

LOOKING TO THE YEAR 2000:  
CHALLENGES FOR INDUSTRIAL RELATIONS AND HUMAN RESOURCE  
MANAGEMENT

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Looking to the Year 2000:  
Challenges for Industrial Relations and Human Resource Management

The pressures for change on the Canadian, U.S. and other advanced industrialized economies in recent years have posed fundamental challenges to many traditional industrial relations and human resource management policies and practices. Increased global competition, the shortening of product life cycles, the greater differentiation within product markets, the growing importance of product quality and innovation, the volatility in currency values and commodity prices, the availability of new information and manufacturing technologies, and the changing demographics of the labor force are all demanding changes in employment practices. These pressures translate into demands on industrial relations systems for (1) labor cost moderation, (2) improved productivity, (3) flexibility in the use of human resources, (4) a highly motivated and multi-skilled labor force, and (5) sustained innovation in labor management relations at the level of the enterprise.

The traditional industrial relations policies and practices in both Canada and the U.S. grew out of the very different set of economic and social needs of the 1930s and 1940s. The primary concerns of the collective bargaining and personnel management institutions that evolved out of the earlier environment were to (1) provide workers with the collective rights needed to improve their wages and working conditions, (2) establish bargaining and conflict resolution procedures needed to achieve labor peace and stability, (3) and to diffuse professional personnel management practices across organizations. These functions continue to be important. However, industrial relations systems are now under pressure to perform these traditional functions and meet these new expectations.

Given the changing nature of the economic and social pressures on

industrial relations systems, it is not surprising that the 1980s have been a period of considerable experimentation with new practices. Consider, for example the following description of events in the U.S.

The early 1980s witnessed a significant change in the U.S. system of collective bargaining and industrial relations. Front page news stories frequently cited labor concession in collective bargaining that departed from the pattern of improved wages, fringe benefits, and job security to which the American public in general and union members in particular had become accustomed. Highly regarded business periodicals dwelled on the advent of new forms of labor-management cooperation at the workplace-- so much so that some proposed that a "new industrial relations" had overtaken the U.S. economy. But at the same time the cumulative effects of more than twenty years of declining union membership made it apparent that the American labor movement has reached a crisis. (Kochan, Katz, McKersie, 1986; 3).

While experiencing similar pressures, the institutional responses of the industrial relations systems of Canada and the U.S. appear on the surface to be somewhat different. The impression is that the Canadian system has been more stable than its U.S. counterpart (Adams, 1988a). Yet few, if any, analysts believe that the pressures for change will dissipate in the future. This is giving rise to an interesting and important debate in Canada: Is the Canadian system destined to follow the U.S. pattern? Or, are Canadian industrial relations practices sufficiently responsive to current pressures and therefore likely to withstand calls for more fundamental changes? Or alternatively, will Canadian industrial relations adapt in different ways?

This paper will review the responses of industrial relations in the U.S. and Canada. This comparative analysis will then be used to explore the challenges the parties to Canadian industrial relations are likely to face in the future.

Two perspectives will guide the analysis to follow. The first is a perspective on the role that industrial relations and human resource practices will play in the future of advanced industrialized economies such as the U.S. and Canada. The second is a theoretical perspective about how to make projections into the future of industrial relations practice.

Advanced economies such as the U.S. and Canada now operate in an international environment where they must seek comparative advantage through development and utilization of their human resources. Failure to do so will result in a gradual reduction in the standard of living for most workers and an increased inequality in income and social welfare. Only by developing and fully utilizing both advanced technologies and human resources can our economies achieve the twin objectives of sustained improvements in productivity and real incomes. In turn achieving these twin objectives will require a continuation, diffusion, and institutionalization of many of the experiments and innovations introduced in selected employment relationships in the past decade. However, there is no guarantee that these innovations will diffuse in a natural way. Therefore, in what follows, emphasis will be given to an assessment of the innovations and a discussion of the factors that are likely to influence their diffusion to broader employment settings.

History teaches us that industrial relations researchers should be exceedingly careful about predicting the future course of events, given the dismal record of past projections. No labor scholar of the 1920s for example predicted the rapid rise of unions in the U.S. in the 1930s. Nor did anyone in the 1950s forecast the explosion of public unions in the 1960s or 1970s in either Canada or the U.S. These examples suggest that simple extrapolation of past trends fails to capture changes in practices that tend to occur during periods of significant environmental turbulence. Nor can we simply assume that Canadian and American industrial relations will follow similar developmental paths. This has been shown most clearly in the divergence between union density rates in the U.S. and Canada between 1950 and the present (Meltz, 1984).

The theoretical lesson to be drawn from this and other evidence is that

looking to the future can best be done through a model that allows for a range of discretion or choice in the responses of firms, government policy, labor unions, and individual workers to environmental changes (see Kochan, Katz, and McKersie, 1986). Thus in what follows we adopt a strategic choice perspective to analyzing the future of industrial relations and human resource practices. This is done by focusing on the interactions between a set of readily observable environmental trends and pressures and the strategic choices or responses of the key parties in the industrial relations system. The assumptions about the environment of the future that we start from are as follows: (1) the internationalization of economic competition will continue to intensify; (2) the pace of technological change will accelerate or at least continue at the rapid pace of the 1980s and become an increasingly important strategic variable for individual firms and national economies, and (3) the work force of the future will become more diverse in demographic characteristics, skill mix, values, and employment patterns. In the following sections we will take up these each of these environmental trends and discuss the range of options open to the employers, unions, government policy makers in responding to them. In doing so special attention will be given to a discussion of the research needed to better track and understand the interactions of these environmental trends and strategic responses.

### Environmental Trends and Their Effects

#### Internationalization

International competition has become an important catalyst for changes in industrial relations practices in both Canada and the U.S. In 1986 22% of GNP in the U.S. was accounted for by the sum of exports and imports compared to only 10% in 1960. The comparable figure for Canada was 60% in 1986 compared to 40% in 1960. Thus, the Canadian economy has always been fairly highly

exposed to international trade. Approximately 75% of Canada's trade is with the U.S. These trends are likely to continue in the future. Indeed competition between U.S. and Canadian firms will increase further if the Canada-U.S. free trade agreement is put into effect.

Yet the industrial relations institutions in both countries evolved in response to domestic not international competition. The challenge was to minimize employment losses due to wage competition within domestic product markets. As will be discussed below, the type of competitive threats workers and unions now face from international sources is more complex, involving not only competition over wages and labor costs but also on the capacity to innovate.

The conventional and still most profound effect of international competition is to threaten the stability of industrial relations by making it more difficult to "take labor costs out of competition" through traditional means, namely, through the spread of unionization, pattern bargaining, or public policies that set a floor on labor standards. For highly industrialized countries such as the U.S. or Canada with workforces that demand high standards of living, firms facing an open economy will therefore find it difficult to compete on the basis of low labor costs.

Theories of comparative advantage predict that, faced with a labor cost disadvantage, a firm will simply lose market share to competitors operating in lower cost regions. This effect will be most pronounced in labor intensive industries where price competition dominates. However, in reality, labor costs vary in importance to total costs, price elasticity varies considerably, and high labor cost firms have a number of strategic alternative courses of action to consider. While a high labor cost firm may in the end experience a loss of market share and lower employment levels, it can also seek to lower labor costs

through gradual wage moderation or abrupt concessions, accelerate the pace of automation to reduce labor inputs, reallocate its resources and leave the market entirely to the lower cost producers, or seek comparative advantages through other means such as by identifying market niches that can be served through advances in product design, marketing, technology, or superior product quality. Finally, a firm might form alliances with foreign producers to source some or all of its products in lower cost regions.

While these strategic options are not neutral with respect to their impacts on industrial relations outcomes, traditional industrial relations structures and processes were not designed to cope with this array of competitive options. Instead, collective bargaining and/or personnel professionals and institutions have generally been relegated to cope with the impacts of these strategic choices after they have been made by higher level executives, or as they evolve in response to market shifts. Consequently, an important effect of intensified international competition has been to highlight the gap between strategic decision-making and traditional industrial relations practice. It is not surprising then that a good deal of the experimentation with changes in industrial relations practice that has occurred in recent years reflects efforts to respond to these competitive pressures by closing the gap between these two levels of decision-making. In the end, however, unless these efforts are combined with corresponding improvements in productivity, real wages and employment can be expected to fall. Let us now examine how the U.S. and Canadian systems have adjusted to these pressures to date.

Labor Cost Moderation. The effect on industrial relations that is most expected from intensified product market competition is to induce firms to moderate wage growth and employment costs. This has clearly been the case in labor intensive U.S. industries that have been exposed to growing imports for



an extended period of time. For example, employment in U.S. apparel fell by 700,000 between 1960 and 1987 while average hourly earnings in apparel fell from 73% of average manufacturing wage in 1968 to 61% in 1982 (Parsons, 1988).

More generally, studies of wage determination in manufacturing have shown that both wages and employment have fallen in import sensitive industries over the course of the past two decades (Vroman and Vroman, 1987). And in the 1980s, wage growth moderated further extending beyond import sensitive industries to other major bargaining units. Estimates of the magnitude of this moderation vary from an average of 1 to 3% below the "norms" of wage behavior exhibited in collective bargaining in the previous decades (Mitchell, 1986; Kochan and Vroman, 1988). These same studies showed a reduction in the wage premium produced by centralized bargaining structures and/or pattern bargaining thereby lending support to the conclusion that the intensified competition of the 1980s led to a decentralization of wage bargaining and a focusing of wage determination on the conditions of individual bargaining units or enterprises (Freedman and Fulmer, 1982).

Similar downward adjustments in wage outcomes have been observed in Canada since 1982. Kumar (1987) has shown that annual rates of collective bargaining settlements reached their lowest point in twenty-five years in 1984-85. Compared to the wage bargaining in the U.S., Kumar concluded the Canadian response was somewhat slower in developing but at least equally broad based and long lasting. Although he finds similar patterns in the processes of downward adjustment (i.e., less emphasis on cost of living clauses, less pattern bargaining, more wage freezes and bonuses), he does not find evidence of a significant structural shift in wage bargaining beyond what a modified Phillips Curve model would predict.

Whether this moderation and shift away from the influence of centralized

and pattern bargaining will continue into the future in either the U.S. or Canada is still a hotly debated issue. Clearly, this is one of the issues that the strategies of the parties will influence.

One set of strategies for reducing the labor cost pressure that has gained attention is to shift from fixed wage adjustments or adjustments that move with macro economic conditions (as do cost of living escalators) to various bonus or contingent payment systems. Indeed, in both the U.S. and Canada there has been some shift from wage standardization and fixed payment systems to lump sum bonuses that are not built into the wage structure. There also has been some modest growth in the number of compensation schemes that link wage adjustments to firm, establishment, or work-unit specific movements in profits or productivity and individual worker skill attainment. For example, a survey of Canadian establishments (the Working with Technology Survey (WWT)) found profit sharing in 25% of its sample, gains sharing in 10%, and pay for knowledge plans in 8% of the sample establishments. In theory, such compensation structures, if diffused broadly, should have favorable effects on macro as well as micro economic performance. That is, contingent compensation systems should help expand employment and control inflation (Weitzman, 1984).

Profit sharing has been implemented as a quid pro quo in a number of key U.S. industries and firms, most notably in steel and autos. But most union leaders remain skeptical of profit sharing unless it can be introduced as a supplement rather than a replacement for fixed wage adjustments based on intra-industry or labor market comparisons, or in addition to cost of living (COLA) escalators. Canadian union leaders have been even more strongly opposed to profit sharing, as was illustrated vividly in the 1984 auto negotiations. While the U.S. autoworkers chose to accept a package that contained strengthened employment security provisions and profit sharing in

return for modifications in the traditional wage and cost of living formula, the Canadian union chose to continue with the fixed adjustment formula.

While many economists continue to promote the spread of contingent compensation because of its favorable economic features, most industrial relations scholars do not expect broad diffusion of these pay practices unless complementary changes in management practices are achieved that gain and sustain workers' trust and confidence in these pay systems. Two changes are cited most often.

First, contingent pay systems require a sharing of greater information on current financial performance and future business plans. This in turn opens the door to questioning of these data and plans by workers and/or their representatives and thereby joins the debate over whether worker representatives should have an active presence in the managerial decision-making bodies and processes in which these plans are designed and administered. In the absence of more open access to information and an opportunity to influence these plans, workers and union leaders are likely to continue to prefer contractually specified and fixed wage adjustments.

Second, contingent compensation systems sharpen concerns over internal equity, particularly concerns over differential treatment of executives and the rest of the salaried and hourly workforce. This has been vividly illustrated by the recent sequence of events in U.S. auto negotiations. In 1982 and again in 1984, years in which General Motors bargained hard with the United Auto Workers (UAW) to set aside their traditional wage adjustment formulas and accept a profit sharing plan, GM's announcement of executive bonuses created a strong outcry from UAW leaders and members. In later years this outcry continued since the GM profit sharing formula produced only small annual bonuses for rank and file workers while executive bonuses continued. The

pressure from blue collar workers led GM to modify its executive bonus formula in ways that reduce the weight given to short term profits and increases the importance of longer run objectives. In 1988 bargaining, Chrysler and the UAW joined this issue directly. The parties negotiated a contract clause that ties executive compensation adjustments to rank and file profit sharing formula. Executives will not receive bonuses in years the company's performance fails to yield profit sharing bonuses for blue collar workers.

North American employers have long been criticized for the large salary differentials that separate top executives from middle managers and hourly employees. These differentials tend to be considerably larger than those found in Japan or in most other European countries. Moreover, the gap widened in both the U.S. and in Canada in the past decade. In the U.S., for example, since 1981, compensation for chief executives increased at an annual rate of approximately 10% compared to increases of 5.9% for lower level managers and executives and 4.4% for blue collar workers(Hay, 1988; Bureau of Labor Statistics, 1988). The same trend was observed in Canada, although the differentials were not as great. Compensation increased for senior executives 14.3% annually between 1975 and 1987 compared to 9.9% for lower level managers and 7.8% of production workers (Kumar and Coates, 1986). These widening pay differentials therefore make it all the more difficult to generate blue collar worker and union leader support for contingent compensation arrangements.

All these data suggest that while pressures for wage moderation will continue in both Canada and the U.S. and will be especially felt in industries open to international competition, countervailing equity and real income pressures are also building within both countries. Whether new compensation practices that involve contingent pay and new institutional arrangements that

support such payment schemes spread to broader settings will depend on the willingness of management and labor to institute the institutional changes and reforms needed to support such plans. At this juncture, there seems little enthusiasm on the part of either labor or management leaders to make these changes.

No one expects that wage moderation or shifts to contingent payment structures alone would be sufficient to cope with international competition. The size of the gaps between manufacturing wages in the U.S. or Canada and newly industrialized countries such as Mexico (10%), South Korea (13%), or Taiwan (16%) cannot be closed by slower growth in wages or by changes in wage structures alone. More significant structural and strategic adjustments are required, most of which again challenge traditional industrial relations patterns and institutional practices. We now turn to an examination of experience with these to date.

Strategic Restructuring. The most widely discussed strategic response to a comparative disadvantage on labor costs is to seek comparative advantage through product differentiation or market segmentation by producing goods and/or services that can demand a price premium. A shift to this strategy requires considerable adaptability and flexibility in all aspects of organizational behavior, including industrial relations and human resource practices (Piore and Sabel, 1984). Firms that emphasize these strategies can be expected to seek flexible work organization practices, cooperative relations both among workers, technical staff, and managers within organizations and among organizations in the value added chain, and a high quality workforce that can make effective use of advanced technologies. We will discuss the role of these industrial relations attributes more intensively in the next section when we focus on the role of new technologies, however, we note them here because their

importance is reinforced by the pressures international competition puts on U.S. and Canadian organizations to sustain comparative advantage in areas other than equalization or minimization of labor costs.

In reality, it is seldom a discrete choice between competing on the basis of flexibility, market segmentation and high quality or on the basis of mass production of low cost standardized goods. Instead, strategic restructuring cases usually involve both efforts to reduce labor costs by trimming employment and by restructuring human resource and industrial relations policies to improve quality, flexibility, and adaptability. Consider one of the cases cited as a successful example of strategic restructuring and implementing many of these changes: the Ford Motor Company.

In the early 1980s Ford experienced a deep economic crisis that threatened its very survival as a world-wide auto manufacturer. In response Ford:

- (1) drastically reduced its labor force by about 42% from its peak level of employment in the 1970s,
- (2) negotiated a new labor agreement with the UAW that introduced profit sharing, new employment security provisions such as a job bank and guaranteed income stream for senior workers permanently laid off because of technological change, plant closing, or other corporate restructuring actions,
- (3) endorsed and expanded its commitment to working with the UAW to promote employee involvement, statistical process control and quality improvement efforts,
- (4) established mutual growth forums for communicating with worker and union leaders at plant and corporate levels, and
- (5) greatly expanded its training and education programs.

In addition, changes were made in the structure of the managerial and technical organizations to facilitate the use of cross-functional teams to speed the introduction of key new products (such as the Taurus and Sabel models) on which the company was to depend for its economic recovery. Relations with suppliers were revamped by reducing the number of suppliers, developing longer

term contracts, and working intensively with suppliers to both reduce costs and to raise quality and service delivery performance (Locke, Kochan, and Heye, 1988). Thus, significant corporate restructuring involves both major employment reductions and adjustments as well as innovations in industrial relations and human resource practices. The question this and similar examples pose for both researchers and policy makers is: How many firms and unions are willing and able to integrate and manage corporate restructuring and industrial relations policies in this way?

The Canada-U.S. Free Trade Agreement. The most immediate question concerning internationalization relates to the potential effects of the proposed Canada-U.S. Free Trade Agreement. The macro-economic estimates of the effects of the agreement on the Canadian economy vary from slightly positive (Wigle, 1988) to somewhat positive (Cox and Harris, 1986). These macro estimates are of little value, however, for anticipating the impact of the agreement on industrial relations in specific firms or industries. Moreover, since the macro models are based on assumptions of perfect adjustment of labor and capital resources, they ignore the very issues that labor and management representatives worry most about, namely the costs of adjustment to current Canadian workers and employers.

Canadian labor leaders are strongly opposed to free trade with the U.S. largely because they fear it will intensify cost competition and thereby will lead to a more aggressive managerial approach to industrial relations. This could happen either through a change in outlook and practices of Canadian managers or through an increase in the influence an/or rate of entrance of U.S. employers in Canada. In either case the fear is that the experiences of nonunion competition and deregulation that have created strong pressures on unions and collective bargaining in the U.S. could be exported to Canada.

These concerns are very likely well grounded. However, they are based on the premise that the dominant form of competition between U.S. and Canadian firms is inter-industry competition based on relative factor prices (labor costs). Yet some have argued that, given the similar stages of development of the Canadian and U.S. economies, the biggest increases in trade may be of the intra-industry variety. In this type of trade the competitive threat comes less from factor cost advantages than from a competitor's ability to adapt quickly to meet specific needs of different market segments or to develop and effectively utilize advanced technologies. Thus one effect of the Free Trade Agreement might be to further increase the importance of those industrial relations attributes that support these types of strategic adjustments. If this is the case, the Free Trade Agreement will intensify the pressure on Canadian labor and management to engage in the types of strategic restructuring described above and the processes of organizational innovation discussed below as essential in firms that seek to gain competitive advantage from advanced technologies.

#### New Technology

Adjustment to technological change has been an ongoing feature of both the Canadian and U.S. industrial relations systems. Collective bargaining agreements in both countries contain a wide variety of employment and income security provisions to deal with the impacts of technological change. One can legitimately ask, therefore, is there anything new or special about the current wave of innovations in technology that require new responses or significant institutional reforms? Or is it simply that the pace of technological change has intensified because of innovations in micro-electronics?

Clearly, no one discounts the importance of continuing to expand the standard provisions for coping with the impacts of new technology. Indeed, these provisions are likely to take on increased importance in collective



bargaining and human resource planning in the future. Yet there is growing theoretical and empirical evidence to suggest that significant changes in organizational and industrial relations practices will be required if technology is to be exploited as a strategic resource. The central proposition in this theory is that the full potential of new technology can only be reached by adopting new organizational forms that effectively integrate technology and human resource strategies and practices. Unfortunately, as the results reviewed below will suggest, American firms have not yet done well in applying this proposition. Data from the auto industry provide a snapshot of this evidence.

A number of studies have shown that the best performing auto manufacturing plants are not those that employ the most sophisticated technology. In an early study, for example, Krafcik (1988) showed that the Toyota-GM joint venture known as NUMMI (New United Motors Manufacturing Inc.) achieved higher productivity and quality levels than both traditional industrial relations/low technology plants and traditional industrial relations/high technology plants. This was the case even though NUMMI employed significantly less new information and robotic technology than the most advanced plants in the U.S. Later research, drawing on a broader sample of U.S., Japanese, and European plants, verified this preliminary conclusion by showing that plants that used a combination of human resource and manufacturing process innovations such as team forms of work organization, statistical quality control, and decentralization of quality control to production line workers contributed more to explaining variance in productivity and quality performance than did the extent of robotics technology found in the plant (Krafcik, 1988). Using a different methodology Loveman (1988) and Roach (1987) both concluded that investments in information technologies have achieved very poor economic returns compared to other forms of capital

investment. Thus, together these studies provide empirical support to the proposition that investment in technology alone is unlikely to provide the economic benefits needed to gain strategic advantage.

A better theoretical understanding of these results has begun to emerge from a number of qualitative case study comparisons of U.S. and Japanese managed auto assembly plants operating in Canada and the U.S. Shimada and MacDuffie (1987), for example, use a concept of "humanware" to capture the interdependence between the technical and human resource systems observed in Japanese manufacturing systems. They argue that manufacturing processes such as just in time inventory systems, small lot production, and decentralization of responsibility for quality control to production workers all depend on achieving human resource inputs of high levels of skill, training, motivation, and participation. A key design feature of these manufacturing processes is that technology is broadly defined to encompass these human resource dimensions. They describe this as a "fragile" production system since it depends on maintaining high levels of performance from the human resource management system. In contrast, the traditional North American approach to manufacturing policy has been to minimize variability through machine control and provision of buffers against human resource system variability (i.e., extra employees to cope with higher absenteeism, buffer inventories to protect against delivery bottlenecks, sophisticated quality control inspection systems and specialized personnel to catch defects after production is completed or as parts enter a plant from an external supplier, etc.).

Successful integration of manufacturing and human resource strategies generally argues for a moderate, incremental approach to new technology investments thereby insuring that the workforce is ready to accept and absorb the new approaches. This point was emphasized in an interview with the

manager of a new Japanese-owned assembly plant in Canada. He described this plant as approximately 20 to 30% from the "frontier" of potential automation. His strategy was to start with the best "man-machine" combination and to upgrade the manufacturing process incrementally from there as opportunities for improving performance were identified. As part of this strategy each new employee was required to work on the assembly line for a period of time before taking a permanent job assignment. The purpose was to insure that everyone in the organization understood how cars were built. This was seen as especially important for the engineers who would work on the design and implementation of future technologies and related process improvements.

An integrated approach to technology and human resource policy also argues for significant involvement of worker (user) representatives at early stages of the technological choice process. Thomas (1988) has shown that in the absence of this early involvement, the requisite socio-technical principles are not likely to be taken into account.

The concepts that underlie the Shimada and MacDuffie model are not entirely new. Indeed to some extent they build on assumptions similar to those found in socio-technical design models (Economic Council of Canada, 1987). They go beyond these models, however, since socio-tech models tend to center in on a single strategy for organizing work--the semi-autonomous work group. A careful analysis of Japanese and U.S. team plant systems indicates that there remains considerable variability in work organization design. In fact, interdependence and coordination of work flow across groups is emphasized more than individual or group autonomy.

Despite the growing awareness of these concepts and despite a number of highly visible examples of the benefits associated with these alternative designs in both Canada and the U.S., the evidence to date is that these principles are

not diffusing rapidly. Conference Board survey data from U.S. firms reported that between 20 to 30% of new non-union plants are being designed with features such as semi-autonomous work groups (Kochan, Katz and McKersie, 1986). A recent study in Canada found that only 23% of the firms sampled indicated that labor-management teams participated in the introduction of new technologies (Economic Council of Canada, 1987). Even within the U.S. auto industry, where the major firms are generally convinced these concepts are essential for achieving their productivity and quality targets, the diffusion process is gradual. Most new plants opened or retrofitted in recent years by GM, Ford, Chrysler, or Japanese firms have introduced these principles. However, the majority of existing plants continue to operate with traditional systems.

The above evidence pertains largely to the effects of new technologies on blue collar work organization. Evidence is mounting, however, that many of the same problems with over-specialization in the organization of work among engineers and technical staff limits the speed of introduction of new product and process technologies. Clark, Chew, and Fujimoto (1987) have shown that it takes on average 40% longer and 50% more manhours of engineering to design a new model in U.S. auto firms than in Japanese auto firms. Mansfield (1987) reaches a similar conclusion based on data from a broader sample of industries. His estimates show that while there is wide variability across industries, on average, U.S. firms take approximately 12% longer than comparable Japanese firms to introduce new products. Based on a comparative study of engineering processes in Japanese and U.S. computer firms Westney (1986) argues that part of the Japanese advantage may lie in differences in the organization of internal labor markets in the two countries. For example, compared to their American counterparts, Japanese engineers get exposed to both design and

manufacturing activities very early in their careers and can generally expect to move from design to manufacturing as part of their normal career progression. This give engineers in both functional areas increased awareness and appreciation for the concerns and perspectives of the other and facilitates problem solving in cross functional groups.

Other studies of the product development process have shown that problem solving and group performance are critical determinants of the performance of product and process development teams (Ancona, 1988; Tyre, 1988; Henderson, 1988). The Henderson (1988) study examined the effects of different patterns of interaction and involvement of users and designers in the various stages of information systems development projects. He found that the best performing design teams were ones where both users and information systems specialists exerted high, mutual influence on each other during the problem formulation, solution, and implementation stages of the process. This finding again reinforces the conclusion that effective cross-functional problem solving is as important a requirement of the human resource management system for white collar and technical occupational groups as it is for the system that governs blue collar production workers.

The above examples from the production and engineering activities illustrate the growing importance of learning from other countries and finding ways to transfer practices from one cultural and institutional setting to another. Indeed, the success of the transplant auto firms (Japanese firms operating plants in the U.S. and Canada) suggests that transfer of learning is possible. Yet transfer requires more than imitation of the structural principles or institutions. For example, there is widespread agreement among auto industry executives that team forms of work organization similar to team structures commonly found in Japanese manufacturing plants are more efficient than the

traditional multiple classification and hierarchical control models found in traditional North American plants. Yet one recent study showed wide variability in the performance of team plants in a large U.S. firm (Katz, Kochan, and Keefe, 1987). Further analysis of these data showed that the most successful team plants in this company were once again plants that followed a moderate technology upgrading strategy with a heavy emphasis on worker participation and joint union-management governance processes. The two team plants with these features were among the top productivity and quality plants in the company. The high technology team plants were among the lowest productivity and quality performers in the company. This suggests that one must again look at the interaction among the technology strategies and the actual problem solving and governance processes at work in the plants. These examples suggest the need for more research on the factors that influence the success of the cross cultural learning and transfer of organizational innovations and human resource practices.

### Labor Force Developments

An individual firm or a national economy can only gain competitive advantage from effective use of human resources if it has a highly educated, skilled, and adaptable labor force. In the absence of a high quality labor force, all of the institutional and organizational adaptations in industrial relations discussed in this paper are unlikely to bear fruit.

While historically firms in both Canada and the U.S. firms could count on this source of competitive advantage, one should not assume this will automatically be the case in the future. Indeed, there is sufficient concern over the quality of education and training in the U.S. to make this one of the most widely discussed human resource issues of the day. The warning signs in the U.S. educational system are quite clear: (1) a twenty-five percent high

school dropout rate; (2) a proportionate decline in college majors in science and engineering, and; (3) weak performance of American students compared to Asian and European students on mathematics and science achievement examinations. Equal but less well documented concerns have been raised about the adequacy of investments in training for those already in the labor market, and especially for blue collar workers who are most exposed to the risk of permanent job loss due to changes in technology. These concerns arise both out of the evidence on the poor reemployment prospects of displaced workers with little education and/or general training (Kruse, 1988) and the general belief that American firms under-invest in training (Osterman, 1988). Underinvestment is in part thought to reflect the narrow job classifications and rigid rules governing movement in typical U.S. internal labor markets.

Similar concerns have been raised in Canadian policy circles, however, the available evidence seems to indicate that the Canadian education and labor market institutions have performed more effectively than their U.S. counterparts over the past several decades. There is no evidence in the data available, for example, of a decline in the quality of education in Canada or in the proportion of students entering the science and engineering disciplines (Davies, 1986). Moreover, Canadian labor market adjustment policies and/or market forces appear to work better than do the U.S., if judged by the proportion of aggregate unemployment attributable to structural versus cyclical causes (Riddell, 1986). Thus, there is some reason to believe that the Canadian labor force is better positioned to adjust to the technical and organizational changes that are critical to the future performance of the economy and to individual employment security and earnings potential.

Considerable concern and uncertainty remains, however, with respect to the adequacy of private sector on the job training efforts. No more is known

about the adequacy of the amount, quality, or generalizability of private training in Canada than is known about these efforts in the U.S. There is general agreement that private sector training will take on increased importance in the future. Some have argued, however, that government policies have overemphasized support for primary and college education at the expense of continued training for those already in the labor force (Riddell, 1986). Yet, as in the U.S., there is no clear consensus on how government can most efficiently spur greater investment in training by workers, firms, and/or unions. Clearly, this is an issue that deserves (and is very likely to get) considerable attention from researchers and policy makers in both Canada and the U.S. in the years ahead.

The most significant labor force development of the past two decades in not only Canada and the U.S. but more generally in all industrialized countries has been the growth in the number of women in the labor force. Labor force participation rates of women in the U.S. increased from 36% in 1960 to 56% in 1988. The numbers for Canada are similar: from 28% in 1960 to 54% in 1986. When the increased role of women is combined with the growth in the number of minorities and immigrants it is clear that the labor force of the future will be more diverse in demographic features than the labor force of the past. Estimates in the U.S., for example, indicate that between 1987 and 2000 nearly 90% of the new labor force entrants will be women, minorities, or immigrants (Johnston and Packer, 1987). The diversity poses challenges to industrial relations and human resource practices since women, minorities, and immigrants have historically experienced difficulty gaining access to those good jobs that will be growing in demand.

The concern over the effects of immigration is especially central in Canada given that over 20% of the Canadian labor force is foreign born. While



a large proportion of these immigrants are from the U.S., recent evidence suggests that immigrants' earnings are significantly lower than those of comparable native born Canadians. This differential appears to be growing, although there is still uncertainty (as in the U.S) over the causes of the growth in the differential. A portion appears to be due to a decline in the quality of the recent immigrant cohort, however, a portion also appears to be attributable to language deficiencies and other constraints on the ability of immigrants to learn skills required to advance to higher paying jobs (Hiscott, 1987; Borjas, 1987). This is similar to evidence from the U.S. indicating that women and minority youth receive relatively less on the job training than their white male counterparts and experience proportionately lower rates of return to the training they do receive (Lynch, 1988). These results pose significant challenges to policy makers and practitioners alike given the growing consensus regarding the importance of training and life long learning to long term income, and the projected demographic mix of future labor force entrants.

#### Union and Management Responses

Debates over the future of worker representation are intense in the U.S. for quite obvious reasons. Since 1960 union representation has fallen from just under one third of non-farm labor force to under 17%. Less than 15% of the private sector workforce is unionized. But even these numbers understate the extent of the crisis facing the American labor movement. Union membership continues to be concentrated in the oldest, slowest growth industries, in the older firms and establishments in these industries, and in occupations that are likely to experience continued shrinkage from technological change. At the same time, traditional union organizing efforts have failed to capture significant numbers of new members among those work groups and occupations that are expanding--women, white collar workers, and service sector employees.

Many are quick to point out that the U.S. is an exceptional case and note that both the historical experience and current situation of the Canadian labor movement are quite different. Union membership in Canada has grown during the same thirty year time period as the U.S. movement has declined. Overall membership appears to have remained quite stable even through the tumultuous period of the 1980s. For example, Statistics Canada survey data for 1984 show 37% of paid workforce is unionized and 42% is covered by a collective bargaining agreement. These overall figures, however, mask some trends that are similar in direction if not in magnitude to the U.S. experience. For example, most of the growth in union membership in recent years has been in the public sector while union membership in the private economy declined from 33% in 1961 to 28% in 1984 (Betcherman, 1988).

But membership numbers and trends are only one dimension of the challenge facing unions today. Unions in all advanced industrialized countries are undergoing internal debates and self analyses over how to represent workers in light of the changes discussed in earlier sections of this paper (Kane and Marsden, 1988; Edwards, 1986; Roberts, 1985). Globalization, new technology, and changing industry and demographic composition along with the strategic responses of employers are challenging many of the traditional structures and processes of unionism and collective bargaining. Thus, the challenges to labor in Canada as in other countries lie not only in organizing new members but also in making the adaptations necessary to effectively represent their members' interests. The question, then, is what can we learn from the responses to date of unions to these environmental, political, and employer challenges?

Both Canadian and U.S. union leaders have been criticized for being slow

to respond to these pressures to change or to initiate innovations in practice. Instead, management has initiated most of the innovations in industrial relations in recent years. At least three reasons account for the reluctance of North American union leaders to initiate innovations in representation and participation.

First, there is the strong legal and historical tradition of management rights built into our collective bargaining systems: Management acts and unions react through negotiation over the impacts of managerial decisions and through the grievance and arbitration procedures. This legal doctrine and tradition of separation of managerial rights from union influence has deterred unions from playing an active role in strategic managerial decision-making. Second, at the shop floor North American unionism has followed a "job control" model of specifying clear lines of demarcation of jobs, detailed rights of workers that are tied to job and union jurisdictions and in some industries occupational or craft lines. This tradition grew out of the Taylorist concepts and, as noted earlier, apply not only to union members but carryover to engineering and managerial functions as well. Thus, flexibility in work organization requires significant departures from this job control tradition. Third, there is an innate and legitimate lack of trust of management among U.S. union leaders that grows out of the long history of anti-union sentiment within the American management culture. American employers would not only prefer to be nonunion but over the long course of history have been aggressive and successful in developing and pursuing nonunion options. This lack of trust is reinforced in the current period by the fact that many of the innovations in work organization and employee participation have been used by nonunion firms in part to avoid unionization. Even where union avoidance is not the dominant motive for introducing these innovations, their effect has been to reduce the incentive for

workers to organize. Therefore, unions have had no success in organizing these innovative firms. An understanding of this context is critical, therefore, to interpreting the current and future response of union leaders to organizational innovations. Thus, a review of the changes in the responses of union leaders may be helpful.

The Evolving Response of U.S. Unions. The initial impetus for a new union response in the U.S. came in the mid 1970s as the quality of working life movement and related forms of employee participation gained momentum in academic, government, and management circles. Initially, the vast majority of U.S. union leaders were quite skeptical of these early employee involvement or quality of working life efforts fearing that these were simply another managerial fad or effort to undermine union solidarity and support. Union leader skepticism was reinforced by the fact that up to that point most of these activities were associated with nonunion companies and were initiated in part to keep workers from organizing. However, a small number of union leaders did advocate these efforts (see for example, Bluestone, 1980) and therefore by the early 1980s considerable joint union-management experimentation was underway. Enough experience with these efforts has occurred for union leaders to now take a more careful look at the risks and opportunities posed by employee involvement and related workplace innovations. Moreover, the scope and impacts of these innovations have broadened out considerably. Employee participation seldom stands apart from efforts to introduce greater flexibility in work organization, information sharing and consultation at higher levels of the union management relationship, and in some cases worker and union involvement in the planning of new facilities or new technologies or production systems. In fact the most recent surveys now show that the rate of diffusion of employee participation, information sharing, and

related workplace innovations is not significantly different between union and non-union plants (Ichniowski, Lewin, and Delaney, 1988). Still, however, there is an active debate within the American labor movement over how to best respond to these issues. While some continue to see employee participation and team based work systems as dangerous departures from longstanding union traditions and principles that should be opposed (Parker, 1988), others see them as potential opportunities for representing worker interests in today's environment (Ephlin, 1988).

The greatest support for innovations is found among leaders at the local and national levels of unions most heavily threatened by foreign competition and where unions have been strong and secure enough to gain a partnership role with management in introducing and administering organizational innovations. Moreover, at the local levels of these unions there is equal diversity in outlooks.

Yet in the midst of this diversity there is consensus among union leaders on a few basic principles that must be in place if these innovations are to gain their support and are to diffuse to broader settings. First, unions must be accepted by management as legitimate and full partners in the design and guidance of these efforts. Second, there must be a greater acceptance on the part of American management of workers' rights to organize and of the legitimacy of unions in society and in their organizations. Union leaders note that American managers cannot continue to have it both ways--they cannot expect union leader cooperation at the workplace at the same time corporate strategies are designed to oppose unionization of new employees or establishments. Third, union leaders are convinced that changes in national labor policy are required to reestablish a "level playing field" with respect to new union organizing. The emerging view of union leaders therefore seems to

be one of recognizing the potential contributions that organizational innovations can play in improving both the interests of workers, employers and the broader economy, however, they would prefer to see these innovations embodied as part of a broader national reform of industrial relations law, ideology, and politics. For these reasons, the extent to which these innovations will diffuse in the future lies to a large extent in the hands of the future political leaders of the country.

Views of Canadian Union Leaders. In the past two decades the Canadian labor movement has gradually separated itself from the AFL-CIO in political strategy, and in the case of several individual Canadian unions, in organizational structure (Adams, 1988). The close ties of the Canadian Labor Congress and the New Democratic Party, for example, depart from the AFL-CIO's policy of more informal or unofficial ties to the Democratic Party. Differences can also be seen in the views of Canadian union leaders toward workplace innovations.

A recent interview study (Kumar, 1988) suggests that Canadian union leaders in general are still quite skeptical of the value of many of the organizational innovations in work practices, employee participation, and representation in strategic managerial decision-making and even broad based tripartite consultation among labor, management, and government officials. Kumar (1988;8-9) summarizes the views of the 17 top level union leaders he interviewed as follows:

Union leaders are convinced that management attempts towards employee involvement, and demands for greater flexibility in work arrangements are nothing but a 'misguided desire for a union free environment.' They are of the view that 'management is more interested in speed up, more productivity than in the worker input.' Labor leaders strongly believe in the adversarial system of labor relations citing the fundamentally different roles of union and management at the workplace. Participation in management decision-making initiative, according to them, are largely cost driven, motivated by management's desire to abdicate its responsibility by transferring to the union the role of disciplining workers, setting one

worker against the other.

As their American counterparts, however, these Canadian union leaders do appear to hold out the option of greater flexibility in view and behavior in the future, if, in their view, the necessary changes in managerial attitude occurs.

Although labor leaders espouse an adversarial union culture, they are not opposed to cooperation with employers on areas of mutual concern. They believe, however, that cooperation is only possible if employers seek genuine dialogue, share information and are honest in their dealings with the union and the worker. Most labor leaders don't think employers accept the legitimacy of the union. There has been no change in employer attitudes towards workers, they point out. Against this background, they think cooperation is only feasible at the strategic policy level on broader issues like trade, labor adjustment and technology, in situations where collective bargaining relationships are long established and mature, and where there is a strong union representing the industry. Working together is feasible, they believe, if management were seriously committed to the change.

A recent review of workplace innovation in Canada (Mansell, 1988) supported the conclusion that the majority of Canadian union leaders continue to oppose workplace innovations citing in support "anti QWL" convention resolutions passed in 1982 and 1983 by the Ontario and the British Columbia Federations of Labor. Yet despite the rhetorical opposition of top union leaders, innovations continue in selected settings with local unions leaders as active and in some cases enthusiastic participants and advocates.

Thus, in all likelihood we will continue to experience a period of intense political debate within both the Canadian and the U.S. labor movements over these innovations. While there seems to be somewhat greater experience with innovations at the local level in the U.S. and more national union leaders in the U.S. see innovations that are properly structured as viable strategies for unions to promote and champion, neither labor movement has developed a coherent and visible program for promoting, supporting, and diffusing these changes.

The lack of strong open support by union leaders for new forms of labor management relations does not imply that a management led process of

adjustment to new technologies and efforts to introduce greater flexibility in work organization will not occur. Indeed, both survey data and two recent case studies of Canadian firms (Adams, 1988b; Chaykowski and Slotsve, 1988) suggest that the introduction of new technologies and industrial restructuring are occurring in unionized relationships, albeit without significant input from labor leaders. Using data from the WWT survey Betcherman (1987) found no significant difference between union and nonunion firms in (1) the rate of technological change, and (2) the degree to which workers were involved in the process of introducing technological change. Moreover this study found that technological changes in union firms were less likely to result in skill enhancements or the creation of new jobs than were changes in nonunion firms. These results are rather sobering since they imply that Canadian unions have not either attempted to or been successful in influencing the process or outcomes of technological change in ways that are beneficial to their members. Even the fact that these data suggest unions do not deter or slowdown the introduction of new technology is of little consolation since one would expect existence of union wage premiums to lead to a faster rate of technological change in union than in nonunion firms.

A case study of the process of restructuring in a large Canadian steel plant (Adams, 1988b) concluded that both the company and the union acted in traditional ways. They bargained hard in contract negotiations over changes in wages, work rules, and employment adjustment provisions and then used existing contract administration procedures to implement the changes agreed to. A similar pattern described in a case study of the process of technological change in a large manufacturing firm reinforces the survey results (Chaykowski and Slotsve, 1988). In this organization management has followed an aggressive strategy of investing in new technologies and in the process has successfully



negotiated with the local union to reduce the numbers of job classifications and to reorganize work to better fit the new equipment.

Thus in these cases one again observed the union following a traditional strategy of negotiating to cushion the impacts of technological change on the workers affected and leaving to managerial initiative the decisions about how to reconfigure jobs and related organizational policies to support the new technologies. In turn, management took an equally traditional approach to the process of technological change. No effort was made to take a socio-technical approach to the design of the technology or the job structure. Instead the technical and industrial relations and human resource management dimensions of the change process were separated and addressed in a standard, sequential fashion. If the experience of U.S. firms generalizes to these cases, we can conclude that the full potential benefits of the new technology to these two firms, their workers, and their union were not realized. If the survey and case study results summarized above reflect accurately current practices in Canadian labor-management relations, then this conclusion may have even wider generalizability.

#### Human Resource Management

One of the major conclusions of our research on U.S. industrial relations has been that innovations in human resource management practices in the nonunion sector during the 1970s served as an important stimulus to union-management innovation in the 1980s (Kochan, Katz, and McKersie, 1986). The lack of comparable data on Canadian management practices makes it difficult to draw any definitive conclusions on the nature of human resource practices in nonunion firms in Canada. Clearly, as in the U.S. there are a number of highly visible nonunion firms (e.g., Magna Corporation, Michelin, Dofasco Steel, etc) that have been quite successful in avoiding unionization and that have a

reputation for innovative practices. Yet, the impression is that Canadian managers in both the union and nonunion sector have been less aggressive than their U.S. counterparts in initiating human resource management innovations (Adams, 1988a). The results of the WWT survey and another survey of management practices in British Columbia (Thompson and Verma, 1987) are consistent with this impression. Yet more data are needed before this "impression" should be accepted as fact. However, one interpretation of the evidence that is available is that Canadian managers are, like their U.S. counterparts in the late 1970s, under pressures from their senior management colleagues to accelerate the pace of change and innovation in human resource management. If this is true, a significant escalation in competitive pressures on the Canadian economy may unleash these pressures and produce more aggressive actions by Canadian employers. On the other hand, there may be more incremental change occurring in human resource management in Canada that is less visible to outside observers. The fact that no concrete conclusion can be reached on the basis of the available evidence of the nature and impacts of Canadian human resource practices suggests that this is another important area in need of further research and policy analysis.

#### Implications for the Future of Canadian Industrial Relations

The above comparison of the responses of the in U.S. and Canadian industrial relations systems suggests the following tentative conclusions:

1. Most of the changes in practice observed in the U.S. are also occurring in Canada. Like the U.S., these changes have not diffused widely across the economy to the point that a "new" system is in place. Indeed, the evidence suggests that the process of change or transformation in industrial relations and human resource practices has been slower, more incremental, and less widely diffused in Canada than in the U.S. Specifically:

a. The rate of increase in collective bargaining settlements has moderated although the change is not as great as in the U.S.

b. Contingent compensation practices are not popular with union leaders while employers show little interest in initiating the organizational changes required for contingent incentive systems to be adopted and supported by workers and union leaders.

c. Growth in union membership in the private sector has leveled off, however, it has not fallen precipitously as in the U.S.

d. Unions have had very limited success in organizing employees in firms that follow state of the art human resource management practices although there appear to be fewer firms that use these practices to avoid unions in Canada than in the U.S.

e. A number of local unions are participating in experiments with labor management cooperation, worker participation, and flexible forms of work organization although these innovations do not appear to be as widespread or to have as many local level advocates at this point in time as in the U.S.

f. National union leaders remain rather uniformly skeptical of management's motives for introducing labor management innovations and therefore are not willing to endorse or champion these innovations.

g. Unions oppose the Canadian U.S. free trade agreement because they fear the loss of jobs to U.S. nonunion firms and/or the growth of a U.S. hard line style of management in Canada.

h. Canadian unions have taken conventional approaches to corporate restructuring and technological change efforts by neither blocking nor by seeking to participate actively in the management decision-making processes that guide such efforts.

i. Canadian immigrants and other minorities are experiencing difficulty in gaining access to the training and jobs required to improve their incomes and occupational status.

2. The processes by which these changes are introduced differ from the experiences in the U.S. in two interrelated ways. First, the non-union sector seems to be less of a source of human resource management innovation that is pressuring unionized firms to match their lead. Second, where changes are occurring in union firms, the changes are coming through the normal bargaining and contract administration process. There appear to be fewer examples of formal programs in labor management cooperation and participation at the

workplace and even fewer examples of union leaders playing a significant role at the strategic level of managerial decision-making.

In summary, the evidence suggests that the same pressures that are affecting industrial relations in the U.S. and other advanced industrial economies are at work in Canada and are producing experiments similar in kind if not in magnitude or scope as in the U.S. This does not mean, however, that Canada is destined to experience the same types of patterns of adjustment and industrial relations turmoil as the U.S. Instead, the future path of diffusion of innovations and adaptation will, as in the U.S. and other countries, depend on the choices and strategies of management, labor, and government policy makers. Thus in this section an attempt will be made to focus on the choices available to each of these parties. In doing so a number of needs and opportunities for further research and policy debate will be highlighted.

#### Choices for Management

Canadian employers do not appear to be as aggressive in stimulating changes and adaptations in human resource practices as their U.S counterparts. This has both advantages and disadvantages for the adaptation process. One advantage is that while Canadian union leaders voice a degree of distrust of management's motives, there is still a less hostile labor-management social climate in Canada than in the U.S. Therefore, Canadian managers are not as limited by the ambivalent attitudes of many U.S. managers regarding the decision of whether to attempt to work with or around unions in the adaptation process.

Canadian managers will have to work more intensively with union leaders if the adaptations in industrial relations noted at the outset of this article are to be achieved. The alternative would be for management to invest in a twenty year process of expanding the nonunion sector to the point where unions were

sufficiently weakened where they could either be ignored or would be forced to accept a secondary role in management controlled change processes. Setting aside issues regarding the desirability of such a strategy, its feasibility is doubtful given the size and political strength of the Canadian labor movement. Therefore, Canadian managers will need to accelerate their efforts to promote change and adaptation with union leaders either through the conventional channels of negotiations and contract administration or by more active efforts to develop new forums for consultation at the workplace, enterprise, industry, and national levels. But there is no guarantee that managers will actually choose to put more emphasis on achieving change by working with union leaders. Some firms may increase their efforts to avoid unions. Thus, achieving a better understanding of the factors that influence management's choice of strategies and their consequences for individual firms, employees, and the macro-economy should be high on the priority list of researchers and policy makers.

If the popular view that cross functional communication, participation, and integration in new product and process developments is accurate, Canadian management, like their American counterparts, will need to make significant changes in organizational structures and processes. These changes will involve modifications in traditional power distributions and organizational boundaries. If case study experiences from U.S. organizations are indicative, this will be a highly intense political process and one that will only succeed if the organizational culture and management reward structure reinforces the change process.

Ultimately the direction of human resource policy in Canada will depend in large part on the nature of the business strategies that Canadian firms adopt. The more firms attempt to adapt to increased world competition and changing

market conditions with strategies that emphasize product differentiation, product quality, and innovation, the more demand there will be for the organizational and human resource policy changes that support these strategies.

### Choices for Union Leaders

Canadian union leaders have responded to pressures from their environment and managerial initiatives for change in ways very similar to the way U.S. union leaders reacted in the 1970s. This does not imply that Canadian leaders are simply behind their American counterparts. Instead it reflects the stronger and more secure position of the Canadian labor movement, a position similar to the perception most U.S. labor leaders had of their position in the 1970s. Thus given their greater strength and the less hostile managerial and political environment in which they operate, Canadian union leaders have a wider range of choices open to them than do their American counterparts at the moment. This suggests that union leaders could adopt an active strategy and lead the debate over how to adapt to change in ways that are consistent with the interests of their members. Such an effort would need to be guided by a vision of not only the role labor wishes to play at the national and provincial levels of policy making but also the long run role unions want to play at the workplace and in strategic managerial decision-making. The alternative union strategy is to continue to hold to conventional views as to the adequacy of collective bargaining for meeting these challenges. Adherence to this policy is likely to lead to an increase in managerial militance and, in the end, to more of the frustrations, disappointments, and membership declines experienced by their U.S. counterparts.

One of the most difficult challenges and strategic choices facing not only Canadian union leaders but union leaders in most countries is how to respond to the increasingly diverse labor force. Collective bargaining has not proven to be

sufficiently attractive to white collar, middle managers, temporary and part-time workers, and employees in small enterprises to get them to organize in large numbers. Yet all of these groups are growing at a faster rate than the more highly organized the blue collar and professional groups. Does this imply that new institutional forms of worker representation and participation need to be pursued to supplement or complement collective bargaining? Do works councils, board membership or other forms of non-exclusive representation have merit and appeal in Canada? These questions have been raised by researchers in Canada in recent years (Adams, 1986) but have not yet stimulated significant discussion or experimentation. Thus, there is no way to answer these questions at the moment in the absence of more open debate, experimentation, and analysis. Yet, like their counterparts in other advanced industrial economies, Canadian labor leaders are likely to find themselves deep in such debates in the years ahead. Thus, stimulating and then evaluating the results of these debates and the experimentation they might generate should be a high priority for policy-makers and researchers.

#### Implications for Government Policy

Let us assume the underlying premise of this paper is accurate that contemporary industrial relations practices need to be adapted in significant ways if they are to contribute to a nation's competitiveness and the welfare of its citizens. Further assume the basic conclusion from this review of the evidence is accurate that changes are underway but not widespread. Then the fundamental challenge facing public policy makers in the years ahead lies in diffusing and institutionalizing the necessary changes. Yet governments have had very mixed records as promoters or catalysts of private sector innovations. In the U.S., for example, efforts to develop and use a National Commission on Productivity and Quality of Work basically failed for lack of enthusiastic

support from either labor or management. The Ontario Quality of Working Life Center seems to have experienced a similar weak level of union and management support. Perhaps the tripartite labor market research boards that are now underway will be more successful.

If experience in other countries is any guide, however, isolated initiatives by government agencies to diffuse and institutionalize industrial relations innovations are unlikely to have a major or lasting effect. Instead, just as industrial relations reforms or innovations at the firm level require supporting human resource policies and business strategies, national policy makers will need to view industrial relations innovations as an integral part of Canada's long term economic strategy.

#### Summary

For the past two decades the Canadian and U.S. systems of industrial relations have diverged in important ways. Differences in union membership trends, management human resource and industrial relations strategies, and the political strategies of labor are the visible markers of the divergent patterns of industrial relations between the two countries. Yet the pressures from changing product markets, technologies, and labor force demographics affecting the two systems are similar and are likely to intensify in Canada in the years ahead. This suggests that the pace of change may also accelerate in the years ahead.

The means by which change occurs in Canada need not and is unlikely to be the same as in the U.S. But if the conclusions of this paper are correct, to avoid the adversarial aspects of the U.S. pattern of adaptation, labor, management, and government policy makers in Canada will need to make significant changes in their traditional beliefs and practices. Labor will need to become more of a champion of innovation and adjustment at the workplace and play a broader role in the management and governance of the enterprise.



Management, in turn will need to accept a broader role of workers and their representatives in the enterprise in return for the changes in the human resource policies and practices it needs to compete in contemporary markets. Government policy makers will need to see these industrial relations innovations as critical to the performance of the national economy.

For these changes to in fact occur will require nothing short of a fundamental rethinking of the nature of the corporation and the role that employees and their representatives should play in its governance. It implies acceptance of a stakeholder model of organizational change and governance. Short of such a transformation in views, structures, and practices it is unlikely that the rhetorical call for firms in Canada (or the U.S.) to use human resources and technology for competitive advance will be turned into a reality.

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