

Symposium on Employment Relations Reform in the World Automobile Industry: Introduction

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The international automobile industry provides a useful basis for examining the degree and nature of change in employment relations under a variety of external conditions. By studying auto firms in various economies, it can be observed 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. These broader institutional arrangements in industrial relations may have 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 and automotive companies, some general patterns have emerged (see Kochan et al, 1997). 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.

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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 better able to adapt through incremental adjustments. These include mature industrialised market economies, as well as some of the newly industrialising economies. For example, decentralisation has been particularly beneficial in the United States by providing the opportunity for wide-ranging experimentation with new work methods. By contrast, economies which have more centralised systems have had greater difficulties in adjustment.

Another feature of the global auto industry, as pressures for greater productivity and quality intensify, is a greater 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 industrialised market economies, 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 in the United States and IG Metall in Germany. 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 (for example, those owned by the Japanese in North America), have greatly weakened the union movement within countries where they were previously the strongest. However, there are some exceptions 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 industrialising economies such as the Republic of Korea, meanwhile, have experienced increases in unionisation and union mili-

tance. The issue of employee representation and involvement, nevertheless, remains a concern for the auto industry in all parts of the world.

Lean Production and Employment Relations

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; Sengenberger, 1993). Indeed, the success of the Japanese and more specifically the Toyota production system, was elevated to the level of folklore when the authors of the MIT International Motor Vehicle Research Program (IMVP) book, *The Machine That Changed the World*, (Womack, Jones and Roos, 1990) coined and popularised the term 'lean production'.

In broad terms, lean production is a set of manufacturing principles directed towards improving quality, decreasing cycle time and reducing cost. It is derived from systems developed by Taiichi Ohno, Shigeo Shingo and their colleagues at the Toyota Motor Corporation during the 1950s and refined over subsequent decades (see Cusumano, 1985). By using techniques such as just-in-time inventory, statistical process controls and standardised methods for each job, Toyota was able to adapt more readily to diverse and rapidly changing markets. The lean paradigm was contrasted with mass production which dominated manufacturing in the United States since Henry Ford introduced the assembly line in the early 1900s. Mass production emphasises high volume and standardised goods, employed highly specialised and dedicated machines which reinforced narrow job definitions, and developed clear demarcations between those who designed and supervised work and those who performed it. This system required large buffer stocks to keep machines running and the separation of quality control and checking from production workers.

Despite the well-established link which exists between production techniques and employment practices, Womack et al devoted little attention to the importance of industrial relations and human resource management for the effective implementation of lean production. Not surprisingly, critics of lean production viewed it essentially as a new version of the 'speed up' practised under mass production, which simply used more sophisticated methods of controlling the workforce and maximising managerial control and profits (see Williams and Haslam, 1992). However, in seeking to explain the success of Japanese transplants in the United States, Shimada and MacDuffie (1986) stressed the human resources and organisational

policies associated with the new production techniques, including: high levels of worker participation in problem solving or 'kaizen' processes, the use of multi-skilled workers organised into teams and the importance of highly skilled, motivated and adaptable workers (see also MacDuffie, 1995). A key task for research is to examine the facts to see whether the hyper-Taylorism predicted by the critics of lean production or the more positive outcomes predicted by lean production supporters are actually appearing in various countries.

The seminar on which this symposium is based was hosted by the Korea Labor Institute in Seoul, March 1997, to examine Industrial Relations and Human Resource Management (HRM) innovations in the world auto industry. Three papers have been selected and revised for this symposium on the basis that they provide useful insights into the way in which aspects of lean production have been adopted within three major auto producing countries: the United States, Germany and the Republic of Korea and the interaction of new production systems with employment practices. Korea represents a relatively new entrant into the world auto industry which is still developing a mass production system. One of the questions which the authors seek to answer is why Korean automakers, which have been heavily influenced by Japanese experience (including joint ventures), have not adopted lean production more readily. The German case traces how the industry has used a variety of approaches to the organisation of production, not all of which follow lean principles, in order to recover from the crisis of 1992-93. Finally, the experience of the United States is instructive in showing how the industry is attempting to regain its former prominence by means of increased decentralisation and diversity. Although the lean production paradigm has been adopted in many U.S. plants, especially those owned by Japanese producers, wide variation in employment relations has emerged in part as a product of growth in the non-union sector. Variation is also being spurred in the United States (and elsewhere) by the fact that management has yet to be convinced that there is one superior model.

Without seeking to summarise all aspects of the three comprehensive papers in this symposium, it may be valuable to focus on aspects of change common to each country, namely: the search for more innovative approaches to work organisation and reform of employment relations.

Innovative Forms of Work Organisation in the Auto Industry

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. Located at the upper end of the scale were Japanese assembly plants in both Japan and North America and assembly plants in Korea. Within the middle group were Australia, Germany, Britain, France, Spain and Italy. While the lowest group included the United States 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. The Japanese plants (both in Japan and North America) were the most advanced in terms of multi-skilling, according to the measures used in the IMVP study. By contrast, plants in the United States 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 were in the intermediate position, with Australia having made considerable gains since the first survey was documented in 1989.

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 Germany, or the United Kingdom, for example, with that of Japan or Korea. 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 United States, 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.

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. For example, where union-management partnerships have been created, such as the Saturn Corporation in the United States, there has been considerable reform. Japanese-owned transplants in the United States and United Kingdom also exhibit innovative work practices and active employee involvement, although little unionisation. However, in the non Japanese-owned plants in North America and United Kingdom, innovation in work organisation practices is only partially diffused and often remains fragile. The latter is also the case in many auto plants in Australia, although recent years have witnessed significant reforms in Australia with union and government support. 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 (Rinehart, Huxley and Robertson 1997), and similar resistance has surfaced in many other countries especially when work reform initiatives are unilaterally led by management.

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 work 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.

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.

Studies of the Korean auto industry reveal that it remains strongly Tayloristic with deep antagonism between employers and their workforces (Amsden and Kang, 1995). Despite the close association between Korean and Japanese auto companies, and a history of joint ventures, Korean plants have adopted relatively few lean production principles. This may be explained, in part, by the fact that the Korean industry has been building up to mass production. The prevailing management ethos in the Korean auto industry has also been predominantly autocratic, reflecting the political environment of strong authoritarian governments until recent years. Furthermore, until the 1980s, the Korean auto industry was protected from international competition and lacked incentives to reform employment relations as part of a competitive strategy (Woo, 1997).

Approaches to the Reform of Employment Relations in the Auto Industry

The U.S. auto industry appears to have adopted the most diverse and decentralised approaches to reform of employment relations. As Katz points out, in this symposium, the auto industry has historically been a leader in collective bargaining in the United States, having pioneered the introduction of multi-year contracts with cost of living adjustment escalators, supplementary unemployment benefits, and quality of work life (QWL) programs. The United Automotive Workers (UAW) has been a large and rather centralised union which exercised its considerable bargaining power

to secure steady gains for workers until the tumultuous 1980s. The union was assisted by three decades of prosperity in the industry, from 1946 to 1979, even though there were periodic cyclical ups and downs. From 1980 until the early 1990s there were declines in sales and profitability induced by an often lack lustre American economy as well as increased competition, especially from Japanese producers within and outside the United States. In the 1990s the American auto producers experienced strong profits and Ford and Chrysler also expanded their market shares. The recovery of the U.S. auto industry was assisted by gains produced through the reform of work methods and improvements in the tenor of labor-management relations.

Diversity across companies in the United States, notes Katz, has been stimulated by the expansion of Japanese ownership and influence in the United States, which has given impetus to the diffusion of lean production. There has also been the extension of non-union employment in both U.S.-owned firms as well as in Japanese and German auto transplants, which has been a problem for the UAW. The majority of these foreign-owned plants are non-unionised. The Japanese transplants use teams more extensively, although worker autonomy is limited because the teams are oriented toward problem solving. Moreover, supervisors in these plants tend to exert a strong role and there are not the formal grievance procedures to settle worker complaints or worker-supervisor disputes which are commonly found in unionised American-owned plants.

Within unionised plants in both the assembly and parts sectors, there is also strong movement towards variation in employment relations through the spread of more contingent compensation as well as greater diversification in work rules and work practices. However Katz argues that by the mid 1990s both managers and unionists were uncertain and confused as to whether and how many of these workplace reforms had improved economic performance. While management tends to feel that these initiatives have led to lower costs and improved product quality many workers see the main outcomes in terms of a loss of job security and real wage declines. Hence, as the economy has improved and demand for auto production has risen, the UAW has been seeking to restore lost wages and conditions for their members. However, the auto industry is unlikely to return to the more centralised and uniform patterns of the past as persistent international competition will continue to spur diverse responses as will the parties' confusion concerning what constitutes best practice.

The German auto industry experienced a major crisis in 1992-93 when production slumped and the economy was affected by reunification between East and West Germany. By 1996, however, the industry was

recovering its global market share and increasing its exports. As in the United States, the lean production paradigm was the subject of widespread debate. As Schumann explains in his paper, in this symposium, the key reforms which were started in the German industry included: upgrading of value-added tasks, streamlining and trimming waste, and introducing product-oriented process forms or organisation. However, there have emerged two fundamentally different approaches to team work which Schumann categorises as 'structurally conservative group work' versus 'structurally innovative group work'. The former is a modernised version of Taylorism in which job descriptions remain narrow and there is little autonomy for the worker. By contrast, the latter builds on the German tradition of craft work, has a strong focus on qualified, self-directed work and a consensus orientation. The union, IG Metall, has strongly advocated the latter approach which has been adopted by Mercedes Benz in some of its plants. By contrast, Opel's Eisenach assembly plant in East Germany has utilised the former approach, based on the NUMMI plant in California.

Schumann notes that the works councils encountered major difficulties during the economic crisis of 1992-93 when there were employee lay-offs and threatened plant closures. IG Metall was also forced to engage in concession bargaining. In 1993 an 'Agreement to Ensure Location and Employment' was negotiated between Volkswagen and IG Metall. The agreement offered all employees job security for two years. Since then, the agreement has been renewed on the condition that flexible working hours will be introduced and the working week reduced from 35 to 28.7 hours. Employees have also had to accept a 16 percent wage cut. While works councils have been able to ensure the maintenance of training and continuity of employment for apprentices, in some plants, it has become clear that neither the unions nor works councils have been able to prevent deterioration of working conditions.

Finally, it is noted that the 'high quality, high qualification, high wage model' which has been followed by the German auto industry for many years, is under challenge from a 'low pay, low qualification, competitive-pricing model', common in parts of the U.S. auto industry. Global competition has eroded the foundations of the German model and institutional framework despite the successes which have been achieved in some parts of the auto industry with 'structurally innovative groupwork'. Hence, it would appear that a more diverse range of approaches are likely to develop within the German auto industry in the future.

The Korean auto industry is the youngest but fastest growing of the three countries in this symposium. Although it only began to emerge as a significant domestic industry in the mid 1960s, it is anticipated that at

current growth levels the Korean manufacturers will be among the top five auto producing economies in the world by the year 2000. The rapid expansion of the industry has not been without setbacks, however, as the Korean economy faltered during the 1990s. Two factors which have contributed to slower than expected growth in both the auto industry and the Korean economy as a whole have been unstable industrial relations, exemplified by high levels of industrial disputation, and strong wage growth, which has resulted from vigorous union campaigns (Rodgers, 1996).

In their paper, in this symposium, Park and Lee draw some interesting contrasts between Korean and Japanese employment relations strategies in the auto industry. In Japanese firms, they argue, core employment relations practices such as compensation, skill formation and staffing are closely interrelated. Strong emphasis is given to skills development and the measurement of performance as one of their industrial relations strategies. By contrast, Korean firms have not invested as strongly in skills training for their workers, but have rather emphasised moral education. Korean workers tend to question the fairness of performance evaluation, do not see much to gain from skills development, and have short-term perspectives concerning their careers. Hence, Korean auto workers change their jobs more frequently than their Japanese counterparts, in order to gain higher wages and promotion. Korean workers, however, have security of tenure and employers complain that there is little flexibility in managing their employees. Collective dismissals are unusual in Korea. The government introduced labour law reforms in 1997 which are designed to make it easier to dismiss redundant workers, but the enforcement of the new laws have been delayed for two years. Park et al argue that Korean auto workers have few incentives to perform the more demanding tasks which accompany lean production systems.

Yet, there is much flux in the Korean auto industry, with some of the change propelled by changes in public policies. For example, after government-imposed legal changes were challenged by union protests, modifications were made to Korea's labor laws in 1997 which, on the whole, added more flexibility to the labor market while providing some enhanced legitimacy to independent trade unions.

The role of the state in determining both the future of the auto industry and the nature of employment relations is much greater in Korea than either Germany or the United States. The auto industry in Korea was selected by government and the business elites as one of the target industries in the 1970s and massive capital investment was undertaken to ensure that the auto industry developed rapidly. The industry became a major focus of the Korean chaebols, which are horizontally diversified conglomerates control-

led by their founding families. Hyundai and Daewoo Motors are both owned by Chaebols, although Kia Motors (the second largest auto manufacturer in Korea) is a management-controlled company. Another chaebol, Samsung Motors, will begin production of passenger vehicles from 1998 (Woo, 1994). Production across the industry as a whole expanded at an average of 13 to 17 percent each year throughout the 1990s, despite some setbacks due to variable quality in exported products (especially in the United States market).

Although industrial relations have been turbulent throughout the Korean auto industry, there are some significant differences between the strategies pursued by companies. During the 1980s, both Daewoo Motors and Kia Motors had pro-company unions and were able to maintain stable industrial relations. In the early 1990s, however, both companies faced more militant union leaders who made strong demands for 'union democratisation'. However, the two companies took sharply different paths in the development of their labour-management relations during the 1990s. Daewoo management, faced with a crisis in the early 1990s, took a hardline stance against militant union leaders and succeeded in stabilising labour relations at both the corporate and the workplace levels. By contrast, Kia management were indecisive towards union demands and were adversely affected by turbulent labour relations between 1994-97. Hyundai Motors, which was unionised in 1987, faced severe conflicts with the union and experienced the heaviest losses among the major Korean auto producers between 1987-1993. Yet, the experience of labour-management conflict at Hyundai has led both management and union to seek a more stable relationship in the recent years.

Conclusion

All three papers in this symposium demonstrate the pervasive influence of the Japanese on the automobile industries of the United States, Germany and Korea, particularly in terms of production systems. Many companies in these countries use the Japanese producers (and Toyota in particular) as benchmarks against which to measure their performance. The concept of lean production has been widely adopted in principle although there is considerable diversity in its application. Furthermore, while all countries are seeking to introduce more innovative forms of work organisation and to reform aspects of their employment relations, no single approach or 'one best way' has emerged. Although the Japanese experience remains an important influence on producers in each of the countries in our symposium, they are choosing their own paths towards reform. Hence, in the United

States, there is a trend towards greater variation in employment relations based on a diversification of work practices and a more decentralised approach. While in Germany there remains a strong tradition of social partnership, based on co-determination and works councils, global competition has eroded aspects of the German model and its institutional framework. The Korean auto industry has expanded rapidly, but it continues to be unstable and conflictual. As Korean unions have grown in strength, they have rejected aspects of the Japanese approach. However, as new legal frameworks are negotiated in Korea, and pressure from global competition increases, a more stable and uniform industrial relations system may emerge. It is unlikely to be a replica of Japan, but certainly will be influenced by the experiences in other countries such as the United States and Germany. While employment relations reform is likely to take different directions in each country, there will be considerable cross-fertilisation as a result of global trends.

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