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LINKAGES BETWEEN INDUSTRIALIZATION STRATEGIES AND INDUSTRIAL RELATIONS/HUMAN RESOURCE POLICIES: SINGAPORE, MALAYSIA, THE PHILIPPINES, AND INDIA

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{{abstract}}
The case studies of Singapore, Malaysia, the Philippines, and India presented in this paper support the author's contention that a country's industrialization strategy for economic development profoundly influences its industrial relations (IR) and human resources (HR) policy goals. The author finds that import substitution industrialization was associated with IR/HR policy goals of pluralism and stability, while a low-cost export-oriented industrialization strategy was associated with IR/HR policy goals of cost containment and union suppression. In countries that moved from a low-cost export-oriented strategy to a higher value added export-oriented strategy, the focus of IR/HR policy goals shifted from cost containment to work force flexibility and skills development. The four countries diverged, however, in the specific institutions and arrangements they adopted to meet national IR/HR policy goals, due to different political choices made by dominant actors and different institutional industrial relations histories.

The expectation that the logic of industrialism would make industrial relations systems increasingly similar (Kerr, Dunlop, Harbison, and Myers 1964) has not withstood the test of history: today's "advanced" countries have vastly different industrial relations systems. However, industrialization continues to be a central explanatory variable in research on the transformation of industrial relations systems in "developing" countries, particularly in Asia, given that continent's rapid industrialization over the past two decades.

In this paper I argue that industrialization strategies (IS's) and industrial relations and human resource (IR/HR) policy goals are closely intertwined and mutually reinforcing. Changes in the focus of national IR/HR policies are strongly influenced by changes in IS, since IR/HR policies are important components of the industrialization strategies of countries. In Asia, the key determinants of industrial relations change are the *choice* of an industrialization strategy and the *shifts* between strategies, not the *logic* of industrialism (Kerr et al. 1964) or the *levels* of industrialization (Sharma 1985).

This paper does not fully examine the reasons different countries chose certain IS's, nor does it analyze the causes of variations across countries in the institutional arrangements adopted to meet IR/HR policy goals, although I do present hypotheses concerning these issues. The focus is largely on the relationship between IS's and IR/HR policy goals at the national level.

To support this argument, I present case studies of four vastly different Asian countries: Singapore, Malaysia, the Philippines, and India. I chose these countries for three reasons. First, all four experienced shifts in their IS's after their independence. Second, the countries are currently following different IS's. Singapore currently follows a mixed strategy of advanced export-oriented industrialization and exports of services; Malaysia is in transition between low-cost and advanced export-oriented industrialization; the Philippines is primarily a low-cost exporter; and India has long pursued an advanced import substitution industrialization strategy and is currently shifting toward an export-oriented strategy. Thus, these countries permit both longitudinal and cross-sectional analyses of the links between IS and IR/HR. Third, the four countries differ vastly in their economic and industrial relations conditions.

{{1}}**Relevant Literature and Argument**

Space constraints disallow a long review of the large and burgeoning literature on industrialization and economic development. The literature reviewed in this section is therefore illustrative.

Previous researchers have had different views regarding the relationship between IS and IR/HR policy goals. Kerr et al. (1964) claimed that the logic of industrialism causes a convergence of industrial relations systems at both national and workplace levels: to put the case briefly, modern technology requires modern institutions. Frenkel (1993) suggested that the level of industrialization determines the influence of trade unions on workplace industrial relations, with unions in more advanced Asian countries having greater influence. Sharma (1985) and Bjorkman, Lauridsen, and Marcussen (1988) argued that different stages of industrialization reflect different regimes of capital accumulation, leading to different kinds of capital labor relations. Frenkel and Harrod (1995) concluded that industrialization does not result in convergence to any specific IR model, given differences in technology, national institutions, and political dynamics. Deyo (1989) focused on the weakness of East Asian labor movements in the context of export-oriented industrialization and suggested that this weakness is linked to structural economic factors, communities' role in engendering labor organizing and protest, the oppositional potential of workers, and the degree to which elites intervene to control labor dissent. While this literature points to the existence of a link between IS and IR/HR policies, the nature of that link is never clarified due to differences in approaches and dependent variables.

This paper draws on the work of Roemer (1981), Haggard (1990), Bradford (1990), and Gereffi and Wyman (1990) to develop a typology of industrialization. Several different patterns (or trajectories) of industrialization exist. These patterns are distinguished primarily by whether they are inward- or outward-oriented and by the sector of their focus (Gereffi and Wyman 1990). An import substitution industrialization (ISI) strategy, for example, typically focuses on the promotion of locally owned industries catering to a relatively large domestic market in order to conserve foreign exchange and to promote industrialization and local entrepreneurship. Under this strategy, domestic industries are protected from foreign competition through state regulation and high import tariffs. In some countries all sectors are protected, while in others only the state-owned sector enjoys protection. The primary outcome of ISI is the generation of a local industrial base with local capital.

Within the ISI strategy category, however, there is some variation. As Gereffi (1990) noted, primary ISI most often focuses on developing consumer goods industries, while secondary ISI uses domestic production to produce substitutes for imports of a variety of capital- and technology-intensive manufactured goods, consumer durables (for example, automobiles), intermediate goods (for example, petrochemicals and steel) and capital goods (for example, heavy machinery). The focus of a secondary ISI strategy is to create a domestically owned diversified industrial base that will fuel future economic growth. Singapore, Malaysia, and the Philippines, during the early stages of their post-independence development, pursued a primary ISI strategy; India followed a secondary industrialization strategy until 1990.

In contrast, export-oriented industrialization (EOI) typically involves an outward-looking focus, with foreign exchange earnings constituting the basis for economic development and growth. Typically, under this strategy, appropriate incentives for export and for inward foreign investment are enacted by the state. Here, too, there is variation. In Asia, primary EOI has been characterized by labor-intensive manufactured exports (often electrical and electronic components, footwear, and garments), for which the primary source of competitive advantage is the low costs of labor and production. In several Asian countries, this export growth has been financed by foreign investments made by multinationals, although Korean EOI has been largely financed by domestic firms and the state. Secondary EOI includes the export of higher value added items that are skill-intensive and require a relatively developed industrial base. Secondary EOI includes the strategies of "industrial deepening" noted by Cheng (1990) in Korea and Taiwan. There also exist other types of industrialization strategies, such as the "heavy industries strategy" and the "small scale industrialization strategy" alluded to by Roemer (1981), as well as the commodity export strategy that predated the ISI strategies used in the countries studied here, before their independence (Gereffi and Wyman 1990).

In this paper I describe four countries' dominant strategies to illustrate how IS and IR/HR policy goals are closely intertwined. However, it must be noted that identifying a country's industrialization strategy is difficult, since several IS's can be pursued at the same time. The typology used in this paper refers to the industrialization strategy that is most prominent at any given time. It is also difficult to pin down the exact dates of strategy shifts, since shifts invariably take several years to accomplish. As the cases will show, the shift from primary to secondary EOI in Singapore took approximately three years (Rodan 1989), while in the Philippines, the shift from ISI to Primary EOI took almost 20 years, partly because of the lack of coherent IS policies (Bello and Verzola 1993).

To analyze IR/HR policy goals, I use an inductive approach, based on what governments have done. In some countries these government policy goals include political suppression of unions to keep labor costs down, and in others they include union restructuring, restrictions on the subjects of collective bargaining, or changes in wage and overtime payment systems. In the primary EOI regime, for example, the key policy goal of the government involves keeping wages and other labor costs low. Government policy goals are in some instances inferred from the actions taken by the state. In most cases, I have selected only policy goals that suggest a major change in direction. I focus on the IR/HR policy goals affecting the private sector in each country.

IS's require particular national-level industrial relations policies for a number of reasons. For example, an export-oriented industrialization strategy based on cheap labor and foreign investment requires a cheap labor force with the appropriate levels of productivity and skills, a labor movement whose structure and policies do not deter foreign investment through labor militancy or resistance to the introduction of new technology, and dispute resolution mechanisms that can quickly solve industrial conflict. The dominant actor (in these countries, the state) will ensure that appropriate industrial relations and human resource legislation is enacted to support the industrialization strategy.

The transition to secondary EOI requires IR/HR policies that emphasize productivity, increased skills formation, and workplace flexibility (defined as the ability of the employer to quickly react to changes in the market by restructuring work organization, compensation, human resource practices, and labor relations).[1] This transition often implies fundamental changes in national-level policies.

In addition, changes in workplace practices and production organization will force employers to substitute positive human resource practices for repressive labor management strategies, and such developments at the workplace or firm level will require supporting national level IR/HR policy changes. Therefore, different IS's imply different goals for national IR/HR policy. Under primary ISI, the lack of significant external competition permits the state to pursue pluralistic IR/HR policy goals. Under secondary ISI, the requirements of different industries for productivity gains force a change in the IR/HR policy goal. The focus of national IR/HR policy under typical primary EOI will be keeping labor costs low, and its focus under secondary EOI will be flexibility and productivity enhancement.

The reasons for the adoption and even success of the IS are often idiosyncratic (see Bowie 1991 for Malaysia; Rodan 1989 for Singapore; and Bello and Verzola 1993 for the Philippines). Adoption of IS could also be linked to the need for imitating successful development strategies (Cheng 1990), may be orchestrated by either "independent" states or "dependent" states (Frenkel and Harrod 1993), or may be linked to globalization. Similarly, the adoption of particular IR/HR policies may be caused by factors other than IS. For example, Haggard (1990) and Deyo (1989) argued that suppressive labor policies were initiated in some countries for political reasons, even before the adoption of EOI. This paper focuses not on the reasons an IS is adopted, but rather on the ways in which IS and IR/HR policy goals are mutually reinforcing (see Figure 1).[2]

{{Figure 1 about here. This is actually a sort of table; see hard copy and end of this electronic copy.}}

While there is a strong interrelationship between IS's and IR/HR policy goals across countries, the specific institutional industrial relations arrangements in each country vary tremendously. What explains these variations in industrial relations institutions within and across industrialization regimes? I would suggest that the specific institutional arrangements used to meet IR/HR policy goals are determined by the *political* choices made by the state in each country, as well as the previous industrial relations institutional history in each country. The ability of the state to fully enact policies consistent with the focus of the IS is constrained by several political and social factors, such as the degree of political stability and opposition to the ruling government, the legitimacy of the government, the nature of the political system, the institutional history of industrial relations, and the strength and political influence of trade unions.[3]

{{1}}**Country Studies of Industrialization Strategies and IR/HR Policy Goals**

This section describes the industrialization strategies and IR/HR policy goals of four countries—Singapore, Malaysia, the Philippines, and India—drawing from recent research. The date of independence is used as the starting point of the analysis in each country to ensure consistency in the comparisons. Note, however, that each of these countries had an IS even prior to independence (Gereffi and Wyman 1990).

{{2}}**Industrialization Strategy and IR/HR Policy Goals in Singapore**

Singapore adopted an import substitution industrialization (ISI) policy after independence in 1959. Because an ISI policy requires a large internal market to be self-sustaining, Singapore reunited with the Federation of Malaya in 1961, which provided it with a large market. Despite the economic rationale for integration, however, political differences resulted in a breakaway from the Malay federation in 1963 (Huff 1987). As Huff suggested, given the lack of a large market and local entrepreneurship talent, Singapore had no choice but to adopt an outward-looking export-oriented industrialization (EOI) strategy financed by foreign investment for its economic development. Rodan (1989:85) suggested that after the collapse of the federation and the ISI strategy, the People's Action Party

(PAP, the party in power in Singapore) employed the "ideological apparatus of the state to sponsor values and attitudes that enhanced the poltical legitimacy of the PAP's right to exclusive power to determine the course ahead."

The state-sponsored primary EOI strategy adopted in 1965 initially focused on attracting foreign investment in the radio receivers and televisions industries. Attracting foreign investment required policy changes in several different areas, such as infrastructural development (the development of transport, communication, free trade areas, and export processing zones); financial and fiscal incentives (land subsidies, electricity and power subsidies, building subsidies, exemption from corporate taxes, and export duty subsidies); and industrial relations policies (Huff 1987).

During British colonial rule the focus of industrial relations policy was on the control of communist unions through the union registration process, although the colonial administration enacted laws ensuring minimum standards in wages, conditions of employment, collective bargaining, and arbitration. With the adoption of EOI, however, the focus of the state's industrial relations policy was to provide foreign investors with a "stable, cheap, and flexible industrial relations system" (Chiang 1988:239). Stability in industrial relations was promoted through the creation of a tripartite national governance structure. The National Trade Union Congress (NTUC), aligned with the PAP, led by Lee Kuan Yew, and the Employers Federation (SNEF) were provided with representation in all important national bodies, including the National Wages Council, the Economic Development Board, the Housing Board, and the Employees Provident Fund Board, as well as various other boards in several different spheres of government (Chiang 1988). To create responsible unionism, the government provided funding to the labor movement for the education of union leaders and members regarding economic development issues (Chiang 1988).

At the local level, workplace flexibility was promoted through many IR/HR policies. One such policy was to place restrictions on the subjects of bargaining; specifically, transfers, promotions, job assignments, redundancies, layoffs, and retrenchments were deemed to fall outside the scope of bargaining.[4] To contain industrial disputes in the interest of economic development, the right to strike was prohibited in essential industries, and in nonessential industries the ability of unions to strike was circumvented through various administrative requirements.[5]

Further, to ensure cost control, the Industrial Arbitration Court was empowered to ratify all collective bargaining agreements and to reject agreements if they conflicted with Singapore's national interest (Chiang 1988; Krislov and Legget 1985). To provide employers with stability in industrial relations and labor costs, the period of collective bargaining contracts was fixed at five years. Wage increases were controlled via wage guidelines of the tripartite National Wages Council that took into account the competitive position of Singaporean exports (Chew and Chew 1995). Clearly, these workplace policies reflected the need to provide foreign investors with both stability and flexibility in industrial relations.

The low-cost foreign investment–dominated EOI strategy adopted in 1963 was largely successful. By the early 1970s, manufacturing accounted for 21.4% of employment, up from 9.3% in 1965. The contribution of manufacturing to GDP increased from 15.6% in 1965 to 23.9% in 1980. In 1980, about 20 foreign corporations accounted for 76% of manufactured output, 65% of capital formation, 28% of GDP, and 82% of manufacturing exports (Huff 1987).

By 1974–76, rising wage levels due to labor shortages in manufacturing, combined with increased competition from other low–labor cost Asian nations such as Korea and Taiwan, threatened the future of a low-cost EOI strategy. The state aggressively spearheaded a second industrialization phase toward higher value added foreign investment, primarily in computer assembly and semiconductor manufacture, beginning in 1980.[6] The shift into a higher value added EOI was assisted by the tripartite National Wages Council, which recommended wage increases that were in excess of 12% for three consecutive years between 1979 and 1981. These high wage increases drove out low-cost producers (Rodan 1989:145).

This high tech EOI strategy required IR/HR policies providing high technology and capital-intensive investors with highly skilled labor. As Chew and Chew (1995) suggested, several policy changes were introduced to meet these needs. The education system was restructured in 1981. The new curricula emphasized secondary education, several vocational training institutes and polytechnics were opened, and a new university (the Nanyang Technical University) was established to provide foreign investors with skilled labor (Begin 1993).

In order to provide companies with greater flexibility in industrial relations (the ability to quickly make changes in workplace rules), the state altered the union structure in 1981. Although the government initially sponsored a shift toward German-style industrial unionism, arguing that industrial relations outcomes should reflect industry-specific characteristics, the diversity of foreign investment eventually led the government to accept the National Productivity Council's recommendation to implement Japanese-style enterprise unions, called "house" unions. The claim was that the house unions would increase firm level flexibility and productivity, and allow collective bargaining outcomes to reflect the financial circumstances of each firm rather than each industry (Chiang 1988).

To encourage firms to continuously invest in skill enhancement and training, the Skills Development Fund (SDF) was introduced in 1982. The SDF legislation requires firms employing 50 employees or more to pay 2% of their payroll costs into the SDF. Employers contributing to the SDF can recover 80% of their contributions, provided they invest in training (Chew and Chew 1995). Applications for funds for training can be based on either a single training program or an entire year's training calendar. This system not only provided an economic incentive for skills development, but also was able to subsidize skill formation in smaller firms that do not contribute to the fund (Chew and Chew 1995).

A final change in industrial relations policy made in 1981 to support the new advanced EOI strategy was seen in wages. The National Wage Council discouraged centralized wage setting by recommending wage increases that reflected the "profitability, performance, and progress of different industries" (Pang 1983:32–33). Following wage freezes after the 1985 recession, the NWC resumed its drive toward increased workplace flexibility by advocating flexible wage systems that would increase the variable portion of wage increases and use lump sum payments instead of base wage increases (*Straits Times,* Nov. 19, 1993).

Although the driving out of low-cost producers in the early 1980s caused a temporary economic slow-down in the early 1980s, by 1986, the restructuring of investment incentives and the investments made in education and skills development began to pay off. Higher-quality Japanese investments appeared, expanding the manufacturing of semiconductors, disk drives, and computer assembly. The technological depth of the foreign investments increased steadily, with many firms (for example, Motorola) locating higher-end processes and R&D services in Singapore (Salih, Young, and Rajah 1988). The influx of investment resulted in a shortage of skilled and unskilled labor, and in 1986, immigration policy was altered to allow the importation of "guest workers." By early 1987, more than 195,000 guest workers had been imported (Huff 1987).

Singapore's economic development strategy is currently undergoing a shift. By the end of the 1980s, with a skilled work force and a higher-wage economy, Singapore began to turn to the service sector for continued growth after facing increased competition from other Southeast Asian countries such as Malaysia in the manufacturing of electronics. The predominant strategic change currently under way is to emphasize the finance, banking, and ports sectors in order to make the country a regional financial center and a trading and ship repairs center (Huff 1987). The service sector now accounts for 53.8% of GDP and 30% of total employment.

Singapore's industrial relations system demonstrates both stability at the national level and flexibility at the local level. At the national level, unions have significant voice in decision-making.[7] At the local level, the enterprise union structure, coupled with the restrictions on the ability of trade unions to bargain and strike, and the efficacy of the Industrial Arbitration Court (Krislov and Leggett 1985) have completely eliminated strikes. Labor-management relations are cordial, and real wages have increased steadily since 1985 (see Table 1). The trade union movement has focused its efforts on servicing its members in different spheres through the creation of union-run cooperatives for transportation, textbooks, insurance, and supermarkets, and the unions also sponsored a consumer movement (Chiang 1988). With the decline of manufacturing and the rise of services, union density fell sharply from a high of 25% in 1970 to 14.5% in 1993 (Begin 1993).{{Table 1 about here}}

The stable yet flexible IR system that Singapore created was necessary given the country's need to attract foreign investment. The choice of the specific tripartite institutional framework, however, was facilitated by several political factors, such as the lack of significant opposition to the PAP (see Chew and Chew 1995), the ability of Lee Kuan Yew to get union leaders to buy into the tripartite arrangement, and the broad societal acceptance of the need for foreign investment and exports. Arguably, the ability of trade unions to have voice in important national level decisions through the tripartite framework more than compensated for the curtailment of bargaining subjects at the local level.

The Singaporean case also demonstrates that higher technology–intensive EOI is associated with IR/HR policy that is focused on workplace flexibility and skill development. Further, IR/HR policies were well integrated with macro policies focusing on education, immigration, and economic development. In fact, Singapore provides a model of macro policy integration that other countries such as Malaysia have tried to emulate.

{{2}}Industrialization Strategy and IR/HR Policy Goals in Malaysia

Like Singapore, Malaysia embarked on a vigorous ISI strategy after independence, although its ISI phase lasted longer given its larger internal market. The first phase of ISI (1957–63) focused on infrastructural and rural development, with industrialization left to the private sector. In the second phase of ISI (1963–70) the state emerged as a leading investor, motivated by the New Economic Policy (NEP) that promised the economic advancement of ethnic Malays (relative to ethnic Chinese and Indians). The NEP was based on the premise that the primary way to accomplish this goal without ethnic strife was to enact policies that would ensure rapid economic growth, and at the same time, through regulation, reserve both investment and jobs for Malays (see Kuruvilla and Arudsothy 1995; Bowie 1991; and Spinanger 1986).[8]

During the ISI phase, industrial relations in Malaysia reflected the system inherited from the British, with legislation providing for collective bargaining and minimum standards, while the focus of government policy was to contain conflict in the interest of economic development (Kuruvilla and Arudsothy 1995). The prohibition of political strikes and restrictions on the ability of the various national labor federations to carry out trade union functions (they were registered as societies) also ensured that the Malay-dominated government had control over the labor movement (Arudsothy 1990). At the level of the workplace, the legislation was similar to that of Singapore, with restrictions on the subjects of bargaining (transfers, promotions, layoffs, retrenchments, and job assignments being deemed outside the scope of bargaining), and restrictions on the ability of unions to strike.[9] During this period, there was relatively steady union growth, while wage bargaining was largely at the industry level, particularly in the plantations sector. Since the government did not use the extensive powers it commanded to regulate industrial relations in this phase, Kuruvilla and Arudsothy (1995) have referred to this period as "controlled pluralism."

A resource crunch resulting from NEP policies, the state's failed heavy industries program, and Malaysia's increasing foreign debt (which was 30% of GNP by the mid-1980s) forced Malaysia in 1973–74 to embark on an intensive export promotion drive based on cheap manufactures financed by foreign investment (Spinanger 1986; Bowie 1991). The mechanisms used to induce foreign investment, largely in the electronics industry, were similar to those followed by Singapore, except in industrial relations, where several new policies were enacted (Kuruvilla and Arudsothy 1995).

The first direction of change in IR/HR policy reflected the need to contain costs in the export sector. By 1975, policy changes included an extension of tax and labor exemptions for foreign corporations (companies were exempted from several labor protection laws), an alteration of the definition of wages for the calculation of overtime to reduce costs in the export sector (which used overtime because of the labor shortage), and a reduction in the rate of overtime pay for working on holidays and rest days. The emphasis on cost containment could also be seen in the government's refusal to enact minimum wage legislation for the export industry, and its refusal to enact equal pay for equal work in the export-oriented electronics sector, where 78.6% of those employed were female (Rajah 1994; Grace 1990).

A second direction of change in IR/HR policy focused on union control, largely at the local level. As part of the "look east" policy of the Prime Minister in 1980, the government encouraged the formation of Japanese-style enterprise unions (currently about 30% of unions are enterprise-based) (Arudsothy and Littler 1993).[10] In the export-oriented electronics sector, unions were banned. Although the ban on electronics unions was lifted in 1988 due to international pressures (Kuruvilla and Arudsothy 1995), electronics workers were not permitted (unlike their counterparts in the electrical industries) to affiliate themselves with national or industry level federations. A combination of state policies and employer opposition (Kuruvilla and Arudsothy 1995) ensured that the electronics sector continued to be union-free (less than 10% of electronics firms are unionized). The decision to allow only in-house unions in electronics is largely attributed to pressure from foreign investors (Grace 1990), although it is also consistent with the government's pursuit of a low-cost export-oriented strategy.

The third direction of change in IR/HR, involving a more activist involvement of the government in industrial relations matters, arguably developed because of the government's role as an investor and employer as a consequence of the Heavy Industries Program. Kuruvilla and Arudsothy (1995) documented the different manifestations of the new activism, including extensive powers given to the labor minister to declare industries "essential" and to suspend trade unions acting against the "national interest," and greater involvement in union recognition cases (with increased rejection of registrations in manufacturing) and in dispute settlement, where an increased number of cases were referred to compulsory arbitration. The greater involvement of the government in industrial relations reflected efforts to contain industrial conflict in the interest of fast-paced economic development.

The low-cost EOI strategy has paid rich dividends. By 1989, the manufacturing sector accounted for 30% of GDP (up from 15% in 1970) and 40% of export earnings, and the contribution of transnational corporations to exports increased from 28% of total exports in 1971 to 58% in 1988 (Kuruvilla and Arudsothy 1995). The electronics industry, the centerpiece of the dramatic export performance, employed 16.7% of the manufacturing work force in 1988 (Onn 1989), and exports of semiconductors exceeded M $4 billion, comprising 24.8% of total manufacturing exports, in 1989 (Grace 1990). The Malaysian economy registered annual growth rates of over 6% during the 1980s.

Yet, in the mid-1980s, an impetus for changing this low-cost manufacturing export strategy came from firms within the electronics industry. While the low-cost EOI strategy attracted foreign investment, it also resulted in a labor shortage. (Currently, out of a work force of about 13 million, roughly 2.5 million are guest workers, according to government statistics, while unofficial estimates place the figure at 4 million; see Kuruvilla and Arudsothy 1995.) The consequent rise in wage costs (annual wage increases exceeded 6% during the latter half of the 1980s), combined with a world-wide recession in 1985, forced the electronics industry to restructure itself. The industry started to shift toward increased automation and adopted new forms of flexible work organization (see Rajah 1994). Competition from low-cost producers in other countries, and the need to build forward and backward linkages involving the electronics industry, motivated the state to formally announce a shift from its primary EOI strategy. The new strategy emphasized the attraction of more technology-intensive foreign investment, but also emphasized the need for Malaysia to build and deepen its industrial structure.

The new industrial strategy (revised and articulated in the state's Vision 20/20 plan) implied restructuring of investment incentives to attract higher technology-based capital investment (the attraction of R&D and higher-end processes of semiconductor manufacture were key goals) and the creation of small-scale industries (which were expected to stimulate linkages primarily as subcontractors to the electronics industry [PSDC 1993]). The new strategy also implied several macro economic and social policy changes. Immigration policies were altered to allow the import of both skilled and unskilled "guest" workers, given the labor shortage. The education sector was reformed and deregulated, leading to a mushrooming of private colleges having exchange arrangements with universities in Australia and Canada (Young and Kiat 1992). Between 1985 and 1992, enrollment in polytechnics increased by 113%, and enrollment in colleges increased by 45% (Young and Kiat 1992).

The central elements of IR/HR policy thus have shifted away from cost containment and union control to training and skills development designed to provide a better-quality work force necessary to attract higher-technology investment. More specifically, the government enacted the Human Resources Development Act in 1992, which established the Skills Development Fund, similar to that of the Singaporean system. The 1% of payroll cost paid by all firms is matched by the government, and the SDF subsidizes training costs of all applicant firms. The tax on the firm is larger than in Singapore, however, since each firm can only take back a maximum of 60% of its contributions to the SDF (Kuruvilla and Arudsothy 1995).

At local and regional levels, skills development centers have been set up by the government to work in collaboration with business. These efforts are complemented by initiatives in the private sector, such as the new agreement between the Federation of Malaysian Manufacturers and the University of Science and Technology for skill training programs, and the initiatives taken by foreign multinationals in Penang. Although these firms are often fierce competitors in the international semiconductor market, they cooperate locally in the development of skills at the Penang Skills Development Center (PSDC 1993). Wage bargaining has been decentralized to the enterprise level in the unionized sector, although in some industries, such as banking and plantations, industry-level bargaining is still the norm (Kuruvilla and Arudsothy 1995).

The move to advanced EOI has continued to attract foreign investment of high quality. Rajah (1994) suggested that higher-end processes such as chip design, wirebonding, and research and development operations are increasingly being located in Malaysia. Work organization in the electronics industry mirrors practices followed in the advanced countries, and human resource management techniques are based increasingly on the development of skills with high pay and employee involvement in a nonunion environment (Rajah 1994).

In sum, in Malaysia, industrial relations at the workplace level in the export sector exhibits the goal of workplace flexibility. In the more traditional ISI sector, industrial relations at large state-run organizations like the Malaysian Airlines System and Proton (a car manufacturer) also shows trends toward increased joint labor-management consultation and flexibility (Rajah 1994). At the national level, however, the Malaysian government has resisted the efforts of labor federations to unite into a single federation, and the government's recent "behind the scenes" support of a rival labor federation is indicative of its intention to keep the labor movement fragmented in the interests of political stability (Arudsothy and Littler 1992). Union density has steadily declined in Malaysia from over 12% to 9.9%, and the export manufacturing sector is increasingly nonunion. The growth in real wages (average annual growth has exceeded 6% since 1987), coupled with a labor shortage and union suppression and substitution practices of employers, has successfully prevented the growth of the labor movement. In sum, a shift to a nonunion model at the local level and fragmentation at the national level is apparent (Frenkel 1993).

The Malaysian case suggests a congruence between first-stage EOI and an industrial relations system geared toward cost containment. In addition, the institutional arrangements governing industrial relations included several elements of labor suppression. During the transition to second-stage EOI, however, Malaysia's industrial relations policies have increasingly resembled Singapore's, with a clear congruence between a more advanced EOI and policies focusing on skills development. And as in Singapore, EOI based on higher skills in Malaysia is bringing about an integration between IR/HR policies and macro level policies focusing on education, immigration, and economic development. The lack of opposition to the ruling political party (the Barisan National Front, which was a coalition between the United Malay National Organization [the party of the ethnic Malays] and the parties representing the ethnic Chinese and Indians, MCA and MIA respectively), and the economic advancement of the largest section of the Malaysian population (the Malays) under the current economic development strategy, provided the state the legitimacy to enact policies that apparently trade off labor and union rights for increased foreign investments in the export sector. The demands of foreign investors also appear to have been an important factor in influencing the state's choice of institutional industrial relations arrangements in the export sector (Grace 1990).

{{2}}Industrialization Strategy and IR/HR Policy Goals in the Philippines

The Philippines adopted an ISI strategy (after postwar independence) that used tax incentives and protection from foreign competition to stimulate the growth of local industry. The ISI strategy successfully fostered the growth of a new domestic industrial-capital elite, and expanded manufacturing, which experienced annual growth rates of 14% between 1949 and 1953 and 11% between 1953 and 1959 (Villegas 1988). The dependence of the Philippines on the import of capital and technology to sustain its ISI strategy, however, resulted in a balance of payments crisis in 1960 (Ofreneo 1994). The shortage of foreign exchange was alleviated by stabilization loans from the International Monetary Fund (IMF) and the World Bank, granted on the condition that the Philippines deregulate its economy and open it to foreign investment through adoption of an EOI strategy (Bello, Kinley and Elinson 1988).

During the ISI phase, the focus of IR/HR policy was pluralistic, with little effort to tinker with inherited IR/HR institutions, which were primarily American. For example, the Industrial Peace Act of 1953 was based on the Wagner Act and promoted free collective bargaining, voluntary arbitration, unfair labor practice legislation, and business unionism. The number of registered unions increased from 435 to 839 during the 1950s, with a new generation of union leadership in ISI industries such as textiles, banking, sugar, and mines (Ofreneo 1994).

The 1962–72 period was characterized by a mixed approach to industrialization. The powerful agricultural elite continued to push for economic liberalization and free trade, while the new industrial elite argued for the continuation of protection for ISI industries that had just stablilized (Bello and Verzola 1993). Some liberalization followed, via a devaluation of the peso and removal of protections in some sectors (Villegas 1988). Social unrest resulted from the devaluation of the peso, however, and set the conditions for the declaration of martial law in 1972 (Villegas 1988; Ofreneo 1994). Martial law allowed the Marcos regime and its World Bank advisers to implement the recommendations contained in the Ranis Mission report (a World Bank–funded mission) and the World Bank Country Report of 1975, both of which argued for a full-scale export-oriented agricultural and industrial strategy based on the comparative advantage of cheap labor. To attract multinational corporate investments in export processing zones established in Bataan and Mariveles, the government accelerated the decontrol of trade; increased foreign borrowings to finance reforms in education, industry, and financial systems; simplified tariffs and customs codes; and rationalized investment incentives (Villegas 1988; Macaraya and Ofreneo 1993).

To keep costs low to attract foreign investment, industrial relations policies were transformed through a new labor code introduced in 1974 (Villegas 1988). A key change in IR/HR policy focused on guaranteeing industrial peace to foreign investors. A ban on strikes was instituted, but later modified to apply only to "vital" industries "including those engaged in the production and processing of commodities for export" (Villegas 1988:61). The Secretary of Labor was empowered to obtain injunctions against strikes. Compulsory arbitration also was introduced through the National Labor Relations Commission. Unions were prohibited from soliciting contributions to their strike funds, and all existing strike funds were to be shifted to labor education and research purposes. In addition, Article 271 of the labor code banned foreign donations to unions. These provisions, notes Villegas (1988), significantly weakened the unions' ability to strike in non-vital industries. Unfair labor practices by employers were "decriminalized."[11] Furthermore decree No 1458 allowed permanent replacement of striking workers (Villegas 1988).

The second direction of change in IR/HR policy focused on union structure, to facilitate a tripartite corporatist arrangement for stability in industrial relations. The highly fragmented labor movement was restructured on a "one union in each industry" principle. Unions were required to become affiliated with one recognized labor center, the Marcos-controlled Trade Union Congress of the Philippines. An employers confederation was also formed to participate in tripartism.[12]

The third direction of change in labor policy focused on the provision of cheap labor to the growing numbers of foreign investors in the EOI sectors. The National Manpower Youth Council ensured a constant supply of trained workers, and the Apprenticeship Program allowed children aged 14 and older to be employed in export industries at a fraction of the prevailing minimum wage (Villegas 1988). Although minimum wages were revised numerous times, these increases fell far short of the rise in living costs.

The final direction of change in IR/HR policy was a downward revision of existing labor standards regarding working hours, overtime, and health and safety. This change was justified on grounds that existing labor protection standards were too high and did not reflect Philippine realities (Villegas 1988).

The martial law period did not accomplish a full-scale EOI strategy, given the continuing dominance of some of the industrial elites during the period of "crony capitalism" described by several authors (for example, Macaraya and Ofreneo 1993). However, foreign investment in the low-cost electronics sector continued to increase, along with foreign aid, and both helped sustain the EOI strategy. Repeated devaluations of the peso, coupled with a financial crisis that stemmed from the political excesses of the Marcos regime, the failure of domestic industries under an export regime, and the inability of exports to offset the debt payment requirements in the 1980s (the debt had reached 93% of GNP in 1986) resulted in further dependence on World Bank financing (Macaraya and Ofreneo 1993; Bello and Verzola 1993). The result was a series of "structural adjustment" loans in 1983 and 1986.

The strategic thrust of structural adjustment was a more determined implementation of EOI and deregulation of the economy, coupled with a systematic easing out of inefficient Filipino firms (Macaraya and Ofreneo 1993; Villegas 1988). The World Bank's report on the Philippines emphasized that "priority should be given to the continued expansion of labor-intensive manufacturing taking advantage of the competitive aspect of labor costs" (Villegas 1988:70).

Foreign investment increased by 1156% after the structural adjustment policies were implemented in 1983 (Macaraya and Ofreneo 1993). The nontraditional manufactures (electronics and garments) attracted 80% of the investments, and by the end of 1983, the electronics sector accounted for 32% of total Filipino exports (Macaraya and Ofreneo 1993). However, the removal of policies protectioning domestic industries and the devaluations of the peso had a devastating impact on domestic industries. For example, the number of closures of domestic firms climbed from 831 in 1981 to 2,284 in 1984 (Department of Labor and Employment 1985).

To contain the growing strikes against martial law, the government enacted BP 130 (prohibiting strikes against the national interest) and BP 227 (allowing the use of law enforcement agencies to control strikers). In addition, procedures for terminating workers were simplified in response to employer pressures (Villegas 1988), leading to increased layoffs and terminations. During 1981–82, 65,000 workers were laid off annually, whereas during 1983–85, after the 1983 implementation of structural adjustment, the annual number of layoffs increased to 82,000 (Department of Labor and Employment 1986). At least 60% of workers in the growing export sector were still receiving less than the minimum wage in the early 1980s, and this period witnessed a decline in union membership from 12.2% to 9.3% (Villegas 1988). These developments intensified the schism that existed between the pro-government TUCP and other illegal labor centers such as the KMU and FFW that opposed structural adjustment policies. This deep schism in the Filipino labor movement still persists (Ofreneo 1994).

Structural adjustment continued under the democratic regimes of Aquino and Ramos, although labor laws were altered to expand union rights. Union formation was simplified, with mandatory representation if 20% of the employees in an establishment petitioned for representation. Collective bargaining was allowed in the public sector, and the one-union-per-industry rule enacted by the Marcos regime was withdrawn. In cases of unfair labor practices such as the firing of union activists, the mandatory 15-day cooling off period before labor action was rescinded, and a simple majority was deemed sufficient in strike ballots (a change from the previous requirement of a two-thirds majority). However, the provisions restricting strikes, such as BP 130 and BP 227, continued to be enforced more firmly than during the Marcos regime, and the government cracked down on illegal strikes (Ofreneo 1994).

In an effort to curb industrial unrest, arbitration was mandated to be the final step in all grievance cases, and the terms of collective bargaining agreements were fixed at five years. To encourage more collaborative labor-management relations, a joint labor-management consultation scheme based on the Japanese example of JCC's was introduced, and a form of tripartism was introduced under which labor centers participated in the setting of regional minimum wages. It is still too early to evaluate the effects of these changes.

Although President Aquino rolled back the more repressive elements of Marcos's labor policy, suggesting a return to the sort of pluralistic policy that the Philippines had immediately after World War II, this has not resulted in the strengthening of the labor movement, nor has it promoted more stable industrial relations. If anything, easing of the rules governing union formation has resulted in even more fragmentation of the labor movement, with 7 or 8 national centers, 155 national federations along a myriad of political lines, and more than 5,600 independent local unions organized on a "general unionism" principle (Ofreneo 1994). Inter-union rivalry ("every federation behaves like a general at war with the other generals" [Ofreneo 1994:324]) has resulted in a weak union movement, with few union victories in representation elections. The unions rely on the minimum wage as the floor for collective bargaining, and their economic muscle is weakened by the restrictions on strikes, the government's crackdown on illegal strikes, and employers' replacement of striking workers. Further, subcontracting, casualization, and the use of contract labor have increased five-fold, and have contributed to declining union power (Ofreneo 1994). Although trade unions claim a total of 3,000,000 members, the actual number of workers covered by collective bargaining contracts is under 600,000 (Department of Labor and Employment 1993). While strikes have declined over the past two years, the number of cases pending arbitration has increased sharply, suggesting that there is still conflict in the system (Department of Labor and Employment 1993).

The Philippine case suggests a correspondence between low-cost export-oriented development and a cost containment–oriented and repressive industrial relations policy. However, in this case, almost 30 years elapsed between the announcement of the EOI policy and its full implementation. Although the focus of the cost containment–oriented labor policy was consistent with a low-cost primary EOI strategy, the institutional industrial relations arrangements varied across different political regimes. During the Marcos dictatorship labor relations policies were extremely repressive. During the Aquino and Ramos governments, in contrast, democratization led to the removal of the restrictive IR/HR policies of the Marcos era. However, the liberalization of labor regulations to make union formation easier has resulted in an increasingly fragmented labor movement. Furthermore, declines in real wages and job security, the downward revision in labor standards, and an extremely weak union movement indicate that IR/HR policies have helped sustain the low-cost development strategy. Finally, the Philippines case also suggests that pressures from external bodies such as the World Bank and IMF can strongly influence a government's industrialization strategy and consequently the industrial relations system.[13]

Industrialization Strategy and IR/HR Policy Goals in India

After independence in 1947, driven by considerations of self-reliance, India adopted an advanced ISI model under the rubric of a centrally planned mixed economy (Mathur 1993). The ISI strategy emphasized the growth and long-term development of heavy capital goods industries run by the state with largely indigenous technology (Sodhi 1993). The private sector was regulated through restrictions placed on investment and production capacity. The ISI strategy was sustained by a policy of industrial licensing that regulated the entry of new firms into economic sectors, and extensive import duties ensured the protection of domestic industry from foreign competition.[14] Forty years of ISI resulted in a slow but steady economic growth rate of 2–3% per year, a diversified industrial structure with both heavy industrial and consumer goods industries, a nuclear program, and space industries. Moreover, the insularity of the ISI strategy kept the Indian economy relatively unaffected by worldwide recessions (Singh 1994).

Industrial relations policy in India was influenced by the close ties between political parties and the labor movement forged in the struggle for independence (Ramaswamy 1983). First, labor legislation was extremely protective of labor. In terms of labor standards, India's Factories Act of 1948 is among the most advanced in the world, with maternity leave and benefits, the provision of child care in all factories, and advanced legislation on health and safety.[15]

Second, union formation is relatively simple, with any seven persons being able to form a union. Each political party sponsors its own national union federation, which ensures that a multiplicity of unions are affiliated to various political parties in each enterprise. Efforts to reform union recognition legislation to allow single bargaining agents have been resisted by the political parties (Reddy 1978).

Third, since union leadership is a stepping stone to political leadership, Indian trade union law allows "external" leaders (who are not employed in the enterprise and are normally political figures) to run union affairs. Industrial action therefore is often driven by political considerations not connected with enterprise problems (Ramaswamy 1983).

In terms of collective bargaining, industry-wide bargaining occurs in certain industries where the employers are organized, but bargaining otherwise is decentralized to the enterprise level. Although there are no restrictions on the subjects of bargaining, the Industrial Disputes Act of 1947 restricts the ability of employers to fire, lay off, or retrench employees, or to close businesses. While layoffs are costly (the employer must pay 50% of wages for the first 90 days, and layoffs are permitted only for a maximum of 180 days), retrenchment and the closure of firms require government permission, which, given the close relationship that exists between unions and politicians, is rarely given.

Industrial relations is largely conflictual (the number of man-days lost due to strikes is the highest in the world) despite restrictions on strikes (for example, the provision that a strike or lockout must be withdrawn if the dispute is referred by either party to third party conciliation [Lansing and Kuruvilla 1987]).[16] The dispute resolution system is ineffective, largely because state-appointed conciliation and mediation officers are also political appointees, which allows unions and political parties influence over the dispute settlement procedure (Lansing and Kuruvilla 1987).

The political orientation of trade unions has provided the labor movement with political influence far greater than their union membership alone would warrant. Labor is the swing vote in at least 30% of all parliamentary constituencies, although the labor movement is not large (India has about 47,000 registered unions with about 6 million members, comprising about 2% of the work force [Venkataratnam 1993]).

There is considerable agreement that Indian industrial relations is "inefficient" (see Ramaswamy 1983; Mathur 1993; Lansing and Kuruvilla 1987). The multiplicity of constantly competing unions in an enterprise hinders the development of stable labor-management relationships, resulting in a very high rate of industrial action. The power of unions, it is argued, has resulted in excess employment in the public sector, and slowed rationalization and restructuring in the private sector (Venkataratnam 1993). The protection from foreign competition afforded to

Indian manufacturers, and a guaranteed internal market, created huge and inefficient industries that were not able to compete internationally once the economy was liberalized (Economist 1994).[17]

The ISI strategy and industrial relations policy goals are mutually reinforcing, although they had different roots (labor policy was adopted due to the influence of trade unions, while industrialization policy was adopted in order to attain self-reliance). A protectionist ISI strategy was congruent with a highly protectionist IR/HR system that blocked the development of collaborative and flexible industrial relations.

The best evidence of this congruence can be seen in the actions of manufacturing employers, who, when protectionism was withdrawn with trade liberalization in 1991, started calling for revisions in labor legislation to allow them to retrench workers and close unprofitable firms. Meanwhile, industrialists in other sectors have been calling for a continuation of protection from external competition to give them time to restructure and rationalize their firms (See Sodhi 1993; Venkataratnam 1993).

A balance of payments crisis in 1991 was the factor that precipitated the change in India's economic policy. For several reasons, India's foreign exchange reserves had declined from U.S. $3 billion in 1990 to less than U.S. $0.2 billion in March 1991 (Kuruvilla and Erickson 1994). In danger of defaulting on its debt payments, India approached the World Bank and the IMF for emergency assistance, which was granted on the condition that India "liberalize" its economy and change its "inward orientation."

"Liberalization" is in progress currently. Industrial policy has shifted from ISI to a form of EOI. The licensing of industries has been virtually eliminated, the rules regarding monopoly restrictions have been relaxed, the ceilings on foreign investment have been removed, and the public sector has been opened to privatization. Firms are now allowed free entry into and exit from all industries except for a few strategic ones. In addition to these reforms, trade policy has been revamped to promote exports and freer trade, the Indian currency has been made fully free-floating and convertible, and restrictions on the importation of several goods have been removed. Fiscal policy has been amended to reduce the fiscal deficit and control the underground economy (estimated to be 1/5 of the economy), agricultural subsidies have been reduced, and several price controls have been removed. Furthermore, financial markets have been liberalized, banking regulations have been reformed, and stock markets have been freed from government control (see Venkataratnam 1993; Sodhi 1993).

Economic liberalization has put pressure on industrial relations institutions to change. Both employers (who now must restructure to survive in the face of international competition) and the World Bank are strongly lobbying for changes in IR/HR legislation that would allow firms to lay off and retrench workers without government permission (Sodhi 1993).

Although labor legislation has not yet been changed, IR/HR practices are undergoing rapid change. One significant outcome of structural adjustment and liberalization has been work force reduction. Given their inability to retrench, employers have introduced voluntary retirement schemes (VRS) to shed excess labor. Although precise estimates of the number of people participating in VRS are not available, Venkataratnam (1993) suggested that a total of 5 million jobs will be lost through VRS, plant closures, and the privatization of inefficient public sector organizations.

Employers' industrial relations practices clearly have become more aggressive recently. For example, the number of lockouts has increased dramatically, even as strike frequency has declined (Venkataratnam 1993). In addition, in order to avoid unionization, employers are promoting workers into administrative and supervisory ranks to make them ineligible for unionization by shifting them outside the purview of the Industrial Disputes Act (Venkataratnam 1993). Employers are also pushing for joint consultation over productivity improvements, and recent collective bargaining contracts assert management rights more forcefully than ever. For the first time, concession bargaining has occurred in several industries (Venkataratnam 1993; Sodhi 1993).

Venkataratnam (1993) suggested that for the first time, the employers feel that government is on their side. The beginnings of a government-business coalition (in contrast to the previous government-labor coalition) are increasingly apparent. For example, in the state of Maharashtra, for the first time, the government has attempted to neutralize labor unrest by declaring several private sector firms "essential and public utilities," thereby outlawing strikes in these firms (Abreu 1994).

Economic liberalization has weakened labor's ties with political parties and forced unions to face what Sodhi (1993) calls an "existential crisis." The Congress Party, the party in power, actively supports liberalization, even though its trade union arm, the powerful INTUC, fundamentally opposes liberalization. The decline of the INTUC's political influence has further weakened a labor movement whose membership is already declining due to the spread of VRS. The excessive fragmentation of unions on political lines, a growing alienation between trade unions and their members, and the waning influence of national unions over enterprise-based unions have further weakened the union movement (Sheth 1991; Sarath 1992)

Economic liberalization has thereby called into question the economic and political basis of previous IR/HR policies. Current trends indicate a movement toward increased workplace flexibility. If and how this flexibility will be institutionalized through new legislation remains open to question.

India provides an illustration of how a country's IR/HR policy goals and its ISI strategy became mutually sustaining. The close relationship between political parties and trade unions since independence ensured that the state's choice of institutional industrial relations arrangements governing industrial relations was geared toward the protection of labor rights and labor power. With the creation of a more open economy since 1991, the existing labor policy is being questioned, and workplace practices have already shifted toward greater flexibility in industrial relations. Although employer IR/HR practices have already changed, the government is approaching reform of IR legislation slowly, and through tripartite discussions. Economic liberalization has weakened trade unions considerably, but the long history of trade union partnerships with political parties has ensured that unions retain a voice in the design of the new system.

{{1}}**Discussion**

The four country cases demonstrate that there is a close relationship between industrialization strategies and IR/HR policy goals, as argued. Each type of IS appears to be congruent with certain IR/HR policy goals (see Figure 1). Under ISI, national IR/HR policies in all four countries have focused on stability and have been relatively pluralistic. Under primary EOI, the IR/HR policies of Malaysia and the Philippines focused on cost containment, which included a substantial amount of union repression and initiatives to keep labor costs down. Under secondary EOI, the IR/HR policies of Malaysia and Singapore emphasized skills development, workplace flexibility, and productivity. In India, a shift from second stage ISI to a more "liberalized" EOI-type economy has oriented IR/HR practice toward increased employer autonomy and productivity, while debate about policy change continues.

Events in the four countries show that changes in IR/HR policies are primarily caused by changes in industrialization strategies. For example, in Singapore, changes in national IR policy were a product of deliberate decisions taken by the state after adoption of export-oriented industrialization. As Chiang (1988) suggested, it was clear to the Singaporean state that industrial relations stability and flexibility were critical to the attraction of foreign investment, and industrial relations policy was configured to meet that need.

In Malaysia, the adoption of more repressive IR policies evolved more gradually, after EOI was adopted, and appears to have been part of efforts to attract and retain foreign investment, notably in the electronics industry. Clearly, the cost containment aspect of IR policies in Malaysia developed in response to pressures from foreign investors. In the Philippines, repressive IR policies were adopted to support export-oriented industrialization by keeping costs low. In India, the IR institutions gradually evolved under a protectionist ISI regime, and the shift to an export-oriented industrialization policy has produced pressures, mostly from employers, for IR system change.

The close relationship between IS and IR/HR policy goals manifests itself in different ways. In at least two of the four countries, IR/HR policies have been used to promote the shift from one IS to another. In Singapore, the transition to a secondary EOI was encouraged when the National Wages Council mandated double-digit wage increases in an effort to drive low-cost producers out of Singapore. In Malaysia, new forms of work organization and increases in labor costs forced the government to support a second-stage export-oriented industrialization strategy, with its attendant implications for IR/HR policy as well, suggesting that the impetus for change in IS was triggered by IR/HR developments at the level of the firm. This is further evidence of the close relationship between IS and IR/HR policy goals.

There is some evidence that the arguments made in this paper are generalizable to other Asian countries. Lee (1995), Park and Lee (1995), Levin and Hong (1995), and Brooks (1995) found evidence of a similar relationship in their respective analyses of Taiwan, Korea, Hong Kong, and Indonesia.[18]

{{1}}**Conclusions**

The results of this paper suggest that congruence between IS and IR/HR policy goals is an important precondition for successful economic development. This paper also identifies several issues for further research. One open question is why substantial variation exists across countries in institutional industrial relations arrangements, even when the IS and IR/HR policy goals are similar. Although I have shown that changes in IS have shaped IR/HR policy goals in the four countries examined, the industrial relations institutions and practices are different across those countries, and often more resistant to change, as Figure 2 shows. The experiences in these four countries suggest that the institutional arrangements used to meet national IR/HR policy goals are dependent on the choices governments make, and these choices are constrained by political conditions (for example, the power of the ruling party and the influence of unions) as well as the previous institutional history. But more research is needed to uncover the factors causing the variation in IR/HR institutions and practices.{{Figure 2 about here. Like Fig. 1, Fig. 2 is actually a table; see hard copy and end of this electronic copy.}}

Although most IR scholars have viewed labor, management, and government as the primary actors in any IR system, the close relationship between industrialization and industrial relations found in the four countries analyzed in this paper suggests that several external actors can affect the IR system through their infuence on the industrialization strategy.[19] For example, in Singapore and Malaysia, foreign capital played a significant role in shaping IR/HR policies and institutions. In the Philippines, the World Bank has had a fundamental impact on industrial relations through its effect on IS. Although it is not easy to separate the effects of industrialization strategy and foreign capital on industrial relations change, external actors appear to be important, and their importance is only likely to grow as the international economy becomes more global. In addition, external organizations such as the new World Trading Organization are attempting to link trade issues more directly with industrial relations policies and practices.

It is also necessary to extend the analysis of IR/HR policy to the meso (company) and workplace levels. In another study, for example (Kuruvilla 1996b), I found that ISI sector firms in Malaysia and the Philippines typically had paternalistic, complacent, and passive IR/HR practices, whereas EOI sector firms had dynamic, aggressive, and flexible IR/HR practices. In countries where inter-firm networks are important, and when employer associations are more active, the meso level assumes great importance. Thus, it is essential that future research analyze how IS, national, and meso-level IR/HR policies are linked to workplace practices.

Finally, in contrast to the prediction of Kerr et al. (1964), the only way in which the four countries analyzed here exhibit convergence is in terms of the congruence between industrialization and IR/HR policy goals. These countries diverge widely in their industrialization strategies and corresponding IR/HR policy goals and in the institutional arrangements by which the goals of national IR/HR policies have been pursued, and thus they do not converge in IR/HR institutions and practices.

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{{footnotes}}

[1]My definition of workplace flexibility differs substantially from that of Standing, who uses the term "flexibility" to describe the activities that firms engage in to reduce employment during economic downturns, such as subcontracting, layoffs, and use of probationers. My use of the term "workplace flexibility" follows Katz, Kuruvilla, and Turner (1993).

[2]The argument is consistent with Deyo (1989) in associating EOI with labor suppression, but differs from Deyo regarding the focus of inquiry, the dependent variable, and the relationship between IS and IR/HR policy goals.

[3]Although the focus in this paper is on national IR/HR policy goals, I have also studied the relationship between IS's and IR/HR practices at the workplace level. Details of this relationship can be found in Kuruvilla (1996b).

[4]This feature was introduced by the Industrial Relations (Amendment) Act of 1968.

In British usage, layoffs are temporary and retrenchments are permanent.

[5]For instance, strikes were allowed only after a 14-day notice period, and only after a secret ballot was conducted with at least two-thirds of the members voting for a strike. Political strikes were disallowed, and the government could prohibit strikes if they were deemed to be against the national interest. Since strikes were not permitted once a dispute was under conciliation or mediation by a third party, either of the parties could request mediation services of the government, which would effectively end any strike. See Chiang (1988) for a more detailed description of other policies.

[6]See Rodan (1989:119) for a more detailed description of this transition.

[7]See Chew and Chew (1995) for support for this statement, and Leggett (1988), who argues that the labor movement has been hobbled by authoritarian government.

[8]Essentially, the New Economic Policy attempted to increase the economic power of the Malay population through legislation on affirmative action in employment and in corporate investments and shareholdings.

[9]Workplace policies were virtually identical to those in Singapore, and reflect the policies of the British (Kuruvilla 1996a).

[10]Essentially, the "Look East" policy of the Prime Minister focused on cajoling Malays to adopt the diligent and hard-working practices of the Japanese and Koreans.

[11]Under the Labor Code introduced by the Marcos government, article 250 made unfair labor practices such as union busting into administrative offenses, punishable by fine only. Under the old Industrial Peace Act, these had been criminal offenses, punishable by imprisonment, fine, or both.

[12]Tripartism was, however, never fully institutionalized, given opposition from other labor groups, and the efforts to change the union structure actually led to the rise of the KMU (Kilusang Mayo Uno) to challenge the supremacy of the TUCP.

[13]For a more detailed discussion of the World Bank's influence on the Philippines, see Bello, Kinley, and Elinson (1988) and Macaraya and Ofreneo (1993).

[14]For a more detailed description of the development of India's ISI strategy, see Venkataratnam (1993).

[15]Factories' rules are so detailed that even the toys to be kept in child care centers, called "creches," are specified by the law.

[16]The man-days lost due to strikes in 1987, 1989, and 1991 were 36,583,000, 30,440,000, and 7,640,000, respectively, and strikes in those years numbered 1,799, 1,893, and 831. Note that the figures for 1991 reflect only the period January–July.

[17]For instance, Ashok Leyland, one of India's largest truckmakers, argues that it costs $14,000 to make a Ford Cargo van in India, due to high labor costs and costs of licensing and import duties, whereas the same van can be made in Britain for half the price (Abreu 1994).

[18]In addition, Dombois and Pries (1994) posited a similar argument in the case of Latin America.

[19]The influence of external actors on the IR system has been noted by Frenkel and Harrod (1995).

Table 1. Economic and Industrial Relations Conditions in Singapore, Malaysia, the Philippines, and India.

Variable	*Singapore*	*Malaysia*	*Philippines*	*India*
1. Population (Millions, 1991)	2.7	18.4	63.8	862.7
2. GDP per Capita (PPP $ 1990)	15,880.0	6,140.0	2,303.0	1,072.0
3. GDP Growth Rate				
1971–75	9.4	7.2	5.7	2.4
1976–80	8.5	8.6	0.0	3.4
1981–85	6.2	5.2	–1.2	5.4
1986–90	7.9	6.1	5.1	5.4
4. Sectoral Share of GDP				
Agriculture, 1980	1.2	22.9	25.1	38.1
Agriculture, 1990	0.3	18.7	22.1	32.4
Industry, 1980	29.1	19.6	25.7	25.9
Industry, 1990	29.1	26.9	25.5	27.5
Services, 1980	44.7	22.4	26.2	36.0
Services, 1990	53.8	22.7	30.7	40.0
5. Foreign Share of Mfg. Exports, 1988	86.0	60.0	66.0	0
6. Exports as Percentage of GDP, 1990	157.0	71.0	20.0	6.0
7. Union Density (percentage of total work force):				
1979	24.5	18.0	10.9	1.06
1984	16.4	16.0	9.7	1.85
1988	17.2	9.9	9.6	2.00
1993	14.2	9.5	9.6	2.00
8. Strikes				
1960	45	37	43	1,026

1970	5	17	104	2,843
1987	0	24	62	1,799
1989	0	17	267	1,786
1992	0	17	136	1,388
9. Average Annual Growth Rate of Earnings per Employee				
1970–80	3.0	2.0	–3.7	0.4
1980–89	5.0	3.2	6.4	3.4

Sources: Human Development Report (1993); *ILO Yearbook of Labor Statistics* (1993); unpublished figures assembled by author.

Figure 1. **Industrialization Strategies and National Industrial Relations/Human Resource Policy Goals: The Framework.**

	Import Substitution Industrialization	***Export-Oriented Industrialization***
Primary	IR/HR Policy Goal = Stability	IR/HR Policy Goal = Cost Containment
Secondary	IR/HR Policy Goals = Stability and Productivity Enhancement.	IR/HR Policy Goals = Workplace Flexibility, Productivity, Skills Development.

Note: The institutional arrangements countries choose to meet the IR/HR policy goals described here will vary as a function of the state's political choices and the previous IR/HR institutional history.

Figure 2. Variation in Institutional Arrangements to Meet National IR/HR Policy Goals: Singapore, Malaysia, the Philippines, and India.

	ISI			*EOI*		
1st Stage	*IR/HR Policy Goal = Stability*			*IR/HR Policy Goal = Cost Containment*		
	Political Choices			*Political Choices*		
	India, 1947–1980	*Malaysia and Singapore, 1955–1965*	*Philippines, 1945–1959*	*Singapore, 1955–1970s*	*Malaysia, 1975–1986*	*Philippines, 1960–Current*
	-Minimum standards legislation -Free CB -Multiple unionism -Job security -Industry and enterprise level bargaining -Political unionism -Institutions to reduce conflict	-Minimum standards legislation -Collective bargaining -Emphasis on conflict reduction -Restrictions on bargaining subjects	-Minimum standards legislation -Unfair labor practices legislation -Free CB -Industry and enterprise bargaining	-Tripartism -Centralized wage determination -Restrictions on bargaining subjects and strikes	-Cost reduction through changes in overtime legislation -Ban on unionization in export sector -High government involvement in union recognition and dispute settlement	<u>Martial Law</u> -Ban on strikes -Compulsory arbitration -Downward revision of labor standards -Rationalization of union structure -Decriminalization of UFLP of employers <u>Democracy</u> -Liberalization of Marcos-era laws -Fragmented and weak unions

2nd Stage	*IR/HR Policy Goals = Stability and Productivity Enhancement*	*IR/HR Policy Goals = Workplace Flexibility, Productivity, Skills Development*		
	India, 1980–1991	*Singapore, 1978–*	*Malaysia, 1986–*	*India, 1991–*
	-Emphasis on economic unionism -Emphasis on productivity enhancement	-Education restructuring -Skills development institutions -Rationalization of bargaining structure to enterprise level -Wage decentralization -Rules emphasizing workplace flexibility	-Education restructuring -Skills development institutions -Withdrawal of unionization ban -Less government intervention -Rules emphasizing workplace flexibility	-Labor relations legislation under debate -Job security provisions under revision -Workplace flexibility under debate