National Industrialisation Strategies and Their Influence on Patterns of HR Practices

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Most economies display several different patterns of industrial relations (IR) and human resource (HR) practices at the level of the firm. Often, the patterns of IR/HR practices of firms differ based on the nature of the industry, the nature of technology and production methods used, the specific economic circumstances facing firms and, in some cases, the IR/HR philosophy of key individuals and managers. Patterns of IR/HR practices also differ based on economic sectors, with IR/HR practices in the service sector showing differences with patterns in the manufacturing sector.

Yet it is clear that there are different patterns of IR/HR practices across and within countries that cannot be fully explained by the various firm, industry and sector specific variables noted above. It is important to consider the effect of national-level variables in explaining variation in IR/HR patterns across nations. This article argues that the industrialisation strategies adopted by countries is a critical influence on IR/HR patterns. Kuruvilla (1995a) argued that in the context of the rapidly developing nations of Southeast Asia, the national industrialisation strategy has been shown to influence national level IR policy to a considerable extent. Using the industrialisation framework suggested by Kuruvilla it is argued here that different industrialisation strategies also create distinct patterns of IR/HR practices at the level of the workplace - patterns that transcend sector, industrial and firm level boundaries. This argument is evaluated in Malaysia and the Philippines.

INDUSTRIALISATION STRATEGIES FRAMEWORK

This article utilises the framework as presented in Kuruvilla (1995a) (and shown in Figure 1 below) and it develops that framework by demonstrating a link between national industrialisation strategies and workplace IR/HR practices. The argument is that different industrialisation strategies have different implications for the goals of national IR policy in Southeast Asia. According to a recent World Bank Research Report, one of the primary reasons for the rapid growth of several Asian countries *(eg,* the newly industrialised countries - NIEs) has been the adoption of an export oriented industrialisation

strategy (World Bank Research Report, 1993). One commonality across the fast growing Asian nations is that all of them (with the exception of Hong Kong) commenced with an 'import substitution industrialisation' (IS1) strategy and thereafter shifted to an 'export oriented industrialisation' (EOI) strategy, during which they experienced their fastest growth (Kuruvilla and Pagnucco, 1994).

Within each strategy, whether ISI or EOI, there are variations which can be described by dividing the strategy into two stages. Typically, the first stage of EOI is characterised by an emphasis on the export of low cost manufactured goods, where the comparative advantage is one of cheap labour. The second stage of EOI is typically characterised by the manufacture and export of higher value added higher technology products, with more highly skilled labour and where the comparative advantage is one of both quality and cost. Within the ISI strategy, the first stage typically focuses on the production of consumer durables and light manufactured goods for the domestic industry. A few countries, such as India, have graduated to second stage ISI, which includes more sophisticated domestic industries such as heavy engineering, steel, automotive, defence and aviation industries, for example.

Hence the article will focus on these two strategies, although other industrialisation strategies exist. The focus of national industrial relations and human resource policy (IR/HR) under ISI is found to be one of pluralism and stability, while the focus of IR/HR policy in first stage EOI is one of cost containment. In the second stage of EOI, the focus of national IR policy shifts to one that emphasises workplace flexibility and skills development. Despite similarity across nations in the goals of national labour policy, there is variation in terms of the specific institutional arrangements that countries have adopted to meet the goals of the national IR policy. This institutional variation is due to political choices made by the state and the unique historical circumstances in each country. The result is a convergence in terms of the links between industrialisation and IR policy, but a divergence in terms of the specific institutional methods used to meet the goals of the national IR policy. See Kuruvilla (1995a) for a more detailed specification of the framework.

In this article, the framework is extended to the level of the workplace and, specifically, the patterns of workplace IR practices. In other words, the argument is that different industrialisation strategies spawn different patterns of IR and HR practice at the firm level. Given that industrialisation strategies create distinct industrial sectors (described below), the patterns of workplace level IR and HRM will differ based on the industrialisation strategy.

FIGURE 1 *Economic development strategies, industrial relations policies and workplace IR/HR practices*

	Import substitution industrialisation	Export oriented industrialisation
STAGE 1	*National IR policy focus*	
	Pluralism and stability Political choices resulting in country specific institutional arrangements to meet IR policy goals	Cost containment Political choices resulting in specific institutional arrangements to meet IR policy goals
	Predominant pattern of workplace industrial relations	
	– passive HR practices – paternalistic IR practices – Pluralistic system – Relatively Tayloristic work organisation	– Cost containment oriented HR practices – Union avoidance and suppressive IR practices
STAGE 2	*National IR policy focus*	
	Pluralism, stability and productivity Political choices resulting in country specific institutional arrangements to meet IR policy goals	Workplace flexibility and skills enhancement Political choices resulting in country specific institutional arrangements to meet IR policy goals
	Predominant pattern of workplace industrial relations	
	– active HR practices to increase productivity – collaborative IR practices – pluralistic system	– aggressive HR practices promoting skills development and flexible pay – dynamic work organisation – positive and non-union HR practices – highly flexible HR systems

Industrialisation strategies in Malaysia and the Philippines

Both Malaysia and the Philippines adopted an ISI strategy in the 1950s. Given their inability to sustain a foreign exchange intensive import dependent ISI regime, both countries shifted to EOI. In Malaysia, the shift into first stage EOI occurred in the 1970s, with the enactment of state policies to attract foreign investment into the electronics sector. A combination of cheap and compliant labour, along with a considerable range of financial, fiscal, regulatory and infrastructural incentives resulted in the attraction of foreign capital in the electronics and electrical goods sectors of the economy (Salih, Young and Rajah, 1987; Spinanger, 1986). In the late 1980s, given the influence of rapid technological change, globalisation of products and markets, increased competition from other low cost Asian exporters and a labour shortage arising from the inflow of foreign firms, the government articulated a second stage EOI strategy which focused on attracting firms exporting higher value added manufactures in electronics and electricals. This approach required the development of more highly skilled labour (Rajah, 1994; Kuruvilla, 1995).

In the case of the Philippines, repeated foreign exchange crises in the 1960s led the World Bank to recommend the adoption of EOI strategies consequent to its stabilisation loans to the country. However, given the disagreement between local capitalists in the imports sector and those who profited from exports, a full scale EOI program was not implemented until the martial law period in 1972 (Bello and Verzola, 1993). The EOI program was intensified under the World Bank sponsored structural adjustment in 1983 (see Villegas, 1988; Ofreneo, 1994, for a more specific discussion of the policies enacted to boost exports) and has continued since then under the Aquino and Ramos administrations. While the Philippines is in the stage of export orientation characterised by the export of low cost labour intensive manufactures financed by foreign investment, Malaysia is transforming from the low cost EOI stage to a more advanced EOI characterised by the exports of more technology-intensive products, coupled with some industrial deepening (Kuruvilla, 1996).

The results of the adoption of EOI regimes can be seen in four key indicators in both economies, listed in Table 1.

TABLE 1 *Outcomes of industrialisation strategies*

i) *Economic growth rates*

	Malaysia	Philippines
1971-75	7.2	5.7
1976-80	8.6	6.0
1981-85	5.2	-1.2

ii) *Contribution of sectors to GDP (per cent)*

	Malaysia			Philippines		
	Agriculture	Industry	Services	Agriculture	Industry	Services
1960	33.8	7.2	20.4	27.1	15.2	29.0
1970	28.8	14.7	22.7	27.0	22.6	32.6
1980	22.9	19.6	22.4	28.8	25.7	26.2
1990	18.7	26.7	22.9	24.6	25.5	30.7

iii) *Contribution of manufacturing to total export earnings – 1970 -1990*

	1970	1974	1977	1980	1984	1987	1990
Malaysia	7.4	13.6	15.4	19.0	26.7	39.5	43.9
Philippines	7.6	12.9	24.9	36.8	55.1	61.8	61.8

TABLE 1 contd

iv) *Foreign firms share in manufacturing – 1988 (per cent)*

	Employment	Fixed assets	Sales	Exports
Malaysia	49	32	45	60
Philippines	/	32	41	66

Source: i), ii) and iii) - World Bank Tables, 1992; iv) – National statistics, various years

Both economies have experienced: a) growth in the relative share of industry in GDP; b) increases in the contribution of exports to total GDP; c) increases in the contribution of manufacturing exports to total exports; and, d) high economic growth rates. The industrialisation strategies have created two distinct economic sectors, the import substitution sector and the export oriented sector. Although it is difficult to estimate the relative size of these two sectors in the economy given the absence of any systematic data collection by the governments, the sectors operate under different rules and are characterised by different industries and firms.

The export sectors in both economies are typically characterised by foreign multinationals and firms producing manufactured goods, primarily in the electrical and electronic industries, but also in small manufactures and textiles. Under an export oriented regime, these firms are the target of numerous financial, fiscal and regulatory incentives to encourage exports (Kuruvilla, 1995). In both countries, firms in the EOI sector are primarily foreign owned, competing in international markets with their economic circumstances depending largely on international market conditions. Most foreign firms export 100 per cent of their production and, in both countries, have relatively little local linkages with the exception of subcontracting arrangements. The EOI sector is typically smaller than the ISI sector - although it is growing at a more rapid pace - and estimates suggest that this sector may account for 20-25 per cent of employment in both economies.

The ISI sector, on the other hand, is larger and typically consists of large state and private owned industries operating in core sectors such as utilities, transportation, communications, airlines as well as in the manufacture of consumer and industrial goods. These industries are largely protected from foreign competition in both countries, although exposed to some degree of domestic competition. Several of them are monopolistic firms owned and operated by the government. The economic conditions of these industries are largely locally determined, with international market forces having a relatively smaller impact. In the Philippines, the ISI sector has witnessed severe declines in the last decade, given government policies that support an export oriented regime - for example - the devaluations in the Philippine peso during the 1980s raised the costs of foreign exchange needed for imports in ISI industries (Villegas, 1988). In Malaysia, the ISI sector has also grown as a result of government policies encouraging industrial deepening to accompany the dramatic export performance.

Research methodology and sample

The two countries are chosen because they have both followed an ISI strategy as well as an EOI strategy for economic development following their independence. Within each country, representative industries in the ISI sector and the EOI sector were selected based on both comparability (did they exist in both countries?) and on occupation (did they include both blue and white collar employment?). Within each industry, three firms were chosen at random for investigation. The firms reported here are those that agreed to participate by allowing access to data and interviews. Data collection was primarily through on-site interviews of production and personnel managers in each firm. The names of the firms as reported are their real names, except in one case where confidentiality was requested.

The article uses a research design consisting of systematic pair-wise comparisons with case studies of firms in banking, paint manufacturing, electronics, electrical and tool and die making industries. Pair-wise comparisons offer the potential for isolating and clarifying similarities and differences across industrial relations systems and, in this article, these comparisons are made at several levels. First, comparisons of workplace level IR/HR practices are made between the 1SI and EOI sectors within each economy in order to evaluate the argument that industrialisation strategies have resulted in different patterns. Secondly, comparisons of ISI sector and EOI sectors are done across the two countries so as to evaluate whether the pattern of differences found between ISI and EOI regimes is stable and consistent across both countries - *ie* are the results broadly generalisable? For the argument to hold true: a) IR/HR practices among firms in each country's ISI sector ought to be similar; b) patterns of IR/HR practices of in the ISI sector of both countries ought to be similar; c) IR/HR practices of firms within each country's EOI sector ought to be similar; and, d) patterns of IR/HR practices in the EOI sector across the two countries must evidence some difference, given that they are at different stages of export oriented industrialisation (Malaysia follows a more advanced EOI strategy while the Philippines follows a simple EOI strategy based on low costs).

Finally, the cases also permit comparisons of firms in specific industries across both sector and countries. These multiple levels of comparison include both comparison strategies of "most similar" and "most different" systems designs (Przeworski and Teune, 1970) used in comparative political science, although the application of this technique to comparative industrial relations research is relatively rare.[i]

CASE STUDIES OF FIRMS IN MALAYSIA AND PHILIPPINES

Tables 2 and 3 summarise the results of the case studies. The section below elaborates further on the detail of IR/HR practices provided in the tables.

ISI sector firms in the Philippines

Dutch Boy Paints - this firm is the largest manufacturer of commercial and industrial paints in the Philippines and employs 324 workers. The market for industrial and decorative paints (which accounts for 80 per cent of their production) is highly price sensitive. There are over 70 competitors, mostly smaller manufacturers, with lower overheads competing on the basis of price at the lower end of the market. Dutch Boy's competitive strategy has always been predicated on its reputation for quality rather than on price. This focus has continued even through the price sensitive environment of the 1980s, resulting in significant losses in market share, from a high of 60per cent in 1960s to 20 per cent in 1994. Boysen paints, a Chinese owned firm whose competitive strategy focuses on price, has increased its market share from 0 per cent in 1974 to 40 per cent in 1993 and appears to do better than Dutch Boy in several different areas such as profitability, (compare Boysen's 20 per cent on sales to Dutch Boy's 2.5 per cent), employment (Boysen 175 employees, and 1.2 billion sales, Dutch Boy 324 employees for 702 million in sales), delivery times (time between order and delivery) where Boysen reports 1 hour, in the case of Dutch Boy it is 4.5 hours. Finally, accounts receivables, another important indicator of a firms financial strength, is 120 days in Boysen, but only 60 days in Dutch Boy.

The firm's complacency in its business strategy is reflected in its HR practices as well. Despite the complexity (1000 different product lines) of the continuous process technology used, the company has made little effort to increase skills of workers or change work organisation practices over the last 40 years. Training is largely job specific with little effort to broaden workers' skills and job classifications. The firms compensation strategy is based on a market leadership principle, paying the best wages in the market, but is largely rigid, with fixed pay' scales and increments negotiated with the union, a variable bonus that is guaranteed to all workers and with only three per cent (out of total increases of 12 per cent in 1992-93) based on merit. There are no productivity- linked or skill-acquisition based incentives in the compensation system.

The firm boasts of a long and collaborative relationship with the union, where negotiations are carried out by the company's president and the union leaders. The negotiations are generally cordial, with the last collective bargaining agreement being signed in five four-hour sittings - which is extremely fast by Philippine standards. The approach to employment and industrial relations is largely paternalistic. There has never been a strike and the grievance system has never been used since its inception in 1960. In the words of the personnel manager "if the workers' demands are genuine, we agree to them". While one fifth of the production requirements are met by overtime, during periods of low production the firms ability to be flexible is constrained by its no layoff policy.

Interbank - the bank is ranked 18th in the Philippines. Deregulation of the banking industry in 1989 has increased competition since it now allows universal banks (unibanks) that can operate throughout the economy, resulting in an explosion of new branches as the bigger players expand into rural markets. Interbank employ's 1200 employees. Except for 334 bank officers, all of the employees are unionised.

The bank's HR policies and practices reveal some degree of paternalism, although basic conditions are comparable to other banks given that the banking industry is unionised in the Philippines. Its compensation strategy' is predicated on being a market leader and union officials indicate that the bank has the best wages and benefits in the industry'. Tire compensation system is simple, based on a salary scale and includes a guaranteed bonus equivalent to four months wages.

In terms of work organisation and training, the practices reflect a Tayloristic approach that is consistent with policies of most domestic banking firms that were interviewed. No policies on job rotation and skills development exist. The predominant type of training is to increase job related skills. The average tenure is nine years (for a 15 year old bank), although the increase in demand for tellers since deregulation is being felt with turnover rates increasing to about 6-7 per cent currently. Interbank has a no layoff policy and eschews overtime and other flexibility enhancing mechanisms available to the industry such as subcontracting and retrenchment. The banks response to the increasingly competitive environment has been to increase automation rather than to decrease employment.

The company and the Interbank Corporation Bank Employees Union have a cordial collective bargaining relationship in a heavily unionised banking industry. The bargaining relationship is about ten years old and three long term agreements having been entered into without a strike. Labour/management relationships have grown steadily better through institutional procedures such as formal labour/management committees and regular briefing meetings with the union called

'situationers'. No significant bargaining regarding job assignments takes place and, since the bank pays above the market wage, wage bargaining is relatively dispute-free.

EOI SECTOR FIRMS IN THE PHILIPPINES

Uniden - Uniden makes CB radios, web pagers, web scanners, satellite receivers and other electronic accessories in its Philippine operations for export to North America and Australia. This case study is of one of their two plants, employing 4,300 workers and making printed circuit boards for use in various electronic products.

Uniden is known as a supplier of cheap electronic products, positioned at the lower end of the market. Their competitive strategy has focused on low costs and their products, such as CB radios and answering machines, are the cheapest in the US market. Rising labour costs in their factories in Taiwan and South Korea forced them to move operations in 1987 to lower cost areas such as South China and the Philippines. Consistent with Japanese Pan Asia production strategies common in other industries (see Kuruvilla and Pagnucco, 1994) design and product development is done in Japan, while marketing is done in individual countries by local workforces.

Their HR strategies tend to mirror the low cost business strategy of the company. The plant employs primarily young women operatives between the ages of 18-22, who are paid 60 per cent of the wages of male workers in the industry (see Pineda-Ofreneo, 1985). Material handling jobs are also performed mostly by women, although few women can be seen in line leader or supervisory jobs. Work organisation is based on a Tayloristic assembly line principle. Each operator looks after several machines in a production line and line leaders and assistant line leaders are responsible for material supply and inspection. Workers are not trained or allowed to attend to machine breakdowns which are left to engineering staff. The training is job specific and carried out on the job.

Uniden's compensation strategy matches its low cost business strategy. Comparisons with other international electronics firms suggest a compensation strategy of the market follower. Operators with at least two years experience are paid 165 pesos (approximately $ 6.60) per eight hours, which is only 7 per cent above the minimum wage of 154 (approximately S 6.02) pesos per day in Metro Manila and in contrast to the industry leader, Motorola, whose average wages are approximately 25-40 per cent higher than the minimum wage in Metro Manila. In addition the wage system is rigid, based on a fixed scale, with guaranteed annual increments, no production incentives and no merit related increases.

The company is nonunion and resisted union organising drives in 1987 and 1991. Interviews with workers, however, indicate that the company pursues active union suppression strategies. The primary' method of increasing employment flexibility is through the use of contract and casual labour in its indirect operations. At the time of writing there were about 500 contract workers in the plant, working jobs such as staff canteen, security and materials handling. Contract workers are paid the minimum wage. The relatively' short tenure rates (average two years) and the high rates of labour turnover (30 per cent) appear to be - according to several workers - a consequence of Uniden's low cost employment practices.

Motorola - The Philippine operations of Motorola involve the assembly and testing of integrated circuits, in contrast to its Malaysian operations which are considerably more advanced, including both wafer fabrication and some research and development. The plant employs about 2000 operators and currently produces 10 million integrated circuits a week for export to the US. Motorola is well known in the electronics sector for its high quality products and innovations in production organisation and people involvement and its HR strategies in the Philippine operations are consistent with the Motorola approach worldwide.

Work organisation currently reflects Motorola's worldwide system, which utilises fully automated production systems. The work allocation of an operator involves the monitoring of automated production lines, mostly via computer terminals. All operatives are trained in autonomous maintenance and trouble shooting; autonomous maintenance has resulted in reducing machine down times by 60 per cent since it was introduced in 1991.

Training is comprehensive, with employees exposed to skill training, production, quality, maintenance and parts management, trouble shooting as well as communication and interpersonal skills. Motorola's corporate policy ensures that every employee receives a minimum of 40 hours of training per year in order to facilitate meeting the company's policy of multiskilling. Under this policy, each operative must know at least three jobs at the same hierarchy and one job at the higher level. At any given time, each worker trainer (the highest job in the worker hierarchy) will be training at least ten workers, working on a schedule that covers the entire workforce. From the employee's point of view, he or she can expect to learn one new skill every six months until two years have elapsed, when he or she gets promoted to the next level.

In terms of teamwork, Motorola uses both structured and autonomous teams. Structured teams include straight line teams that are part of one production line and one department as well as

interactive teams that are comprised of different people to solve different kinds of problems. For example, straightline teams in the wirebonding department are comprised of both horizontal teams (workers in different shifts) as well as vertical teams (workers in different job hierarchies) beginning with the supervisor and ending with a material handler. The team becomes an interdisciplinary team when engineers and technicians in quality assurance and inspectors are added. Each team meets for one hour a week on production time but also meets outside the production time on overtime pay. More recently, fully autonomous work teams have been introduced to some departments where the team takes full responsibility for recruitment, training, production management and performance appraisal. The team has been successful in winning many international Motorola competitions organised in the USA and have received prizes for two consecutive years. Employee involvement is further enhanced by a suggestion scheme which includes small rewards (200 pesos) for accepted suggestions and larger rewards after the implementation of the suggestion.

Motorola's compensation strategy and performance appraisal systems are linked to the concepts of teamwork and multiskilling. In terms of compensation strategy, Motorola positions itself at the top of the market for wages and salaries and their pay rates (and more importantly their benefits) are, on average, 20 per cent higher than the market rate, with equal pay for both males and females. The compensation system is flexible, with approximately 50 per cent of earnings devoted to performance and productivity and this part may increase or decrease according to plant performance. Wage increases are tied to both the cost of living and also to the performance of the employee and the employee's department, based on the performance appraisal system.

In terms of employment and flexibility, the average turnover rate is less than two per cent. Peaks and lows in production are met by overtime and redeployment. In the 1985-86 recession in the electronics industry, a programme of adjustment involving leave, shared work, shorter hours, voluntary retirement and temporary layoffs was developed in consultation with workers. The consultative manner in which this decision was taken has been much talked about by the workers given the massive layoffs at other electronics firms. Notably, Motorola has never been unionised.

Citibank - this is the largest bank in the foreign exchange sector and employs 1000 people. Citibank has positioned itself as the only bank in the Philippines with a global reach. Therefore, Citibank sells itself as an outward looking bank and its business strategy and HR strategies are dependent on what happens internationally rather than locally.

Consistent with its worldwide HR practices, Citibank has multiskilling and job rotation for all employees. Training is largely performed on the job with some external coursework. Movement up the

levels of job grades is based on acquisition of new skills. While the bank adopts a market follower compensation strategy (Citibank positions itself at the bottom of the foreign banks and at 75 per cent of the local banks) its range of non cash benefits are among the best in the industry. The compensation system is tied substantially to the acquisition of new skills, where a maximum of 10-25 per cent of the salary increases are for skill development. The rest of the compensation package is relatively fixed but includes bonuses for attendance and good performance. While the increases in salary levels are negotiated with the union, the union does not know the job scales for each grade.

In terms of workplace flexibility, Citibank follows an aggressive policy of subcontracting. As far as possible all indirect jobs are contracted out. Currently, these indirect jobs include security, messengers, janitors and computer processing. Contracting out is still viewed as essential to keeping payroll costs low and most credit card operations, including processing of applications, reference checks and liquidity checks were also contracted out at the time of research.

Citibank's employees have an in-house union affiliated to the National Association of Bank Unions. The relationship, conflictual in the early 1980s, has become more co-operative recently. This is partly on account of an institutionalised exchange of information once a month, but largely due to a festering dispute regarding the use of contract labour for computer programming, driving and security employees, being decided in favour of the union by the labour courts. The union is involved in the job evaluation committee but their role is restricted to that of monitoring rather than direct participation.

Matsushita Communications (MCP) - the organisation is a wholly owned subsidiary of Matsushita Communication Industrial Company (Japan), Matsushita Electric Industrial Co (Japan) and Matsushita Electrical Philippines Corporation Philippines. MCP started its operations in 1988 in the Philippines and produces floppy disk drives, electric condenser microphones, hand-free microphones and closed circuit video cameras and monitors for export. MCP accounts for over two per cent of the Philippines total export earnings and employs, in this factory, 2,832 workers.

Consistent with the prevailing Japanese practice of the electronics industry in Southeast Asia (see Salih *et al,* 1987), Matsushita does most its research and development in Japan, its medium end production in Malaysia, while the Philippines operations focus on low end production. The production focuses on the assembly and testing of microphones and a significant part of the assembly line has been automated and roboticised, although the extent is limited compared to Matsushita's Malaysian operations.

The work is organised around automated assembly lines, using individual workers with specified job responsibilities yet who are also part of teams. The team leader, who supervises about ten people in

a horizontal team, reports to the supervisor, who in turn supervises about 20 teams or 200 people. Within each sub process *(eg,* amplifier block, building diaphragms or microphone assembly) different patterns of job assignments are in evidence.

Training is largely performed on the job by worker trainers and the worker is then rotated across all jobs in the department. Promotions to line leader and worker trainer are based on skills acquired and 'soft' skills such as personal development and supervision are emphasised at these levels. All workers are also now being trained in the use of robotic technology.

The compensation system is based on a simple salary scale, which begins at about 3,900 pesos per month (more than double the minimum wage of 1875 pesos per month). Wage increases are based on regular increments in the scale with one mid-year bonus that is based on overall firm performance. The compensation is based on a detailed job classification system that is organised around knowledge, skills (both mental and physical) and with different weights for different jobs.

The union is an in-house union affiliated to the Federation of Democratic Trade Unions. Labour/management relationship has been cordial, thanks to an institutionalised labour/ management co-operation scheme and regular meetings with management once a week. Grievances are small in number, averaging five per quarter. There has never been a strike in Matsushita, which enjoys a very positive reputation in the region for being a fair employer.

In terms of employment flexibility, the company uses a variety of practices including cutting shifts, transfer of employees to other departments and having workers schedule their annual vacations during economic downturns. Although the company makes extensive use of casual and temporary workers, this has been a source of conflict with the union and, in 1993, at least 1000 casual workers were regularised. There has been one retrenchment in 1984 when 40 per cent of the employees were retrenched, but rehired in 1986.

ISI SECTOR FIRMS IN MALAYSIA

Jotun Corro-Coat (JCC) - the market leader for powdered paints in Malaysia (75 per cent market share), JCC employs 120 workers. With a long standing reputation for quality it does not view the competition (three firms accounting for 25 per cent of the market) as a serious threat. Given that powdered coatings are the preferred paint for the fast growing electronics industry in Malaysia, JCC faced a constantly expanding market for its products within Malaysia itself. It is a key ISI industry'. Faced with a stable economic environment, JCC management appears complacent about its future.

In terms of work organisation, the job classifications are relatively rigid and workers have little control over the machinery since their work is governed by machine cycles in the continuous process technology that is used. However, monthly production targets are discussed and agreed to with the local union, which is affiliated to the National Union of Petroleum and Chemical Industry Workers.

JCC's compensation strategy of being the best paymaster in the paint industry is closely' tied to its need to attract and retain skilled workers in a labour shortage economy. The compensation system is simple with defined scales, defined annual increments and annual bonuses irrespective of the financial performance of the plant. Merit-based increases are also given, though the quantum of such increases are specified in the collective bargaining contract. The only flexible component of the system is a fixed production bonus based on every additional ton of powder coatings produced over the negotiated workload (it was 300 tons under this agreement). The compensation system is therefore quite rigid, with little flexibility to negotiate the rates of pay either up or down and the bonus payment constituting an additional rigidity.

While most: training is 'on the job', technical skill development and computer skills are taught externally in government training institutes and skills development centres. Job related skills are the focus of the training and the company believes that workers are not capable of being trained to attend to breakdowns in the highly complex and expensive machinery and so these are handled by maintenance engineers. The management admits, however, that there is an absence of outside agencies that can help increase intellectual skills of its workers in the area.

Labour turnover at JCC has been rather low, less than 3 per cent annually. Internal flexibility requirements are met by the use of overtime. This permits maintenance of a leaner workforce and provides workers with increased earning capacity. Working four hours overtime is routine. Industrial relations is collaborative and there are significant safeguards in the contract against retrenchment. The collective bargaining agreement is specific regarding the co-decision making powers of the management and union in a number of specific areas and issues and promotions also form a subject of negotiation. In general, HR practices in JCC reflect considerable union influence in decision-making and, in relative terms, has significant restrictions on employer discretion on many issues.

Perwira Habib Bank (PHB) - a privately owned commercial bank, PHB is one of the largest commercial banks in Malaysia with 1125 branches and 50,933 employees. PHB is experiencing a period of intensive growth and the number of branches has increased by 7 per cent every year for the last six years. Profitability rates have also shown steady increases, between 1991 and 1992 profitability per employee rose by 12 per cent.

Given that the banking industry is heavily unionised in Malaysia, with separate unions for clerical and junior officers (affiliated to the Union of Bank Employees) and for officers (affiliated to the Association of Bank Officers) most HRM issues such as compensation are common across the industry. Collective bargaining is centralised at the level of the industry. Since banks are defined as 'essential industries', strikes are not permitted.

While compensation practices are common across all banks there is considerable variation in training practices. In PHB, training is primarily done for skill enhancement and is provided on the job. Although the Malaysian central bank has promulgated rules mandating that each bank must spend 2.5 per cent of the annual wage and salary costs on employee training, PHB has consistently exceeded that target, spending approximately 4.5 per cent of its wage bill on training activities.

In terms of employment flexibility, current contracts do not permit layoffs or retrenchments in the event of economic downturns. There is a level of complacency about HR and administrative costs that was not evident in the manufacturing industry. The only long term response that increases flexibility is the trend in terms of increased automation in the banking industry worldwide and PHB is at the forefront of the automation movement in Malaysia, having adopted an automated service centre concept.

Labour relations in PHB have been cordial. There have been no strikes or industrial disputes during the last five years. There is very little daily interaction between union and management, as most negotiations are done on a central level.

EOI SECTOR FIRMS IN MALAYSIA

Mattel Tools - is a fully' owned subsidiary of Mattel Inc, an American toy manufacturer noted for its toys such as Barbie Dolls and other plastic toys. Mattel Tools makes plastic and diecast molds for toys. The escalation of labour costs in Hong Kong, where Mattel has another tool and die factory, has also brought increased business to Mattel Tools in Malaysia. Production of casts and moulds has increased steadily since 1988.

The technology used in Mattel Tools is acclaimed as state of the art. 'Cadcam' is used to design patterns for molds. The mold pattern is made by highly skilled pattern makers using the latest grinding and milling equipment. All of the operations, whether it is cutting, grinding or bench-fitting are highly skilled jobs requiring intensive training and experience in tool and die making.

Mattel's HR policies reflect the need for attracting and retaining highly skilled workers. In terms of training, the skills for the low end operations such as lathe milling and grinding are locally available. However, tool and die making skills have to be developed because of the absence of skills in tool and die making in Malaysia. The high turnover in skilled tool and die- makers (whose skills are required in almost every manufacturing industry) means continuous training is paramount and shortages are met by importation of skilled workers from India. Mattel runs its own training centre and, in collaboration with the Penang Skills Development centre, has instituted a five year technical training program for tool and die makers involving two years of schooling and three years on the job.

Mattel's compensation strategy is geared to retention of skilled workers, especially given its high training costs in training tool and die makers. The compensation system is flexible, with a fixed salary as well as annual increments tied to inflation and a variable portion of pay based on a series of production and merit-based incentives. Merit increases are also given at the discretion of management. In addition, there are a number of different incentive schemes. Approximately 40 per cent of total pay is flexible.

Flexibility is important, given that toys are a luxury good and extremely sensitive to changes in economic conditions. In order to enhance workplace flexibility several strategies are used. Apart from high levels of daily overtime (exceeding three hours every day) the company makes extensive use of vocational trainees, under a centralised apprenticeship programme run by the government. At any given time there are 12-24 trainees, corresponding to more than 12.5 per cent of the workforce. In periods of recession, the trainees contracts are terminated.

Mattel also uses subcontracting extensively and about 30 per cent of the total production is subcontracted both locally and internationally in India. Mattel has several vendor development programmes to develop subcontractors which allow' them to not only reduce costs of production (subcontractors' production is roughly one third of Mattel's in-house costs) but allows Mattel to operate a just-in-time system that reduces inventory carrying costs.

The employees are not unionised; an attempt was made five years ago but management 'cracked down' on the key workers who were fired. There have not been any unionisation attempts since and the progressive personnel policies - high wages, good benefits and the creation of an open communications process by a new personnel and human resource development manager has contributed to increased co-operation between management and workers. Mattel is a good example of a lean organisation that follows a highly flexible HRM approach.

X Semiconductors - this firm is a subsidiary of a well known European semiconductor manufacturer and employs 1000 employees. A market leader in the European market, its manufacturing

establishment in Malaysia demonstrates the state of the art in electronics manufacturing and its HR policies reflect the high skills-based production system used.

Work organisation is based on teamwork in a highly flexible production system. Each operative is trained in several horizontal tasks consistent with the multiskilling policy of the company. In terms of more vertical tasks, the worker not only solves production and minor maintenance problems but also sets up machinery (including programming the relevant software) uses statistical quality control to monitor yield and inventory and attempts process improvements. In the teams, the team leader doubles up as the supervisor. Teams are largely horizontal, although vertical teams are formed as and when the need arises.

The compensation strategy of the company is that of a market follower, paying the market rate for operatives. However, at least 40 per cent of the compensation package is tied to skill acquisition and both individual and team-based production incentives. Although annual wage increases based on the cost of living are provided to everybody, merit determines increases above those in the cost of living. The firm has a policy of multiskilling where each operative must know at least four different jobs before advancing to the next level. Most training is done on the job, although workers are sent for required courses at the Penang Skills development centre. All operatives must demonstrate competency in maths and elementary statistics as well as use of computers before being confirmed in their jobs.

Although the plant has never been unionised, there is regular labour/management communication thanks to a consultation scheme. There is a greater emphasis on job security and the valuation of experience and skills under the firm's newer production system as compared to the pre-1985 Fordist production system. The company has made a serious effort over the last five years to increase its subcontracting network and this has been facilitated by the Malaysian Government's promotion of linkages between small subcontractors and the electronics industry. Most of the subcontracted work relates to simple labour intensive operations and comprise less than 10 per cent of the total value of output of the company. Our interviews with both management and workers suggest that both production and HRM practices reflect the practices in the electronics industry in Penang, where most of the high skill based electronics operations are located.

COMPARATIVE EVALUATIONS

These cases permit comparisons at several different levels. First, differences between ISI and EOI sectors within each economy will be discussed, followed by an analysis of the differences and similarities across the two countries. The basic differences found in IR/HR practices are listed in Tables 2 and 3 below.

WITHIN COUNTRY COMPARISONS

The ISI and EOI sectors in Malaysia

Table 2 suggests several differences in IR/HR practices across the ISI and EOI sectors in Malaysia. As Table 2 indicates, the two diverse firms in the ISI sector, JCC and **PHB** Bank, are characterised by rigid job classifications, rigid pay systems, simple on the job training methods, profess to have no layoff policies, and meet their flexibility requirements primarily through the use of overtime. Labour/management relationships are generally co-operative and HR practices tend to reflect rigidity and complacency. Although these two firms exhibit similarities, note that they are in different industrial and economic sectors, use differing technology and work organisation methods and employ different kinds of employees (blue-collar vs white-collar). Apart from similar approaches to IR/HR practices, the other critical similarity is that both firms face stable economic environments given the rapidly growing Malaysian economy and both firms face domestic competition that is not threatening.

The IR/HR practices in the EOI sector are rather different. Both firms are export oriented units servicing international markets. Although they are in different industries using different technologies, work organisation is largely based on teamwork operations which emphasise multiskilled workers and flexible compensation arrangements that enhance skill acquisition and development. As Table 3 suggests, these firms tend to make more use of subcontracting arrangements to enhance external flexibility and some of them use temporary and casual workers and apprentices. Both firms are non union and have resisted unionisation attempts. These cases suggest that HR/IR practices in the EOI sector are far more flexible and aggressive than those of the firms in the ISI sector.

TABLE 2 *IR/HR practices of firms in Malaysia*

ISI sector

IR/HR practice	Jotun Paints	Perwira Habib Bank
Business	Manufacture of paints for domestic market	Domestic banking
Work organisation and technology	Continuous process technology Rigid job classifications	Clerical operations Rigid job classifications
Training for operators	On the job for job-specific skills	On the job for job-specific skills
Compensation strategy and system	Market leader Rigid system with production bonuses	Market follower Rigid pay system with guaranteed bonuses
Workplace flexibility	'No layoff' policy Overtime when necessary	'No layoff' policy 'No overtime' policy Use of temporary labour in peak periods
Labour/management relations	Co-operative	Co-operative

EOI sector

IR/HR practice	X Semiconductors	Mattel Tools
Business	Export of electronic components	Export of moulds for toys
Work organisation and technology	Automated assembly line Team-based work systems	Automated design and manufacture with highly skilled individual processes
Training for operators	On the job Multiskilling Teamwork training	On the job Training in maintenance External training in tool and die making
Compensation strategy and system	Market follower Highly flexible pay tied to productivity and skills development	Market follower Highly flexible pay with incentives forming 40 per cent of salary
Workplace flexibility	Regular overtime Extensive use of subcontracting	Regular overtime Extensive of temporary labour 'No layoff' policy Subcontracting
Labour/management relations	Non-union with progressive HR policies	Non-union with progressive HR policies

TABLE 3 *IR/HR practices of firms in the Philippines*

ISI sector

IR/HR practice	Dutch Boy Paints	Interbank
Business	Manufacture of paints for domestic market	Domestic savings bank
Work organisation and technology	Continuous process Rigid job classifications	Flexible job classifications Group work
Training for operators	On the job for job-specific skills No job rotation or multiskilling policy	On the job for job-specific skills No job rotation or multiskilling policy
Compensation strategy and system	Market leader Rigid but generous compensation system	Market leader Rigid pay system with guaranteed bonuses
Workplace flexibility	'No layoff' policy Overtime when necessary	'No layoff' policy Increased automation
Labour/management relations	Paternalistic and co-operative	Co-operative

EOI sector

IR/HR practice	Citibank	Uniden	Motorola	Matsushita
Business	Foreign exchange bank	Export of circuit boards	Export of electronic goods	Export of electronic goods
Work organisation and technology	Flexible job classifications Group work	Manual assembly line Rigid classifications Fordist work organisation	Fully automated process Highly flexible job classifications Semi and fully autonomous teams	Semiautomated assembly Fixed job classifications with horizontal teams
Training for operators	Job rotation Multiskilling	On the job for job specific skills No multiskilling policy	Job rotation External team training Skills development policy Incentives for education	Job rotation People skills
Compensation strategy and system	Market follower Flexible compensation tied to skills acquisition	Market follower Rigid compensation system with no incentives	Market leader Highly flexible pay system tied to skill acquisition	Market follower Skill-based system with productivity incentives
Workplace flexibility	Subcontracting Overtime	Extensive use of subcontracting and temporary labour	'No layoff' policy	Extensive use of temporary labour, overtime and subcontracting
Labour/management relations	Conflictual progressive HR policies	Non-union with aggressive union suppression strategies	Non-union with progressive HR policies	Unionised with co-operative labour/management relations

The ISI and EOI sectors in the Philippines

The general differences noted between ISI and EOI sectors in Malaysia are apparent in the Philippines as well- although the EOI sector shows a greater diversity of IR/HR practices than in Malaysia. In the ISI sector, both Interbank and Dutch Boy paints show some degree of complacency and paternalism in their personnel practices as seen in Table 2. Both companies are characterised by relatively rigid job classifications with only vertical movement, both firms have on the job training policies with no policy on multiskilling, both have rigid compensation systems that pay above the market, both companies are unionised, have 'no layoff' policies and respond to external and internal flexibility needs through the use of overtime reduction and automation. Industrial relations are largely cooperative and, in the case of Dutch Boy Paints, even paternalistic.

The firms in the EOI sector evidence different patterns of IR/HR practices from those in the ISI sector, although the patterns are more variegated in the former. In general, however, the emphasis on

flexibility in wages, the focus on skills development and teamwork is evident in these firms (see Table 3). However, as noted, IR/HR practices exhibit more variance in the EOI sector than in the Malaysian case. Uniden's IR/HR policies reflect its low cost orientation characterised by assembly line operations with Fordist work practices, a rigid compensation system (that pays barely above the minimum wage), its extensive use of casual and contract labour, absence of multiskilling and union avoidance. On the other hand, Motorola is characterised by a work organisation that is based on teamwork, extensive multiskilling, flexible wage systems, progressive personnel policies in a nonunion environment, including work sharing and no layoffs in economic downturns. Matsushita's practices are more similar to those of Motorola than Uniden although Matsushita is unionised. Citibank, with its teamwork emphasis (unique in the Filipino banking industry) compensation systems tied to skill acquisition, the extensive use of subcontracting and a more conflictual IR system reflects an aggressive approach to IR/HR that are not seen in the banks in the ISI sector.

BETWEEN COUNTRY COMPARISONS

Sector and firm comparisons

Comparisons across the two countries tend to confirm the pattern of IR/HR policy differences noted within each country. Examination of Tables 2 and 3 suggest the firms in the ISI sectors in both countries - *ie,* the two banking firms Interbank (Philippines) and PHB Bank (Malaysia) and the two paint companies, Dutch Boy (Philippines) and JCC (Malaysia) - evidence similarities in the IR/HR strategies. The IR/HR practices in the EOI sectors of both countries also evidence similarities. For instance, the practices of the electronics firms in the Philippines match the aggressive and 'modern' practices of X-semiconductor in Malaysia. Outside of the electronics sector, Mattel Tools in Malaysia and Citibank in the Philippines also reveal active and aggressive HRM practices, with an emphasis towards high flexibility (see Tables 2 and 3).

The central differences between IR/HR practices in the ISI and EOI sectors in both countries appear to be found with respect to compensation policies, work organisation, multiskilling, internal flexibility arrangements and unionisation. The constructs underlying these practices are those of flexibility and productivity enhancement. Firms in the EOI sector appear to place a greater emphasis on flexible HR practices.

Given that Malaysia and the Philippines are following different EOI strategies, (Malaysia follows an advanced EOI strategy while Philippines follows a simple first stage EOI strategy) it was expected that there would be some differences in the IR/HR patterns in the EOI sector in both countries. This difference is best exemplified in the comparison of IR/HR practices of the Philippine electronics firm, Uniden, with the policies of electronics firms in Malaysia. Given its low wage strategy, no multiskilling-training, Fordist work organisation and conflictual employee relations, Uniden's policies would seem to reflect a low cost orientation, while Malaysian electronics firms evidence higher skill-based and more flexible, progressive IR/HR policies. Admittedly, both Motorola and Matsushita in the Philippines also evidence progressive IR/HR policies and are notable exceptions to the argument. However, as noted by Pineda- Ofreneo (1985) and Ofreneo (1994) Matsushita and Motorola are exceptions to the standard of electronics manufacturers in the Philippines and most Philippine electronics firms are more similar to Uniden.

The difference between Malaysian and Philippine electronics firms found here is consistent with other findings regarding the international division of labour in the Southeast Asian electronics industry, (see Lai, 1991; Rajah, 1994; Salih, Young and Rajah, 1987) all of whom have suggested that firms locate the lowest end of their production such as assembly and testing, in the Philippines and higher end processes such as wafer fabrication and design of chips in Malaysia. Motorola, for instance, has three factories in Malaysia and transferred its research and development there as early as 1986, while it has not done so in the Philippines. Motorola's Malaysian operations have recently obtained the AIM Award for People Development and Management for "its major commitment to training and skills upgrading, with capital and an institute to match" *{Far Eastern Economic Review,* October 27, 1984:58). Matsushita's Malaysian operations dwarf its Philippine operations in scope and size with three plants and more investment slated for 1994.

A study by the Board of Investments for the Department of Trade and Industry in the Philippines suggests that Philippine electronics firms typically concentrate on "the assembly, testing and packaging of semi-conductors, representing the most labour intensive stage and involves nothing more than the cutting of silicon wafers into separate dies and their individual encapsulation using plastic ceramic or metal cans as casing materials" (BOI, 1988:51). The Malaysian electronics industry, which focused on assembly and testing in the early 1980s, is now characterised by higher end processes and final testing as well as by research and development. In a recent study of work organisation and HR practices in the electronics industry in Malaysia, Rajah (1994: 22-24) suggests "work boundaries have expanded - team work and collective responsibility have become more important - a wider set of skills, including SQC

(statistical quality control) and computer operations are now required - and wages are higher and tied to skill acquisition". These cases therefore support the proposition that IR/HR practices in the Malaysian EOI sector are perhaps more 'advanced', but certainly different to the norm in the low cost EOI sector in the Philippines.

DISCUSSION

The argument in this article is that the dominant industrialisation strategies of both countries influenced the growth of different patterns of IR/HR policies and practices. The comparisons suggest two conclusions. First, there are differences in IR/HR practices between the ISI and EOI sectors in each country. In the ISI sector, firms appear to be following more 'passive' HR practices. In the EOI sector, in both countries, the HR practices appear to evidence more diversity, but also suggest a general pattern of more 'aggressive' and flexible IR/HR practices. The similarity in the pattern across both countries is quite striking. Secondly, the IR/HR practices under a more advanced EOI strategy in Malaysia differ from the IR/HR practices in first stage EOI in the Philippines and this is best exemplified in the electronics industry, which constitutes the bulk of the EOI sector in both countries.

Although I have focused on the industrialisation strategy to explain the differing IR/HR practices in the two sectors, there might be other explanations for the differences noted here. One explanation is the role of technology in shaping FIR/IR practices. It can be argued for instance, that work organisation in the paint industry cannot be team-based since it uses continuous process technology, providing little opportunity for team-based production. While this is certainly true, it does not explain the other rigid and paternalistic practices found in the paint industry and banks in the ISI sector in both countries. In the banking example, note that while both ISI banks had relatively rigid practices, Citibank in the EOI sector pursued a more flexible strategy. The role of technology, therefore, does not fully explain the patterns noted above.

A second explanation for the differences between EOI and ISI sectors concerns the differences between domestic and foreign management. The argument is that firms in the EOI sectors are foreign owned and they transfer IR/HR management practices from abroad to both Malaysia and the Philippines. This explanation is supported by some of the cases and clearly is the explanation that accounts for the variations in workplace IR/HR practices within a particular sector. For example, while the focus of national IR policy and workplace practices in first stage EOI in the Philippines is best characterised by cost containment and union avoidance, there are exceptions, such as Motorola. Clearly, in the Philippines, Citibank, Motorola, and Matsushita have introduced in these countries the

HRM practices used in their worldwide operations. Note however, that even domestic paint manufacturers like JCC and Dutch Boy are owned partly by foreign interests, with substantial technological collaboration with a variety of foreign firms. Note also that Interbank in the ISI sector is a subsidiary of American Express. Clearly, foreign management brings with it their own IR/HR innovations and, thus, induce variation in the pattern. However, there is enough evidence here to suggest that there is a generalised pattern of ISI-EOI sector IR/HR differences that cannot be explained solely by the presence of foreign management.

The results described here suggest that industrialisation strategy has a fundamental impact on IR. In this article, the cases suggest that industrialisation strategies can also explain the creation and existence of distinct patterns of HR in different sectors even allowing for other factors that may cause variations in IR/HR arrangements such as the technology used by firms, and the business strategies of parent multinationals. The differences in patterns noted under different industrialisation regimes appear to mirror the differences in the competitive environment faced by the firms. Firms in the EOI sector have to compete in the international market and are subject to changes in the global economic environment that is more volatile than the domestic environment that ISI firms face.

The use of the industrialisation strategy framework in explaining IR/HR practices permits researchers to go beyond traditional sectoral differences such as 'manufacturing or services', 'blue collar and white collar' to sectors such as ISI and EOI. For policy makers, the framework suggests the imperative of examining national level phenomena such as industrialisation strategies to guide the development of appropriate IR/HR practices. It would appear that firm level practices need to be at least congruent with national level strategies. This is of special importance for IR/HR practitioners who have to design IR/HR practices in developing countries.

The framework thus provides comparative researchers with a different unit of analysis in examining patterns of IR/HR practices. However, the relatively small number of cases does not permit easy generalisation. A wider range of firms would help make a stronger case for this. Future research may wish to address this issue by extending this type of analysis to more firms in both sectors and to other countries in Asia where development strategies have been similar. Given the increasingly widespread acceptance of the Asian model as a development model for the third world (Kuruvilla and Pagnucco, 1994)[ii] opportunities for this kind of investigation exist in abundance.

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[i] Two well known comparative studies in IR that use pair-wise comparisons are Dore (1973) who compared Britain and Japan and the Aix-en-Provence group (Maurice, Sellier and Silvestre, 1986) who compared France and Germany.

[ii] The notion that there is a clearly defined development pathway in Asia is not new. Deyo (1989) alludes to the similarity of the export oriented economies of Korea, Taiwan, Hong Kong and Singapore, Kuruvilla (1995a) suggests the similarity of export oriented strategies in several Asian countries including the acceptance of this strategy in emerging nations such as Cambodia, Laos and Vietnam. More systematic comparisons of export oriented policies and incentives and similarities in economic transformations (see Kuruvilla and Pagnucco, 1994) also strongly suggest the presence of a typical development model.