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PROTECTION, INTERNATIONAL COMPETITIVENESS AND EXPORT PERFORMANCE OF MALAYSIAN INDUSTRIES

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C O N T E N T S

T A B L E S

PROTECTION, INTERNATIONAL COMPETITIVENESS AND EXPORT PERFORMANCE OF MALAYSIAN INDUSTRIES

1. Introduction

TARIFF protection has been the most important tool used in promoting manufacturing industries under the import substitution industrialisation (ISI) strategy in Malaysia since 1960s. Therefore, incentives given in the form of tariff and non-tariff barriers were generally high under this strategy (see Edwards, 1975; Ariff and Hill, 1985; and Alavi, 1996).

There has been a large body of literature which suggests considerable scepticism concerning the success of the highly protected industries in less developed countries. Critics were mainly centred at the indefinite provision of tariff protection and the failure of protected industries to become internationally competitive and export-oriented industries. It is argued that in many developing countries, once tariff are imposed, their levels are not later reduced (Ballance et al., 1982; Balassa et al., 1971:75). It is further argued that this is caused by failure of the industrial policies in most developing countries in inducing the sequence of import substitution (IS) to exports, i.e. achieving international competitiveness.

The objective of this paper is to evaluate the performance of highly protected industries in Malaysia. We begin by reviewing the structure and levels of protection in the 1960s to the 1980s. Following this, we discuss the previous studies done and methodologies used to assess the performance of highly protected industries in developing countries. Then we examine how the Malaysian industries had performed under the protected environment. We used domestic resource costs (DRC) ratio and export share of total output to evaluate this. Finally, we analyse the protection and industrial policies that has been implemented in Malaysia since the 1960s to understand why many protected firms in Malaysia failed to be internationally competitive and export-oriented.

2. The Structure and Levels of Tariff Protection

THE effective rates of protection have been high for most import-competing industries since the 1960s. During the first round of ISI strategy in Malaysia in the 1960s, effective rate of protection has increased from 25 per cent in 1962, to 50 per cent in 1966, to 65 per cent in 1969 and to 70 per cent in 1972 (see Edwards, 1975:98). However, the ERP started to decrease after the mid-1970s. It fell from 61 per cent in 1974 to 42 per cent in 1980 and further to 28 per cent in 1987 (Table 1).

Table 1: Effective Rate of Protection (%) for 1966, 1979 and 1987

Industry Description (at 2-Digit Level)	1966	1979	1987
Food Industry	55	13	22
Beverages	40	38	44
Tobacco Manufactures	110	nva	-26
Textiles	110	55	51
Clothing	40	-	13
Wood Products	40	35	178
Furniture	50	84	281
Paper and Products	95	55	38
Rubber Products	170	-7	22
Chemical Products	20	50	17
Petroleum Products	0	22	42
NMMP	25	17	122
Basic Metals	40	66	197
Metal Products	40	30	37
Electrical and Electronics Products	155	60	-2
Transport and Equipment	-	75	252
All Sub-Sectors	**50**	**24**	**28**

Source: Figures for 1966 are from Edwards (1975)
Figures for 1979 are from MIPS (1984)
Figures for 1987 are from Alavi (1996)

However, it was found that there was a significant change in the structure of protection. Even though the protection levels for the manufacturing sector decreased over the years, there was a significant increase in the level of protection for the intermediate goods. The ERP of protection for consumer goods and intermediate goods in 1969 was 72 per cent and 33 per cent respectively. In 1987, the ERP on industries producing consumer goods fell substantially to 9 per cent while the ERP for industries producing intermediate goods increased to 65 per cent (Table 2).

Table 2: ERP According to End-Use Grouping, 1969 and 1987

End-Use Grouping	ERP(%) 1969	ERP(%) 1987
Consumer Goods	72	9
Intermediate Goods	33	65

Source: Figures for 1969 are re-calculated from Edwards (1975)
Figures for 1987 are from Alavi (1996)

This implies that the protection policy has switched the priority from favouring the consumer goods industry in the 1960s and 1970s to the intermediate goods industry in 1980s. This phenomena is a consequence of the heavy industrialisation programme started in the early 1980s, which emphasised promoting industries producing intermediate goods, like NMMP, petrochemicals, iron and steel industries.

Thus, the change in industrial strategy has eliminated the protection bias towards consumer goods, with greater emphasise given to intermediate goods sector. However, the pattern of incentives remain biased against export and in favour of industries which are domestic-oriented. This applies throughout the period between the 1960s and 1980s.

As mentioned earlier, protection system in developing countries were argued to create biasness against exports, which could result in various shortcomings related to the ISI strategy, i.e. inefficiency and uncompetitiveness. These phenomena were found by many studies which have attempted to

evaluate the performance of industries under a protected environment. The next section will discuss further on this.

3. Assessment of the Protected Industry Performance

IN theory, a highly protected industry (hereafter referred to as infant industry) has to fulfil three major conditions to warrant protection. The first proposition is that the industry must experience positive and fast productivity growth through both dynamic internal and external economies. The second proposition is that the industry must be able to achieve international competitiveness after a period of time. The third proposition says that the initial losses incurred during the learning period must be recouped after a period of time.

Note that in theory, these conditions have to be fulfilled before protection can be considered justified for a newly established industry. In other words, there is an ex-ante selection of infant industries. But in practice, identifying a potential infant industry is not an easy exercise. This is mainly due to the difficulty of quantifying dynamic internal and external economies. So, in practice, protection is usually given on a made-to-measure basis, i.e. on a trial and error basis. Given these circumstances, it is essential to carry out the assessment of the performance of an infant industry in terms of fulfilling the

conditions mentioned above after the protection has been granted. This means that there is a need for the ex-post evaluation of infant industry performance. Otherwise, it might be possible that protection granted to some industries is not warranted and therefore they might continue to enjoy unwarranted protection indefinitely.

Earlier studies on infant industries concentrated on the analysis of DRC or estimation of technical efficiency. In the 1970s, DRC was used as a measure of the efficiency of resource allocation under a protectionist regime. Studies which have used DRC to evaluate the performance of ISIs were Little, Scitovsky and Scott (1970), Balassa et al. (1982), Bhagwati (1978), Bhagwati and Srinivasan (1975) and Krueger (1978), amongst others. However, in 1980s, DRC ratios were identified as a measure of international competitiveness (see Schydlowsky, 1984).

On the other hand, the examination of infant industries' performance in terms of technical efficiency was most popular in the 1970s. It concentrated on firm-level studies based on case-study evidence of the technical efficiencies of industries particularly in NICs (mainly a few Latin American countries). All of these case studies, however, seem to concentrate on successful infant industries (in terms of their ability to export their product and expertise after a period of protection). There are, however, a few firm-level studies which show that protection had a negative effect on efficiency. These studies view protected

firms in developing countries as high cost and technologically stagnant, with little incentive to become efficient and internationally competitive.

In the late 1970s and early 1980s, the relevance of technical change studies at firm-level in assessing the performance of infant industries were questioned. This has initiated growing number of studies concentrating on total factor productivity growth (TFPG) analysis at industry or sectoral level, e.g. Krueger and Tuncer (1982), Havrylyshyn (1990), and the World Bank (1993).

While recognising that TFPG is a good indicator for sources of industrial growth, there is a great reservation about the use of TFPG as an indicator of industrial efficiency. This is the major criticism on studies using TFPG to evaluate the success of industrial policy in developing countries (success means achieving and maintaining efficiency at international standard). The study by the World Bank (1993), *The East Asian Miracle* has also used TFPG analysis in their assessment of East Asian industrial policies. There were significant number of writings which criticised the study from all angles but, the major issue was somehow overlooked -- the use of TFPG in the analysis. The use of TFPG as a measure of efficiency is questionable for two major reasons. The first question relate to the methodological and measurement problems. The TFP theoretical paradigm, with its assumptions of full resource utilization and perfect competition, seems inappropriate for meaningful analysis, especially in developing countries lacking such characteristics. Furthermore, there are data

inadequacies, particularly on capital inputs. Available data are usually on buildings and structures, machinery, equipment and inventories. But appropriate data should be for capital stock, estimated using the perpetual inventory method. Essentially, this involves development of an annual gross investment series over a period of years. However, in developing countries, access to such data is almost impossible.

In a perfectly competitive economy, all the dynamic changes in production should be captured by the TFPG measurement. Provided all the gains from TFP improvement are not absorbed by increased real wages, countries (or industries) will experience an increasing cost advantage over their competitors. This implies that an increase in TFP leads to an increase in the international competitiveness of the industry. Therefore, dynamic changes in comparative advantage can be measured by the comparative productivity growth of an industry in two countries. In other words, the two major elements in dynamic comparative advantage are domestic productivity growth and world productivity growth (Pack, 1992).

Using this principle, it has been argued that assessment of the performance of a newly established industry that begins without achieving international competitiveness requires its TFP to grow faster than its established competitors. Weiss (1988), Schydlowsky (1984), Westphal (1981), Krueger and Tuncer (1982), Bell et al. (1984), Nishimizu and Page (1986), and Pack (1988

and 1992) have all affirmed that changes in the competitive advantage of an infant industry are determined by the relative growth of the TFP of the industry to its international competitors. In industrially advanced countries, it is a lot easier to do such productivity comparisons due to the availability and reliability of long-term time series data. Even though this approach has been applied extensively in developed countries (see, for example, Broadberry and Craft, 1990; Jorgenson and Nishimizu, 1978; O'Mahony, 1992; amongst others), it does not mean that this approach is suitable for developing countries.

The second question is whether TFPG is a measure the efficiency level or changes in efficiency levels. Recent research has shown that TFPG is only one factor, albeit an important one, influencing changes in international competitiveness over time (Schydlowsky, 1984; Nishimizu and Page, 1986). Thus, the important point to note is, TFPG is *not* a measure of the efficiency level. It is only one factor affecting dynamic changes in competitive advantage. In the assessment of industrial efficiency, therefore, TFPG analysis must be combined with measurement of levels of international competitiveness over time. The use of TFP in assessing industrial performance *per se* does not lead to any firm conclusions.

In addition, in using the comparative productivity approach, question arises to which industry in which country should be taken as a control standard? Furthermore, it is possible that we may find some cases where domestic industry

is experiencing high or positive productivity growth over time, but is lagging behind in terms of international competitiveness. This may have been caused by two factors. Firstly, internationally competitive industries overseas may be progressing faster than domestic industries due to rapid technological changes. Secondly, the domestic industry may have started with substantial initial costs of production, thus facing difficulty in achieving international competitiveness despite rapid productivity growth. There may also be cases where the infant industry achieves international competitiveness even though its productivity growth is slow. This may happen where the foreign competitor's productivity growth is even slower or almost stagnant, and the initial productivity gap is not too great.

Due to the weaknesses of the TFPG measure as an indicator of international competitiveness of a firm, we used export share of total output and DRC as an indicator of international competitiveness of the highly protected in Malaysia. It is important, however, to recognise the shortcoming of using exports as measure of international competitiveness. Exports do not necessarily reflect cost-competitiveness. International competitiveness may have achieved even without exports. At the same time, even though exports may reflect evidence of having reached international standards of price and quality, exports do not necessarily imply cost-competitiveness; they may be benefiting from various government export promotion schemes. Thus, it is essential to bear in mind of these weaknesses when analysing the results of this study.

4. Exports and International Competitiveness

WE estimated the ratio of export to total output for four years, 1975, 1980, 1985 and 1990 of 54 five-digit MIC level industries. Data were obtained from the annual survey undertaken by MIDA on manufacturing firms in Malaysia. Table A1 in the appendix show the result of this estimation. In the analysis of export performance of highly protected industries, we selected industries which were granted higher protection in 1987 and those which had high protection for both 1979 and 1987 (Table 3).

Table 3 clearly show that resource-based industries which were highly protected have been exporting large share of their output since the 1970s. Manufacture of palm kernel oil had the highest ERP in 1979 and the protection level is higher in 1987 than that of in 1979, i.e. NVA (negative value added[1]). The export share of total output of this industry has been consistently high since 1975 to 1990. The share is more than 100 per cent because firms could be exporting previous year's stock. Other highly protected resource-based industries were manufacture of rubber footwear; manufacture of rubber n.e.c.; manufacture of furniture and fixtures; plywood, hardboard and particle board mills; sawmills; and manufacture of pottery, china and earthernware. All these industries had higher level of protection in 1987, except for the manufacture of rubber footwear (but enjoyed 113 per cent ERP in1987). The ERP levels

[1] Negative value added (NVA) means that the value added of these industries is negative when measured at the international price, i.e. without protection)

increased from 100 per cent to 115 per cent in manufacture of rubber; 84 per cent to 281 per cent in manufacture of furniture and fixtures; 69 per cent to 145 per cent in synthetic textile mills; 50 per cent to 248 per cent in plywood, hardboard, and particle board; 30 per cent to 197 per cent in sawmills; and 25 per cent to 197 per cent in manufacture of pottery, china and earthernware industry.

Table 3: Export Share and ERP of Highly Protected Industries

Industry Code	Industry Description	Export Share of Output (%)				ERP (%)	
		1975	1980	1985	1990	1979	1987
31153	Manufacture of Palm Kernel Oil	122	5	205	142	401	nva
35600	Manufacture of Plastic Products, n.e.c.	19	12	17	39	312	297
35593	Manufacture of Rubber Footwear	67	120	62	81	141	113
38432	Man. And Assembly of Motor Vehicles	0	0	0	16	129	nva
35599	Manufacture of Rubber n.e.c.	30	101	118	91	100	105
37109	Other Iron and Steel Basic Industries	3	4	6	16	86	163
33200	Man. Of Furniture and Fixtures	79	68	84	79	84	281
32115	Synthetic Textile Mills	32	64	52	48	69	145
31180	Sugar Factories and Refineries	0	12	10	0	52	nva
33112	Plywood, Hardboard and Particle Board Mills	59	94	58	107	50	248
38441	Man. And Assembly of Motor Cycles and Scooters	0	0	0	0	43	181
33111	Sawmills	0	100	110	124	30	197
36100	Man. Of Pottery, China and Eathernware	0	50	4	97	25	197
37101	Primary Iron and Steel Industries	0	0	7	20	25	296
36921	Man. Of Hydraulic Cement	0	0	1	33	16	nva
36910	Man. Of Structural Clay Products	5	5	10	17	12	82
38191	Man. Of Tin Cans and Metal Boxes	2	9	5	22	11	88
38391	Cables and Wires	3	2	4	36	6	77
31163	Flour Mills	0	14	9	6	-1	nva
31330	Malt and Malt Liquors	43	10	16	8	-100	259
31171	Biscuit Factories	9	1	8	37	-1385	114

Source: Calculated from the Annual Company Survey, MIDA

Clearly, high and increasing level of protection granted to these industries did not deter their export performance, in fact in some cases export share has increased. These industries, however, are resource-based industries which have comparative advantage in production due to availability of relatively cheaper inputs locally. Protection of domestic market apparently enhanced their profitability and viability which in turn enabled them to sell their products in overseas market competitively.

Table 4 shows that all of the highly protected resource-based industries which exported substantial share of their output were internationally competitive in 1987. International competitiveness is measured by domestic resource costs (DRC)[2]. The DRC ratio can be interpreted as the cost to the economy of saving foreign exchange (through import substitution) or acquiring foreign exchange (through exporting). The higher the ratio, the more costly in terms of domestic resources it is to produce this product (Greenaway and Milner, 1993). Ratios of less than one indicate activities of comparative advantage in the sense that they should be net foreign exchange earners; ratios in excess of one indicate comparative disadvantage where the value of domestic resources used up in producing the product exceeds the value of foreign exchange required to import it. There are a few literature which demonstrates that DRC is a useful measure of the comparative advantage for industries in a

[2] For detail of the calculation of DRC, please refer to Alavi (1996).

distorted economy (see Schydlowsky, 1984; Greenaway and Milner, 1993; and Nishimizu and Page, 1986).

Table 4: Domestic Resource Costs (DRC) of Highly Protected Industries, 1987

Industry	DRC Ratio 1987	Resource Based or NonResource Based
Internationally Competitive, 1987		
1. Other Dairy Products	0.7	RB
2. Man. of Cocoa and Confectionery	0.8	RB
3. Soft and Carbonated Drinks	0.4	RB
4. Natural Fibre Spinning and Weaving	0.8	NRB
5. Synthetic Textile Mills	0.8	NRB
6. Knitting Mills	0.9	NRB
7. Plywood, Hardboard & Particle Mills	0.7	RB
8. Planning Mills, Windows Etc.	0.7	RB
9. Man. of Fertilizers and Pesticides	0.5	RB
10. Man. of Drugs and Medicines	0.6	NRB
11. Man. of Soap and Cleaning Preparations	0.7	NRB
12. Tyre and Tube Products	0.9	RB
13. Man. of Other Rubber Products	0.8	RB
14. Man. of Wire and Wire Products	0.8	NRB
15. Man. of Refrigerators, Exhausts etc.	0.6	NRB
Internationally Uncompetitive, 1987		
1. Palm Kernel Oil	nva	RB
2. Sugar Factory and Refineries	nva	NRB
3. Other Food Products	1.2	RB
4. Malt Liquor and Malt	1.2	NRB
5. Dyeing, Bleaching, Printing etc.	1.1	NRB
6. Sawmills	1.3	RB
7. Man. of Furniture and Fixtures	1.5	RB
8. Man. of Container & Paper Boxes	1.0	NRB
9. Man. of Pulp, Paper and Paperboard	1.0	NRB
10. Man. of Paints, Varnishes and Lacquers	1.0	NRB
11. Man. of Chemical Products	1.2	NRB
12. Man. of Rubber Footwear	1.0	RB
13. Man. of Plastic Product	2.0	NRB
14. Man. of Glass and Products	1.1	RB
15. Other Iron and Steel Basic Industries	1.2	NRB
16. Man. of Other Fabricated Metal	1.2	NRB
17. Man. and Assembly of Motor Vehicles	nva	NRB
18. Man. of M/Vehicle Parts and Accessories	1.1	NRB
19. Man. and Assembly of Motorcycles	1.6	NRB

Source: DRC figures for 1987 are from Alavi (1996)

Out of 34 industries which were highly protected (ERP more than 28 per cent in 1979), 15 industries were found to be internationally competitive, and out of these 15 industries, 8 were resource-based. On the other hand, there were 19 industries which were internationally uncompetitive with the majority of them being the non-resource based industries.

Non-resource based industries which enjoyed high and increased level of protection, i.e. manufacture of plastic products; manufacture and assembly of motor vehicles; other iron and steel basic industries; sugar factories and refineries; manufacture and assembly of motor cycles and scooters; primary iron and steel industries; manufacture of hydraulic cement; manufacture of tin cans and metal boxes; cables and wires flour mills; malt and malt liquors, were found to be highly dependent on domestic market (Table 3).

Manufacture of plastic products were granted high protection both in 1979 and 1987, that is 312 per cent and 297 per cent respectively. The Malaysian plastics industry began its history in the 1950s as a backyard industry. It supplies a diverse range of products from packaging products such as plastic films and bags to household wares, building and construction materials and, more recently, plastic parts and components for the automotive, electrical and electronics industries. The export share of total output were 19 per cent in 1970, 12 per cent in 1980, 17 per cent in 1985 and doubled to 39 per cent in 1990. The figures indicate that this industry has been dependent on domestic

market significantly since the 1970s, although the export share of this industry seems to have improved in 1990. However, the question is: do this exports come from the previously protected industries or new industries which were established after 1986 which have been approved under the export-condition regulation? MIDA's unpublished data show that there was a sharp increase in the number of plastic and plastic products industries which were approved under the export-condition after 1985. In 1985, out of 42 industries approved, only 7 per cent of the projects were with 50 per cent and more export condition regulation. In 1990, the share increased rapidly to 82 per cent (see Table 5). It is not clear therefore, whether industries which were highly protected for decades had actually expanded their activities overseas or not, but there is substantial possibility that these industries are still dependent on the domestic market. Table 4 shows that this industry was internationally uncompetitive in 1987, where it had a very high DRC ratio, i.e. 2.

The manufacture and assembly of motor vehicle is another sector which were highly protected and has been dependent on the small domestic market. The motor vehicle assembling industry started in 1967 and it was limited to assembly of automobiles and motorised two-wheeler. This industry is a closed industry and is protected and subject to supervision of the Motor Vehicle Assembly Committee (MVAC) so that the makes and number of models assembled models are limited and the net selling price of every model is subjected to approval by the Ministry of International Trade and Industry. To

protect this industry, any imports of completely built up (CBU) units are subject to import duty. The listed import duty on motor vehicle has increased considerably over the years. In 1970, the import duty was 45 per cent and there was an excise duty of 25 per cent on locally assembled car. In 1973, the tariff was revised in 1979 whereby the import duty ranged from 60 to 100 per cent according to the value of the car. In 1982 and 1984 the tariff rates were raised further to between 90 to 200 per cent and 100 to 200 per cent accordingly. In 1987, the import duty ranged from 140 to 300 per cent. Apart from import duty, there is a quota restriction on imports of vehicles set at 10 per cent of demand in the preceding years. Therefore, the ERP level increased sharply from 129 per cent in 1979 to NVA in 1987. Between 1970 to 1985, this industry was solely dependent on the highly protected domestic market. However, in 1990, it exported 16 per cent of its output. DRC ratio estimated for industry in 1987, indicate its international uncompetitiveness.

Sugar factories and refineries serve largely for the domestic market, and were highly protected since the 1960s. The ERP figure for 1987 is higher than that of 1979 because Alavi (1996) has taken into account the non-tariff barriers in the estimation of ERP, while the MIPS (1984) considered only the listed tariffs only[3]. This industry enjoyed various government protection such as price control and import restriction. In 1987, the import duty on refined sugar was 25 per cent with 5 per cent surtax, but the price comparison with imported refined

[3] For more discussion on this, see Alavi (1996).

sugar into Singapore show that the domestic price is 61 per cent higher that the c.i.f. price. This industry is highly uncompetitive and has been dependent on domestic industry.

Table 5: Projects Approved By MIDA Under the 50 Per Cent or More Export-Condition Regulation, 1985 and 1990

Industry Classification	1985			1990		
	Export-Condition	Total Approved	%	Export-Condition	Total Approved	%
Food	19	57	33	20	36	56
Beverage and Tobacco	2	5	40	-	3	0
Textiles and Apparel	36	50	72	104	124	84
Leather and Leather Products	1	1	10 0	7	8	88
Wood and Wood Products	9	28	32	38	85	45
Furniture and Fixtures	4	7	57	42	47	89
Paper Products, Printing and Publication	6	35	17	14	40	35
Chemical and Chemical Products	5	39	13	27	45	60
Petroleum and Coal Products	-	11	0	2	3	66
Rubber and Rubber Products	12	24	50	28	34	82
Plastic Products	3	42	7	40	49	82
Non-Metallic Mineral Products	7	84	8	24	53	42
Basic Metal Products	3	32	9	15	26	58
Fabricated Metal Products	2	53	4	35	52	67
Machinery, excluding Electrical	6	41	15	30	36	83
Electrical and Electronics	19	62	31	194	213	91
Transport Equipment	2	33	6	13	23	57
Scientific and Measurement Equipment	3	5	60	4	4	100
Others	8	16	50	20	25	80
TOTAL	**147**	**625**	**23**	**657**	**906**	**73**

Source: MIDA Unpublished Data

Notes:

1) Export-Condition refers to industries which have been approved under the export-condition regulation.
2) Total refers to total number of industries approved in a particular industrial sub-sector.
3) % refers to percentage of industries which have been approved under export-condition from total industries approved.

Flour mills cater mainly for the domestic market, with its export share of total output ranging from 0-14 per cent for the years between 1975 to 1990. The industry was established in 1966 when two major companies, Federal Flour Mills and Malayan Flour Mills, started their production. In the same year, imports of flour, bran and pollard were prohibited. The import restriction on wheat flour remains until now and there was also domestic price control on this item. Therefore, even though the listed duty is only 5 per cent, the protection level is actually high due to this non-tariff barriers.

Manufacture and assembly of motor cycles and scooters essentially cater for the Malaysian highly protected domestic market. The motorcycle sector in Malaysia started its operation in Malaysia since the 1960s. The motorcycle assembly sector is presently dominated by the four Japanese motorcycle brands which are assembled in Malaysia by their respective franchise holders (IMP2, 1996: 276). This industry has been highly protected since the 1960s. The output of this industry are subject to price control by the Ministry of International Trade and Industry. Most of the motorcycles CKD (completely knocked down parts) are produced locally (95 per cent) and imported CKDs are subject to the listed imported duty of 5 per cent to 25 per cent in 1987. Motorcycle engine parts are exempted for import duty completely. However, this sector have not made much advancement in the export market.

The irony about EOI strategy in Malaysia is that, rather than enforcing a policy to force the inefficient and uncompetitive ISIs to become internationally competitive and to produce for the export market, the new outward strategy laid stress on activities in especially established zones. Protectionist policies which were blamed as the cause of the inefficiency and uncompetitiveness of the protected industries were further strengthened during this period.

There was concern expressed repeatedly in two Malaysian Plans in the 1970s regarding the efficiency losses due to protection. Further concerns were also highlighted that the provision of tariff and tax concessions will need to ensure that they contribute to high rates of efficiency and the ability of local manufacturers to compete in world markets (Third Malaysian Plan, 1976-1980:279).

This however was stated on paper only. In practice, no official and formal economic evaluation of the effects of granting tariff protection was undertaken during this period. There was no specific tool used to justify which industry deserves protection and there has been no assessment or monitoring to ensure that the protected industries were performing well in terms of efficiency and international competitiveness. At the same time no policies were enforced to make protected industries to become internationally competitive and to produce for export markets.

Therefore, ISIs continued to produce for the saturated domestic market. Exports of manufactures came mainly from the Free Trade Zones (FTZs). Thus, the introduction of EOIs within FTZs has actually led to a separation between the operations in the FTZs and other industrial activities producing for the local market. The result was the creation of a 'dualistic' industrial structure with a highly foot-loose export sector that is mostly situated in the FTZs and the other, a domestic market sector operating in a protected environment (Edwards, 1991; Ariff and Hill, 1985; and Shepherd, 1980).

The second-round of ISI, which began in the early 1980s, emphasizing the promotion of heavy industries (i.e. passenger car manufacture, steel mills, petrochemicals plants and cement factories) worsened the situation further. The promoted projects were those with a high capital- intensity, long gestation periods and substantial scale economies. Their performance was weak and the Mid-Term Review of the Fifth Malaysian Plan (1989:196) commented that "... in general, the performance of heavy industries sponsored by the public sector was far from satisfactory. A number of these projects suffered from heavy financial losses due to the sluggish domestic market and the inability of the industries concerned to compete in international markets."

The second-round of EOI implemented in the mid-1980s also did not facilitate any improvement in the efficiency and international competitiveness of ISIs. Emphasis continued to be laid on two industrial sub-sectors, electricals

and electronics; and textile and apparel industries, with an additional focus on the resource-based industries. Thus, manufactured export expansion during this period was generated mainly from these sub-sectors.

6. Lessons to be Learned from Korean Experience

ONE major policy reform which Malaysia has to undertake to address the problems facing highly protected industries is the integration of ISI and exports. South Korean experience may provide a guide on how this integration can be implemented.

Trade policies in South Korea passed through an import-substitution phase with high and variable protection of domestic import substitutes. In all cases, policies have strongly favoured the production of import substitutes. Numerous studies have shown that the protection structure in Korea has been strongly biased towards IS industries. But it is also found that South Korea promoted exports without dismantling the import barriers erected during the ISI period. Both exports and import-substitutes were promoted by a scheme of export subsidies combined with import barriers. A high effective rate of protection on import substitutes was granted to domestic producers, on condition that export targets were fulfilled (Hamilton, 1986; Luedde-Neurath, 1986; Pack and Westphal, 1986). Hence, the Korean experience has shown

that a protection structure which is oriented towards ISIs need not necessarily destroy incentives to export. What matters is the presence of strong export promotion incentives and export target policies combined with the protection (Amsden, 1989; World Bank, 1993:97).

This export-push approach provided a mechanism by which industry moved rapidly towards international best practices, despite the highly imperfect world markets for technology. Firms and bureaucrats knew that there was a single yardstick for performance: exports. Export targets provided a consistent yardstick to measure the success of market interventions. The emphasis on export competitiveness gave business and bureaucrats a clear and objective system to measure success.

In return for these supports, they became subject to state controls on technology (e.g. production methods, products), entry, capacity expansion and prices. Violators of such restrictions could be heavily punished with the revocation of licenses, fines, and in some serious cases, prison sentences. Thus, in South Korea the state combined support and discipline. The Malaysian government did not do this.

Another interesting feature of these laws is the comprehensive performance monitoring system. The monthly export performance monitoring by the Korean state is famous (see, e.g. Jones and Sakong, 1980:97), but all

firms in the 'promoted' industries were required not only to report on export performance but also on performance in other areas (Amsden, 1989). This includes records on productivity performance, R&D, training and other related indicators. The failure of regular reporting and/or false reporting could be punished with fines and prison sentences. Such a system provided the Korean state with up-to-date and detailed information concerning the state of business in the priority sectors. This ensured the effectiveness of industrial policy in South Korea. And the yardstick used to evaluate industrial policies' success -- mainly export performance -- provided a market test of the success or failure of the policy instruments chosen. Thus, the emphasis has been on *creating* winners rather than *picking* winners.

Thus the South Korean experience shows that high and varying levels of ERP have not been a deterrent to an impressive export performance. This success was facilitated by the existence of a systematic policy which forced all promoted industries to reach global competitiveness and to export after a period of time. This is the major shortcomings in the protection policy in Malaysia. The lack of direction has been the main failing factor. Protection has been granted on a blanket basis irrespective of performance and there has been little planning to develop highly protected industries into internationally competitive manufacturing units.

7. Concluding Remarks

INDUSTRIAL policy reform which Malaysia has to undertake to address the problems facing highly protected industries is the integration of ISI and exports. Since import-competing industries have already been established, what is left now is to force these industries to become efficient and internationally competitive. A radical move to reduce protection rates on import-competing industries as suggested by the neo-classical economists is not an appropriate policy in forcing the highly protected industries to perform better. It would just destroy many existing industries which have good potential. South Korean case shows that the setting of export targets, and the use of export performance and other indicators such as productivity growth to assess policies seems a more a promising approach.

APPENDIX A1

Export Share of Total Output 1970, 1980, 1985 and 1990, and ERP 1979 and 1987(%)

Industry Code	Industry Description	Export Share of Output (%)				ERP (%)	
		1975	1980	1985	1990	1979	1987
31153	Manufacture of Palm Kernel Oil	122	5	205	142	401	nva
35600	Manufacture of Plastic Products, n.e.c.	19	12	17	39	312	297
38291	Man. of Refrigerating, Exhaust, Ventilating etc.	95	53	43	19	172	61
35593	Manufacture of Rubber Footwear	67	120	62	81	141	113
38432	Man. and Assembly of Motor Vehicles	0	0	0	16	129	nva
35599	Manufacture of Rubber n.e.c.	30	101	118	91	100	105
31219	Other Food Products, n.e.c.	9	21	21	35	94	26
31190	Man. of Cocoa, Chocolate and Sugar Confectionery	10	41	58	73	91	18
37109	Other Iron and Steel Basic Industries	3	4	76	16	86	163
33200	Man. of Furniture and Fixtures	79	68	84	79	84	281
35231	Man. of Soap and Cleaning Preparations	53	4	9	51	80	1
34120	Man. of Containers and Boxes of Paper and Paperboard	3	5	13	34	79	39
35210	Man. of Paints, Varnishes and Lacquers	43	3	15	8	76	34
32115	Synthetic Textile Mills	32	64	52	48	69	145
32112	Dyeing, Bleaching, Printing and Finishing Yarns and Fabric	26	27	44	75	62	60
32130	Knitting Mills	110	36	74	84	59	54
31129	Other Dairy Products	7	4	8	7	55	1
38439	Man. of Motor Vehicles Parts and Accessories	10	9	11	25	53	24
31180	Sugar Factories and Refineries	0	12	10	0	52	nva
34190	Man. of Pulp, Paper and Paperboard Articles, n.e.c.	1	5	18	25	52	36
33112	Plywood, Hardboard and Particle Board Mills	59	94	58	107	50	248
35120	Man. of Fertilizers and Pesticides	19	4	5	12	50	32
35290	Man. of Chemical Products, n.e.c.	12	16	10	15	50	76
32201	Clothing Factories	105	91	100	132	45	13
38199	Man. of Other Fabricated Metal Products, n.e.c.	5	13	24	58	43	11
38441	Man. and Assembly of Motor Cycles and Scooters	0	0	0	0	43	181
32111	Natural Fibre Spinning and Weaving Mills	34	5	29	69	42	20
36200	Man. of Glass and Glass Products	12	7	25	33	39	65
31340	Soft Drinks and Carbonated Waters	71	0	5	50	38	-21
38192	Man. of Wire and Wire Products	55	1	6	26	34	47
35220	Man. of Drugs and Medicines	19	14	15	27	32	-11
38193	Man. of Brass, Copper, Pewter, and Aluminium Products	17	43	34	26	32	57
33111	Sawmills	0	100	110	124	30	197
31140	Canning, Preserving and Processing of Fish etc.	107	270	106	123	28	40
34200	Printing, Publishing and Allied Industries	71	5	16	41	26	-8
36100	Man. of Pottery, China and Earthernware	0	50	4	97	25	197
37101	Primary Iron and Steel Industries	0	0	67	20	25	296

38130	Man. of Structural Metal Products	21	7	15	7	25	4
36991	Cement and Concrete Products	9	3	2	0	24	1
35300	Crude Oil Refineries	0	20	17	18	22	42
31214	Meehon, Noodles, and Related Products	131	9	12	24	19	23
36921	Man. of Hydraulic Cement	0	0	1	33	16	nva
36910	Man. of Structural Clay Products	5	5	10	17	12	82
38191	Man. of Tin Cans and Metal Boxes	2	9	5	22	11	88
38410	Shipbuilding and Boat-Building and Repairing	0	3	0	0	11	-1
38299	Machinery and Equipment, n.e.c.	11	16	19	46	6	40
38391	Cables and Wires	3	2	4	36	6	77
31152	Manufacture of Palm Oil	117	49	86	107	-1	-20
31163	Flour Mills	0	14	9	6	-1	nva
31159	Other Vegetable and Animal Oils and Fats	30	66	161	49	-12	20
31220	Manufacture of Prepared Animal Feeds	0	14	0	4	-20	-1
31330	Malt and Malt Liquors	43	10	16	8	-100	259
31400	Tobacco Manufactures	0	0	0	0	-613	-26
31171	Biscuit Factories	9	1	8	37	-1385	114

Source: Calculated from the Annual Company Survey, MIDA
Note: n.e.c. refers to not elsewhere classified.

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