments with JLMCs that discuss severance pay/pension in 1995 (in percent)

FIGURE 10 Proportion of Unionized Establishments with JLMCs Discussing Restructuring and Other Relevant Issues that Ask Employee Representatives for Prior Consent in 1988 and 1995

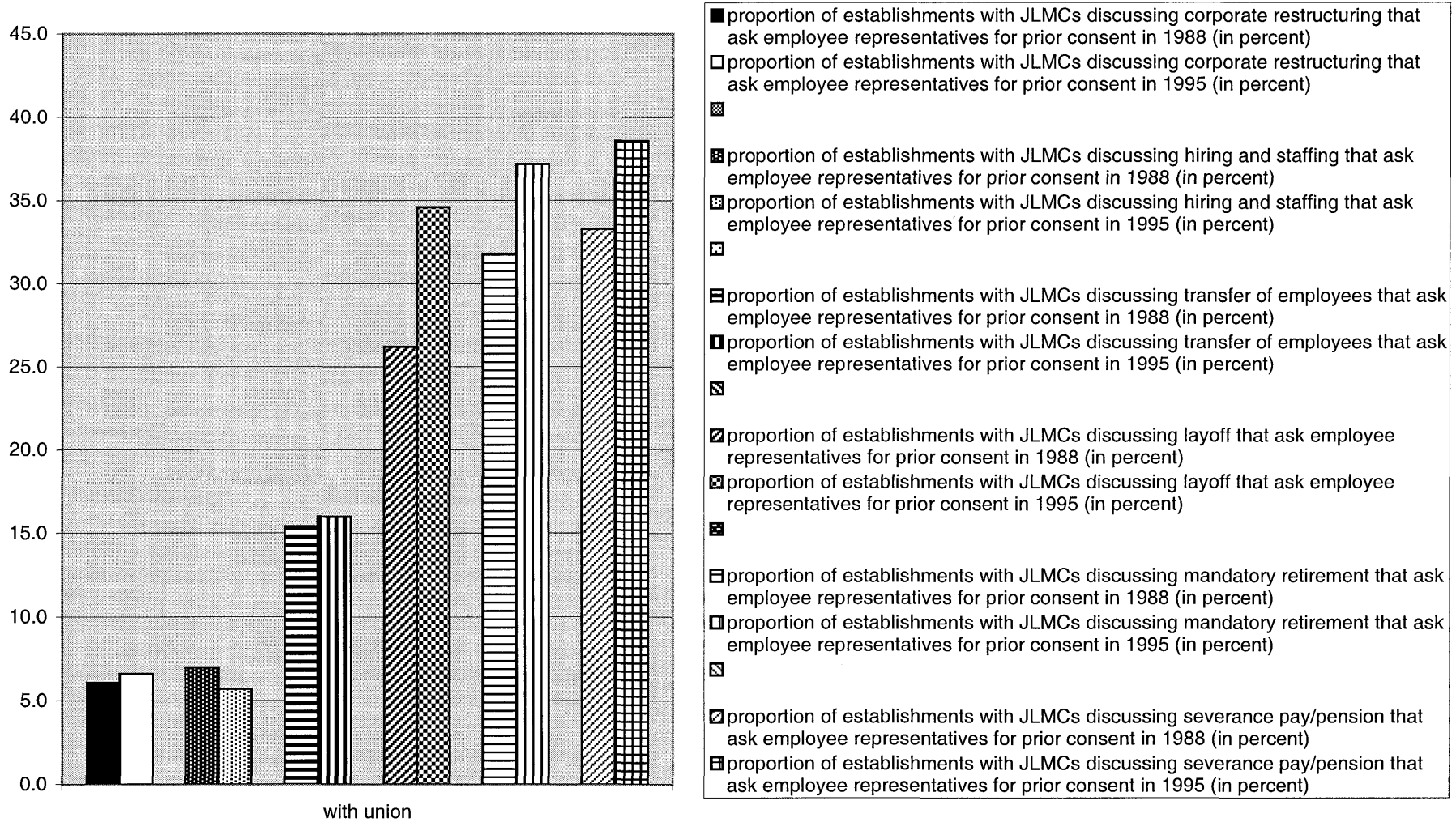
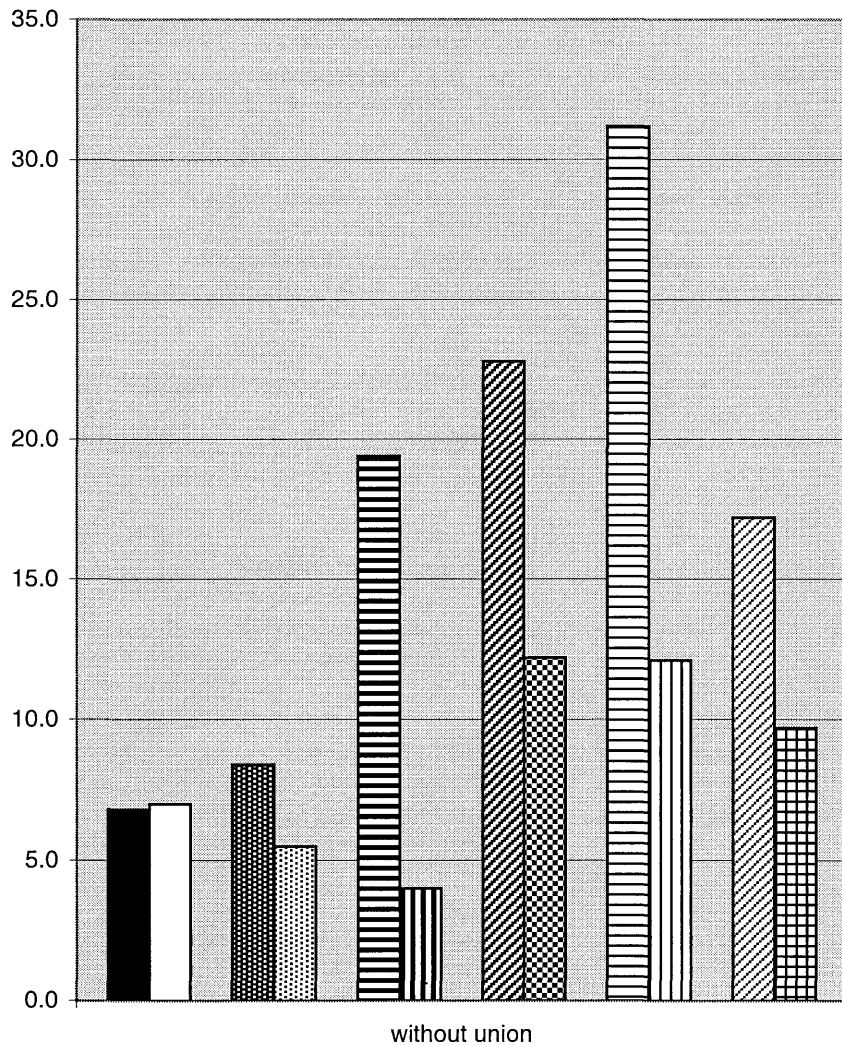


FIGURE 11 Proportion of Non-unionized Establishments with JLMCs Discussing Restructuring and Other Relevant Issues that Ask Employee Representatives for Prior Consent in 1988 and 1995



- proportion of establishments with JLMCs discussing corporate restructuring that ask employee representatives for prior consent in 1988 (in percent)
- proportion of establishments with JLMCs discussing corporate restructuring that ask employee representatives for prior consent in 1995 (in percent)
- proportion of establishments with JLMCs discussing hiring and staffing that ask employee representatives for prior consent in 1988 (in percent)
- proportion of establishments with JLMCs discussing hiring and staffing that ask employee representatives for prior consent in 1995 (in percent)
- proportion of establishments with JLMCs discussing transfer of employees that ask employee representatives for prior consent in 1988 (in percent)
- proportion of establishments with JLMCs discussing transfer of employees that ask employee representatives for prior consent in 1995 (in percent)
- proportion of establishments with JLMCs discussing layoff that ask employee representatives for prior consent in 1988 (in percent)
- proportion of establishments with JLMCs discussing layoff that ask employee representatives for prior consent in 1995 (in percent)
- proportion of establishments with JLMCs discussing mandatory retirement that ask employee representatives for prior consent in 1988 (in percent)
- proportion of establishments with JLMCs discussing mandatory retirement that ask employee representatives for prior consent in 1995 (in percent)
- proportion of establishments with JLMCs discussing severance pay/pension that ask employee representatives for prior consent in 1988 (in percent)
- proportion of establishments with JLMCs discussing severance pay/pension that ask employee representatives for prior consent in 1995 (in percent)

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