

**CHANGING EMPLOYMENT
RELATIONS AND GOVERNANCE
IN THE INTERNATIONAL
AUTO INDUSTRY**

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Introduction

In recent years, considerable debate has surrounded the issue of whether a fundamental transformation of employment relations is underway in both the industrialised and industrialising countries⁽¹⁾. Comparative studies at the national or macro-level of employment relations have been conducted within both an OECD group of countries (see Locke et al 1995) and newly industrialising economies (see Verma et al 1995). To these have been added complementary studies at the industry-level: in steel, telecommunications, banking and automobile manufacturing. These studies have adopted a broader similar analytical framework that focus on five sets of employment practices or issues, as follows:

- (1) the way work is organised
- (2) the process of skills acquisition and development
- (3) the structures and processes of pay and compensation
- (4) staffing and employment security arrangements
- (5) enterprise governance and labour-management relations issues.

The analytical framework adopted for these studies argues that employment practices are shaped by features of the external environment and the choices of firms, unions and governments, as well as by the broader institutional context at the industry and firm levels. The issue of enterprise governance occupies an ambiguous position in that it may be viewed both as a feature of the external environment (especially where governments have legislated for certain arrangements) as well as an element in employment relations practice.

The International Auto Industry

The international auto industry provides a useful basis for not only examining the degree and nature of change in employment relations under a variety of external conditions, but also for assessing the importance of enterprise governance in contributing to these changes. In studying auto firms in particular economies, we have been especially interested in understanding how employee relations strategies relate to overall governance of the firm, to industry-level structures and institutions and to the macro-economic and political institutions in each country. We see these broader institutional arrangements in industrial relations having a significant effect on how well the industry operates in both the domestic and international marketplace.

From the studies which have been undertaken in a wide range of countries for this project, some general patterns have emerged. Yet there are considerable variations in the pace of change and the degree to which both firms and industries in different countries

have been able to adapt through incremental adjustments, as opposed to fundamental transformations.

One common aspect of the adaptation process has been the search for greater flexibility in how work is organised and labour is deployed. Those systems which already have institutional arrangements that promote flexibility, and are generally decentralised in terms of their employment relations, have been able to adapt through incremental adjustments. These include mature industrialised economies such as Japan, as well as some of the newly developing economies. By contrast, economies which have more centralised systems have had greater difficulties in adjustment.

Another feature of the global automotive industry, as pressures for greater productivity and quality intensify, is a new premium being placed on workforce skills. New technologies require a higher order of both analytical and behavioural skills. Firms are having to adjust their payment systems accordingly, in order to attract and develop employees who have the required skills to ensure that the new production systems are successfully implemented and maintained. Some countries, such as Germany and Japan, which have well developed systems for skills enhancement have fared better than others. This is despite the fact that Germany and Japan have contrasting approaches to the way in which skills are acquired either on or off the job. In most economies, however, automobile producers are adapting their systems of remuneration to reward employees for skills rather than other criteria such as years of service.

A third common factor in the experience of firms in the auto industry is the challenge of providing appropriate forms of employee participation or 'voice' in governance issues at the enterprise level. In most developed industrialised countries, the trade union movement has been the traditional channel for employee representation in the enterprise. Indeed, the auto industry has been one of the strongholds of unionisation featuring some of the world's leading unions such as the UAW and I G Metall. However, declining rates of unionisation in many mature economies, such as the United States and Europe, as well as the development of non-unionised plants (particularly those owned by the Japanese in North America), has greatly weakened the union movement within countries where they were previously at the strongest. However, there are some exceptions, such as Sweden, where levels of unionisation have remained very high. Some European countries such as Germany, which have legislated systems for employee representation, have experienced a smaller decline in unionisation. Newly industrialised economies such as South Korea, however, have experienced a rapid rise in unionisation. The issue of employee representation and involvement, nevertheless, remains a concern for the auto industry in all parts of the world.

The Japanese emerged as the dominant force in the international auto industry in the 1970s and 1980s. They captured not only increased market share in North America and established a foothold in Britain, Europe, Australia and parts of Asia, but set the terms of the debate over how to produce automobiles efficiently and with high quality (Shimada, 1993). Indeed, the success of the Japanese or more specifically the Toyota production system, was elevated to the level of linguistic folklore when the authors of the MIT International Motor Vehicle Research Program (IMVP) book, **The Machine That**

Changed the World, (Womak, Jones and Roos, 1990) coined and popularised the term 'lean production'.

The authors of the IMVP book made a bold prediction. They argued that lean production was a 'better way of making things which the whole world should adopt .. as quickly as possible' (Womack et al, 1990, p.225). In their view, lean production was the one best way to organise the production of automobiles. Companies seeking to compete successfully in any part of the world needed to learn how to adopt lean production techniques. Those that did not would fall by the wayside in an ever increasingly competitive world market.

Nevertheless, lean production has its critics and sceptics. The critics view it essentially as an old fashioned 'speed-up' production system dressed up as a new idea. It is simply a modern version of Frederick Taylor's methods of controlling the workforce and maximising managerial control (and profits) on the backs of workers. The sceptics doubt that lean production will sweep across the world as predicted. Local conditions, changing industry practices and the general rejection of theories that suggest that is indeed 'one best way' of single set of 'best practices' to perform work of any kind, including the assembly of automobiles.

At the core of these debates lie employment practices: the way work is organised, how workers and managers interact, the way worker representatives respond to learn production strategies (the auto industry being among the most unionised in the world), and the nature of the adaptation and innovation process itself. What seems to bind together most of the critics and sceptics of lean production is the view that employment practices are shaped not in a deterministic fashion by methods of production, or some singular technological or economic imperative, but by a multiplicity of factors. Thus the sceptics and critics expect the future world of auto production to be more diverse and varied in the future than the lean production advocates and/or theorists predict.

One of the challenges involved in studying the diffusion of lean production lies in agreeing on a working definition of the concept. While the term 'lean production' was popularised in **The Machine That Changed the World**, the term derives its meaning originally from studies of the Toyota production system (Cusumano, 1985). The concept of lean production describes manufacturing and production practices that include just-in-time inventory, careful attention to use of statistical process controls and methods by production workers, and standardised work methods for each job. These specific practices support a manufacturing strategy that uses more general purpose machines and small lot sizes to adapt to a variety of product designs in order to serve diverse and/or rapidly changing markets. An examination of the use of the production techniques in Japanese transplants in the US in the mid 1980s (Shimada and MacDuffie, 1986) stressed the human resource and organisational policies associated with these production practices, including multi-skilled workers who are organised into teams and are able to rotate across different jobs, high levels of work participation in problem solving or 'kaizen' processes, i.e. making suggestions to support the continuous improvement of

the production process, etc. Shimada and MacDuffie argued that this production system depended on having highly skilled, motivated and adaptable workers.

This lean paradigm was contrasted with the mass production system that has dominated manufacturing since Henry Ford introduced the assembly line in the early 1900s. By contrast with lean production, mass production emphasised high volume production of standardised goods by employing highly specialised or dedicated machines, narrow job definitions, with a clear line between those who designed and supervised the work and those who performed it. This, in turn, produced a hierarchical organisational structure and either led to an adversarial relationship between managers and workers. This further reinforced an engineering logic that put emphasis on finding technical controls to reduce variances due to human error or lack of commitment. This system required large buffer stocks to keep machines running in the event mistakes occurred and the separation of quality control and checking from production workers.

Unfortunately, despite the recognised importance of the link between employment practices and manufacturing practices, **The Machine That Changed the World** said very little about the human side of lean production. Many questions were not addressed. How do workers react to these production concepts? How will unions adapt and what type of union-management relations are compatible with this approach? This is the course of much of the debate over whether it will diffuse broadly across the world? These questions were taken up in more detail in our project.

For all of the reasons outlined above, the automobile industry remains a central focus of analysis and national attention around the world. Hence, it is important to sort out the lean production debate by conducting further research and analysis of developments in a wide range of countries. Our project was organised to undertake this task and to use the debate as a rhetorical device around which our analysis could be structured. Specifically our objectives were to:

- (i) broaden and deepen our understanding of the concepts and measurement of performance in the international auto industry and the contribution made by employment relations policies and practices;
- (ii) understand the diffusion and adaptation of lean production and associated employment patterns in a variety of different national contexts;
- (iii) identify new paradigms which may be emerging;
- (iv) examine implications of changes in the industry for policies at various levels (i.e. enterprise, national and international).

In order to gain a deeper understanding of the processes of change and adaptation which the automobile industry is undergoing in the various countries in our study, a number of employee relations practices (outlined on page 1) were studied in detail. Our argument is

that employment relations and governance in the auto industry are interdependent with employment practices.

Work Organisation

Flexibility in work organisation has become a key source of competitive advantage within firms in all of the countries in our study. There has been a great variety of experiments with team work, employee participation in problem solving and productivity improvements, quality circles and the use of total quality management. However, diffusion of these practices remains uneven.

Data collected for the International Motor Vehicle Research Project (IMVP) within assembly plants, by John Paul MacDuffie (1995), provide evidence of considerable variation between countries with regard to work organisation. These data were collected by questionnaire in 1993 from more than 90 plants. MacDuffie used an index of work systems to compare assembly plants in various countries. The index includes items such as the percentage of the workforce in teams, employee involvement or quality circle groups, the number of suggestions per employee and the percentage of suggestions which are implemented, the extent of job rotation, and which personnel take responsibility for quality inspection, statistical process control and the programming of flexible technology. A scale has been developed which has a maximum score of 100 for a work system which is totally multiskilled and zero for one which is entirely specialised. Three groups stood out as being at the upper end of the scale :Japanese assembly plants in both Japan and North America and assembly plants in Korea. Within the middle group were Australia, Northern Europe, Britain, France, Spain and Italy. Within the lowest group were the US and Canada.

While the IMVP data should be used carefully, as they are broadly based and rely on reports by plant managers about their work practices, some useful indications are provided about national differences. Clearly, the Japanese and Korean plants are the most advanced in terms of multiskilling, according to the measures used in the IMVP study. By contrast, plants in the US and Canada remain the most specialised in their work systems, despite considerable debate about the need for work reform during the past five years. Most plants in Europe and Australia were in the intermediate position, with Australia having made considerable gains since the first survey was conducted in 1989.

Comparative data for productivity were obtained, in terms of 'hours per vehicle', for various regional groupings. A comparison was made for the two survey periods of 1989 and 1993. The Japanese assembly plants in Japan and North America are clearly superior to the rest of the groups. However, the assembly plants in both Northern Europe and the newly industrialising economies of Asia (which include Korea, Taiwan and Malaysia) have shown the greatest degree of improvement over the four year period. Plants in the United States exhibited the least improvement between 1989 and 1993, and the gap between them and the other 'middle level' performers has narrowed. There was some improvement in the Australian plants, but they slipped to the bottom of the table as the

Asian plants sharply lifted their performance. While there are obviously many factors which influence the levels of plant productivity, it is not without significance that those assembly plants with the most multiskilled work systems also exhibited the lowest number of hours per vehicle (i.e. were the least efficient according to these measures).

While the Japanese automotive industry is well known for its emphasis on team work, many producers in other countries also have extensive experience in this regard. However, caution is needed when seeking to compare team or group work in Sweden or Germany, for example, with that of Japan. Furthermore, while there appears to have been a relatively easy transition from specialised to multiskilled forms of work organisation in some countries, for others it has represented a fundamental change which has been adopted slowly and has met with strong resistance from groups such as middle managers and supervisors.

Those countries with the strongest tradition of job control by unions, such as the US, Britain, Canada and Australia, have experienced the greatest pressures to reform their work organisation arrangements. However, it is within these countries we see some of the most profound departures from traditional work practices. This is particularly the case where a new 'greenfield' plant or worksite is established or when major technological changes are introduced. In some situations, management has involved the unions and the employees in decisions about the introduction of workplace change, while in others a unilateral approach has been taken. In some Canadian plants there has been strong resistance to management initiatives in the area of work redesign by the Canadian Auto Workers union (CAW) on the basis that these were part of an anti-union strategy (Huxley et al., 1995). Research indicates that the greatest commitment to change tends to occur where employees and their unions (when applicable) are involved at appropriate points in the decision-making process.

In the auto industry, where there is strong influence from international competition (especially from the Japanese), new forms of work organisation have been reasonably common. In settings where new union-management partnerships have been created, such as the Saturn Corporation in the US, there has also been considerable work reform. However, in the non Japanese-owned plants in North America, innovation in work organisation practices is only partially diffused and often remains fragile. This is the case in Britain and Australia, although recent years have witnessed significant reforms in Australia with strong union and government support. Similarly, in Brazil, there has been a breakthrough in union-management relations at Mercedes Benz with an agreement on the introduction of team work and group technology.

There has been considerable experimentation with new forms of work organisation in assembly plants within Northern Europe, particularly in Sweden and Germany. While there are considerable variations in approaches between different automobile producers in these countries, the union movement has been sufficiently strong (particularly the metal workers) to influence the direction and pace of change. The system of co-determination in Germany has provided a channel for participation by employees through works councils. In Sweden there has been a long tradition of experimentation with group work and

participative approaches to work design (see Berggren, 1992, Brulin and Nilsson, 1995). This has important implications for the issue of governance (as shown later in this paper).

Despite the fact that there has been strong influence of Taylorist-Fordist systems of production in Northern Europe, especially in the German auto industry, increased emphasis on flexible approaches to manufacturing, has facilitated a trend towards more decentralised forms of organisation. Although the Germans and the Swedes are direct competitors in the international market place, they have learned from each other and have developed systems of work organisation which rely on a highly skilled workforce being involved in decision making at the plant level. The forms of group work which have been developed in Northern European auto plants appear to allow for greater employee influence and autonomy than those which are found in Japanese plants

In France and Italy, mass production using Taylorist-Fordist principles arrived later than in some other countries, but then spread quite rapidly. In France, where union density is low, the state took a leading role in fostering experiments with worker participation from the late 1960s onwards, culminating in the Auroux laws of 1982, which promote the expression of employee views. However, the process of work reform in the French automotive industry has been haphazard, at best (see Goetschy and Jobert, 1993). In Italy, the unions were very active in the 1980s promoting group-based work organisation, but the employers preferred weaker forms of employee involvement such as quality circles. As shown in the case of Fiat, however, there appear to be a number of new initiatives being taken, especially in greenfield sites such as Melfi which emphasize the importance of work organisation and teams (see Camuffo and Volpato, 1995).

The Japanese automobile manufacturers have implemented a wide range of strategies in recent decades to ensure that the organisation of work in their assembly plants remained flexible and adaptable. Some researchers have questioned the degree of autonomy available to work groups in Japanese assembly plants to make decisions (e.g. Dohse et al, 1986; Jurgens et al, 1993). However, the Japanese producers have introduced continuous improvements in productivity and quality, given extensive training to supervisors who play a key role in workplace change and used extensive job rotation and workgroup activities to enhance the skills of the workforce. Aspects of the paternalistic employment system which has operated in Japanese enterprises for many decades appears to be in a process of change. Yet the Japanese transplants in the United States and Britain have successfully introduced forms of management and work organisation which have yielded much higher productivity rates and quality than the local manufacturers. Indeed, some of the locally-owned firms in North America are now successfully emulating Japanese management practices and work organisation.

Skill Formation and Development

During recent years, greater emphasis has been given to training and skill formation of employees in the auto industry within all of the countries in this study. Furthermore, wage systems are increasingly linked to the attainment of skills as well as to productivity. Not surprisingly, the institutions and practices for skill formation have come under intensive debate. Some countries, such as France and Australia, have implemented national training taxes. Their objectives were to increase the amount of training and to reduce the cross-firm variation in private sector investment. However, Australia abandoned their compulsory training levy on companies after only a few years, following sustained opposition from employers and doubts whether the policy had actually achieved increased aggregate investment in training.

Approaches to skill formation within the automobile industry appear to be strongly influenced by national traditions. In Germany, for example, vocational training has long been a significant feature of the educational system and has provided a steady supply of skilled workers. Germany has a more regulated system than many other countries and greater union involvement in decision-making about skills development. Works councils play an important role in training issues at the enterprise and plant levels. However, there has been criticism of the ability of the system to meet the changing needs of industry. Hence, in 1987, training regulations in the German metal industry were reformed in order to foster a broader and more flexible system. Skill formation has played an important role in facilitating the introduction of technological change, as well as new forms of production.

In Japan, which is also regarded as a leading nation in skills development, there is less regulation by government and a lower level of union involvement than in Germany and some other European countries. However, employers in the automotive industry has emphasized the importance of continuous on-the-job training as a key element in developing and maintaining Japan's competitive edge. Since the oil crisis of the early 1970s, Japanese industry has sought to raise quality while containing costs by using more flexible systems of production and procurement, based on microelectronics and JIT delivery techniques. Although state-run vocational education has not been developed as much in Japan as in Germany, companies have consistently increased the amount and levels of training within the enterprise. Many maintenance and other technical skills which are the province of skilled tradespersons in other countries have been 'built into' the jobs of production workers in the Japanese auto industry (Hayashi, 1994).

All countries in our study appear to be attempting to raise the levels of skills among their workforce and to improve the methods of delivery. All are searching for ways to encourage, if not require, more firms to increase their commitments to training and to allocate more investment to upgrading the competence of their workforce. In Italy, for example, there has been a long-term decline in vocational training and fewer apprenticeships, compared with some other European countries. However, a national agreement was signed between unions and employers in 1989 on vocational training, involving the establishment of joint committees. In recent years there has been an

expansion of formal systems for the accreditation of skills attainment. In countries such as the US and Canada, however, which have more highly decentralised systems of industrial relations, training investment is very uneven and lower overall. Yet there is discussion of how to develop stronger joint public-private initiatives to overcome inherent market failure problems that inhibit individual firms from investing more in skills development.

In the Australian automobile industry, since the introduction of the Vehicle Industry Certificate (VIC), all new employees have been required to undertake formal training on the job to acquire necessary competencies, Wage increases are increasingly based on skills acquired and demonstrated levels of competencies. The VIC was introduced with the support of both employers and unions to formalise the training process and to recognise skills acquired. Progression by individuals within the industry will ultimately depend on having passed all stages of the VIC course. Although financial support is also provided by the government for the development of training within the automotive industry, the new emphasis on competency-based wage systems was the result of negotiations between employers and unions over the restructuring of awards. While the new system is generally regarded as successful, there are considerable variations between firms in terms of the speed and extent with which they have introduced the VIC (see Lansbury and Bamber, 1995)

Data from the IMVP for 1993 indicates wide variation between countries within the auto industry in terms of the number of training hours provided for assembly workers. The aggregate number of training hours provided for newly hired production workers (during their first six months of employment) was highest for Australia, followed by Japan. As noted above, the high figure for Australia may be explained in terms of the introduction of the VIC which has required all new employees to be provided with comprehensive training. However, the number of hours training provided for experienced production workers was greatest, by a considerable degree, in the North American plants of Japanese-owned assembly plants. This may be due to the fact that when the Japanese firms either took over existing plants or built new ones in North America they found that there was a considerable skills deficit among the workforce which needed to be rectified. This would certainly be borne out by the statistics for the non Japanese-owned plants in the US and Canada, which showed the lowest number of training hours provided for newly hired workers.

According to indices of training, which takes account of hours provided for all employees (including production workers, supervisors and engineers) the North American plants owned by Japanese firms provided the most skills development, followed by the European countries (France, Italy and Spain) and then Australia. These countries achieved fairly similar scores, although the Japanese firms again showed a considerably higher level of training hours being devoted to experienced workers in their North American plants. Once again, the 'laggards' in terms of training hours were the non Japanese-owned assembly plants in the US and Canada, which were at the bottom of the comparative table for both new and experienced employees.

Compensation/Remuneration

The world-wide slow-down in economic growth and productivity in the past decade held back real wage growth in most advanced industrialised countries. Real wages were most stagnant in the US and grew only modestly in Japan, Germany and several other European countries. Inequality in income grew generally within most of these countries, again to the greatest extent in the US and to only a modest amount in Germany and Japan. Those economies with more centralised wage setting structures and traditions tended to hold down expansion of wage differentials. However, in Sweden, the long-established solidaristic wage policy gave way as employers pressed hard to decentralise bargaining structures (Hammarstrom and Mahon, 1995).

As well as wage restraint, a great variety of forms of payment emerged during the past decade. In some countries there was a growth in contingent pay, which is compensation that is contingent on some measure of performance which can be assessed at the level of the individual, work group, plant or firm. Examples of contingent pay include profit sharing, employee stock ownership plans and bonuses. In most countries, as noted previously, there was also a modest trend towards compensation based on skills or competencies attained rather than for specific tasks performed or on the basis of seniority. An increasing proportion of firms also moved their employees from wages to salaries as part of the process of reducing status differentials between blue-collar workers and salaried staffs

Although Japan tends to be seen as highly developed seniority wage systems, they apply to only a relatively small proportion of the workforce who are located in the larger enterprises. During recent years, ability-based wage systems have been more widely introduced. For many employees, however, a significant proportion of their annual income is related to the profit performance of their employing organisation. In Australia, despite a tradition of centralised wage determination, there has been a movement towards enterprise-based bargaining which is designed to take greater account of the economic performance of the firm in wage negotiations. There has also been a trend towards employment contracts with complex compensation packages negotiated for a fixed period of years. In theory, the renewal of such contracts depends on a number of factors, including the achievement of agreed performance targets. While this approach was initially confined mainly to professional and managerial staffs, it is increasingly applied to the unionised workforce.

The IMVP data indicates, somewhat surprisingly, that contingent forms of compensation were more extensive within the auto industry in Japan, Australia and Europe than in the US and Canada. This may be due to employers and unions outside of North America demonstrating a greater willingness to negotiate over issues of wage flexibility and apply a wider diversity of methods of compensation in return for wage increases. By contrast, North American employers have focused more narrowly on simply reducing the level of real wages. An analysis of trends over a longer time period is needed, however, before firm conclusions can be drawn.

Job Security and Staffing Arrangements

High labour turnover has long been a characteristic of the auto industry and was one of the factors which motivated European manufacturers such as Volvo to embark on programs of job redesign and work reform during the 1970s. It was hoped that by making the jobs more interesting, the auto industry might become a more sought-after source of employment. In some other countries, such as the United States, higher hourly rates of pay and employment benefits were used in an attempt to attract and retain labour. In many European countries, guest workers were used to fill the vacancies in the factories as local labour sought more desirable jobs. Even in Japan, the auto industry was known as the employment of last resort and was regarded as 'dirty and dangerous'. The industry also tended to follow economic cycles of boom and bust. Hence, workers were used to being either hired or fired in large numbers as the automobile sales waxed and waned.

During the past decade, however, jobs in the auto industry have become more precarious as the result of economic recessions and increased global competition. Until recently, Japanese auto manufacturers were an exceptional case due to their dominance of many segments of the market, as well as the exceptionally strong Japanese economy. However, the concept of life-long employment (which only ever applied to a relatively small proportion of the workforce in large organisations) is in slow decline even within leading firms such as Nissan, which began to lay off workers during the recession of the early 1990s. Japanese auto unions have even sought to prevent companies opening plants in other countries because they feared that this could threaten jobs in Japan, although they have not been successful in the long-term. It is also often difficult to distinguish between what is voluntary severance and outright dismissal, due to the practice of older workers being 'patted on the shoulder' and thereby being asked to leave a company. Furthermore, the Japanese have long used subcontractors and temporary workers as a means of providing large scale employers with a relatively high degree of labour flexibility.

Most continental European countries have laws which require employers to follow certain procedures when redundancies occur, in order to afford some protection to employees and give them a period of warning before they lose their jobs. However, during harsh economic times it is difficult to enforce some of these provisions. In France, for example, the whole system of social protection is under severe strain. Firms are now permitted to depart from general provisions of the law, providing that the parties give their consent. Employers in the auto industry and elsewhere are increasingly using temporary workers and short-term contracts to reduce their liabilities. In Germany, where the auto industry remains vibrant, there is still high employment security for the core labour force, but the government has permitted greater use of temporary and part-time workers who are not covered by the same level of protection. However, in Sweden, where there is the strongest degree of legal protection against job loss for both permanent and temporary workers, the general economic recession hit the auto industry particularly badly. During the early 1990s, Volvo closed a number of plants and Saab sold half of its automobile business to General Motors. Although an economic recovery began in Sweden

by the mid 1990s, and the health of the auto industry has improved, companies have been reluctant to rehire auto workers at previous levels of employment.

The US is at one extreme of the debate about job security since employers have no obligation, contractual or otherwise, to provide security of employment. This led unions, such as the United Auto Workers (UAW), during periods when they were stronger, to seek job security for its members through work rules governing job classifications and seniority. While many older unionised workers have been able to gain a degree of job security through agreements on reverse seniority lay-offs, others have not. As unionisation has declined and union bargaining power has been weakened, many employers have sought to regain control over these areas. Indeed, by increasing the proportion of part-time, temporary and contract workers, employers have gained greater flexibility over the way in which the workforce is deployed, as they are able to vary the size of the workforce to meet fluctuations in demand. There is a growing discrepancy between the job security and conditions of 'core' employees who have long-term or even permanent contracts of employment and 'peripheral' workers who are casual, part-time or on fixed contracts.

A number of newer greenfield auto assembly plants have been built in both the US and Britain, some of which are owned by Japanese companies, and are deliberately non-union so as to ensure that management has greater discretion over issues such as conditions of employment and tenure. For some years now employment has become less secure in Britain as economic conditions have deteriorated and union strength has declined. Conservative governments in Britain have also reduced the obligations of employers to provide redundancy payments.

In Australia, following an unprecedented rise of unemployment to more than 10 per cent in 1994, the federal government sought to strengthen the laws governing job security. However, the automotive industry has undergone considerable rationalisation in the past decade. Of the five companies assembling vehicles in 1985, there are now only three manufacturing groups, and total employment in the assembly plants in the past decade has declined by more than one third. Most of the firms have shed labour either through natural attrition or voluntary redundancy and the unions have focused mainly on seeking to secure the most generous severance payments for their members.

The gradual reduction of tariff protection for the Australian automotive industry, which will reach 15 per cent by the year 2000, is designed to make the industry more efficient and export oriented. However, it has resulted in the proportion of imported vehicles growing faster than those manufactured locally, thereby further reducing prospects for future employment in the industry. The main hope for the future lies in the possibility of an increase in exports based on the decline in the value of the Australian dollar against the Yen and the rising quality of local production. Both Toyota, which has recently opened a new assembly plant, and Mitsubishi which has expanded production, are increasing their exports from Australia to the Asian market.

Implications for Enterprise Governance in the Auto Industry

There is wide variation between the auto industry in different countries regarding the degree to which employees are represented in corporate governance through institutions such as works councils, and the extent to which workers are consulted informally by management. Those countries which have long had strong formal institutional arrangements, such as Germany, have strengthened them in marginal ways in recent years. European Works Councils are also being introduced within the European Community (see Dankbaar, 1994).

In Germany the evidence suggests that the role of works councils has increased relative to that of the unions, as 'qualitative' issues such as the introduction of new technologies, training and work organisation have gained in importance. However, the end of the 'economic miracle' in Germany has imposed considerable strains on the existing system and conflict has increased. Employers have sought to decentralise decisions, which were formerly negotiated with the union, to the plant-level where union representation is often at its weakest. Furthermore, a number of firms within and outside the auto industry are promoting direct forms of employee involvement which do not require participation of the works council. Although unions remain strong within the auto industry, there has been a gradual decline in unionisation. Indeed, the structure of the labour market continues to evolve in a direction which favours white collar and service related occupations, which are less unionised than the blue collar and manufacturing-based jobs.

Certain comparisons which may be drawn between the German and Swedish situations (Auer and Reigler, 1990). Although Sweden does not have highly institutionalised works councils, as in Germany, the workplace reforms of the 1970s strengthened the role of union representatives in decision-making within the enterprise. While unions directly challenged management prerogatives and championed radical plans for wage earner funds, economic difficulties in the 1980s and 90s saw the balance of power swing back to the employers. Employers sought to end the centralised wage agreements between the SAF and LO, and some withdrew from cooperative arrangements with the trade unions. Yet, as a result of continued union influence at the enterprise level, direct forms of employee participation in decision-making persist (see Brulin and Nilsson, 1995). Since the re-election of a Social Democratic government, there are signs of a renewed interest in consultative approaches at the enterprise level, although not of the more formalised works council style found in Germany.

Employee involvement programs have been prevalent in the US for a number of years, under various terminologies, but tend to be found more often in non union than non-unionised workplaces. However, there are some outstanding examples of union-management cooperation in the auto industry, such as the Saturn and NUMMI assembly plants (Adler, 1993; Rubenstein et al, 1994). However, these are rather controversial and isolated cases at the moment. Whether they become pattern setters in the auto industry remains to be seen.

Canada has a similar pattern of firm level governance to the US, in that management has the right to make business decisions based on corporate law, regarding hiring and firing employees, investment, plant closures and technological change. Yet the Canadian Auto Workers' Union has gained significant influence through occupational health and safety laws which require joint labour-management committees to administer laws at the workplace level, but has been resistant to forms of employee participation proposed by management (Robinson et al., 1993). In the Canadian auto industry, as in the US, most strategic decisions remain the prerogative of management (Kumar and Holmes, 1995).

In Japan, the presence of formal labour-management consultative committees tends to be highly correlated with union presence within a firm. Yet the Japanese approach to consultation tends to be highly idiosyncratic and difficult to compare with Western systems. The utilisation of consultative committees also varies considerably between different firms and industries, as do their effectiveness (Nitta, 1996). Nevertheless, a number of activities which are present in most large Japanese enterprises, such as quality circles, have been used by automobile manufacturers in other countries.

Australia provides an interesting case as the result of the Accord between the federal government and the union movement, which was in operation from 1983-1996 under successive Labor governments. This gave the Australian Council of Trade Unions (ACTU) unprecedented influence in strategic economic and political decisions. The union movement cooperated with the government and employers in the introduction of greater flexibility in the wage determination system through enterprise bargaining. However, unions remained weakly represented at the workplace level, even in the auto industry where there is a very high level of unionisation. This can be ascribed, in part, to many years of reliance on the centralised arbitration tribunals. Consequently, there has been only a moderate role for unions and employees in corporate governance, even though there has been a steady growth of interest in various forms of consultation (see Davis and Lansbury, 1996).

Finally, the extent to which human resource and/or industrial relations professionals play a key role in strategic decision-making within automotive firms in various countries is difficult to ascertain. While there has been a good deal of debate and some experimentation with new ways to engage human resource issues in a firms governance processes, relatively little seems to have changed during the past decade. It would appear, however, that the employment relations function has the strongest influence where participation by employees is institutionalised, as under systems of codetermination based on legislation.

From the IMVP study, there are statistics which compare some aspects of employee influence at the plant level. One must be cautious in drawing conclusions from these data. However, the results confirm the view that a very high proportion of the employees in Japanese auto plants are likely to be involved in some form of group which undertakes problem-solving or quality control. By contrast a very low percentage of U.S. workers are likely to a member of such a group. Responses to the question concerning how much influence work teams are likely to have over decision-making are more difficult to

interpret. The estimated level of influence is quite low overall and does not differ markedly between different countries. Influence appears to be greater in regard to work organisation issues than broader human resource matters. Although the Japanese average the highest score overall, there is not a large margin between Japan and other countries on this dimension. An important point to be made from these observations is the difficulty of measuring employee involvement in decision-making and the relatively low level of influence which employees generally perceive that they have in this area.

Conclusions

This paper has outlined the main dimensions of the auto project and has introduced the framework which has guided the case study research conducted in a wide range of countries. It has sketched some of the changes which are occurring in regard to employee relations practices within the auto industry around the world. MacDuffie (1995) provide a more detailed analysis of patterns of performance and contributions made by employment relations practices within the auto industry in various countries. The data is presented at the level of either a particular country or region rather than by company (in keeping with the design of the IMVP study). Our forthcoming book deals with the experience of individual countries (see Kochan et al, 1997). In some cases, data is drawn from one or two plants, while in others a more comprehensive sample is used. A principal objective of the project has been to analyse the diffusion and adaptation of lean production and associated employment patterns in different national contexts, and thereby identify new paradigms that may be emerging.

There are at least two ways of interpreting the changes we observe in practices within the auto industry in different countries. The first interpretation sees change as being influenced primarily by the strategies that firms, unions and government policy makers adopt in response to changes in markets and technologies. This school of thought sees the enterprise as an increasingly important level of activity and analysis in employee relations. Hence, it is fundamental to any study of this kind to collect data on individual plants from particular firms and see how they respond to changes in demands for their product. The statistical data from the IMVP study provides a vital supplement to our qualitative research on particular plants in each country. The combination of selected cases from different countries and the IMVP data enables a very detailed picture to be drawn of differences and similarities in the way that various automobile manufacturers have adapted to changes in the global marketplace during the past decade, and how this is reflected in their employment relations strategies.

The second view is that while enterprise-level strategies and actions are important, they can best be understood as being structured and influenced by the national and/or industry-level institutional arrangements that exist among the key actors in society (i.e. government, business and labor). Hence, considerable attention is paid in our study to the national context in which their case studies of the automotive industry are located. Thus, it is possible to examine the political and economic circumstances in Korea which gave rise to differences between their auto industry and that of Japan. Even industries which

look superficially alike, such as the Canadian and US, assembly operations of General Motors have developed distinct employment relations policies and practices as a result of the different national contexts.

Both of the above perspectives or explanations are necessary to understand the processes which shape patterns of transformation and the adaptation of employment practices within different countries. Hence, changes in markets and technologies will be mediated in their impacts on individual firms and workers through national institutions and policies. Yet even where national institutions have been powerful historically, in economies such as Sweden and Germany, the range of micro-level variation in response to global changes (such as in the international market for automobiles) appears to be increasing. This micro-variation can best be explained by examining the range of choices and strategic responses which the parties take within different countries. Indeed, these choices are critical determinants of the extent to which individual firms (such as Toyota or Volvo) can gain a competitive advantage through their investment in human resources (such as: through advanced levels of skill formation or new forms of work organisation). The choices which firms make in this area not only affect the conditions under which their employees work but may also influence the standards of living in their society. Thus we need to comprehend both the role of national institutions and local variations as well as strategic choices made by the parties at the workplace or micro-level within the enterprise

NOTES

1. The term employment relations is used to encompass aspects which are usually included in both industrial relations and human resource management.

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