

TRADITIONAL AUSTRALIAN INDUSTRY POLICY: WHAT WENT WRONG

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Australian manufacturing industry is generally considered to be uncompetitive because of its years of protection from imports. On the other hand, protectionist strategies in Japan, South Korea and Taiwan appear to have yielded much more successful results. The paper investigates the nature of these strategies, distinguishing between their purpose, in terms of the assurance afforded investment, and their economic effect. It is argued that the Asian countries successfully nurtured infant industries, in contrast to Australia, by means of their emphasis on selectivity, industry structure and direction-setting.

Keywords: Protectionism, industrial competitiveness, development strategies, infant industries.

INTRODUCTION

It is generally accepted that a protection-reliant industry policy was one of the main causes of the lack of competitiveness of Australian manufacturing. Protection made industry inward-looking, stunted technological development and fostered inefficiency. Yet at the same time, protection from imports appears to have been the basis for successful industrial development in at least three Asian economies — Japan, South Korea and Taiwan.

How were these countries apparently able to employ protectionist measures successfully when Australia so notably failed to do so? The question is of interest for a number of reasons. If, under certain conditions, protectionism works, government intervention may have a broader role to play in industrial policy-making than is generally supposed. At the same time, it is necessary for those who support intervention to understand precisely how and in what circumstances such intervention might be expected to work. This paper throws some light on these matters by comparing the Australian experience of tariff protection with the strategies pursued by policy-makers in the three Asian economies.

Before proceeding with the directly comparative exercise, however, it is necessary to determine, first, whether the protectionist reputations of Japan, South Korea and Taiwan were justified and, secondly, whether those industries which did become successful were also those which had been protected in their formative stages. The intention of the paper, it should be emphasised, is not to investigate the reasons for the industrial success of Japan, South Korea and Taiwan, nor to draw

conclusions as to the relative merits of import substitution or export promotion as an industrialisation strategy. Rather, (having established the 'realness' of the effect) the intention is to determine, by means of a comparison between Australia and the three Asian countries, some of the conditions required for the successful use of import protection in developing competitive industries.

THE EXTENT OF PROTECTIONISM IN JAPAN, TAIWAN AND SOUTH KOREA

There is consensus in what is now a very large literature on the Asian model of industrialisation that Korea, Taiwan and Japan were all highly protectionist in the 1950s, partly for balance-of-payments reasons and partly in order to encourage import substitution. There is also agreement that, onto this pattern of strict import controls all three countries superimposed a further pattern of export orientation, by assisting in various ways those industries thought to have export potential.¹

In economic terms, a compensating export subsidy removes the bias towards the domestic market which protection from imports inevitably imparts to the incentives confronting a firm. Is it, therefore, fair to describe these regimes for industrial development as protectionist? Certainly, from the international perspective, if a given country shows higher than average levels of trade restrictions (or if these restrictions are high for particular products) it is considered evidence of protectionism, regardless of the export orientation of the economy in question. However, in assessing the policy use of protection, the question to be addressed is not whether industries in the countries under consideration enjoyed higher average levels of protection from imports than did those in other countries, but rather the extent to which import substitution (or more accurately, the reserving of the domestic market for local producers) was pursued as an essential (if not the sole) element within their industrial development strategies.

The relationship between this objective and calculated nominal and effective tariff rates is not a clearcut one. This is because two separate indicators of protectionism need to be considered: protectionist purpose and protectionist effect. While protectionist effect is obviously of significance (because it measures the extent to which trade is actually impeded), protectionist purpose is also relevant because it is an indication of the strength of the signal which government is sending to assisted firms.

Legal or scheduled tariff rates indicate protectionist purpose, and nominal and effective rates indicate protective effect. Because of unused protection, there may be considerable differences between the legal and the nominal rate, particularly where the latter is calculated (as it often is for developing countries) on the basis of differences between the domestic and world price of a product (sometimes also termed the implicit tariff rate), rather than on the ratio of duties collected to the value of imports.

Even if the implicit rate of protection is low or even zero or less (that is, domestic prices are close to, or even below world prices for the same good, thereby making most of the formal protective system redundant), the existence of high legal rates of protection is still of significance because it assures the domestic producer of home-market domination for his output. If the price competitiveness of domestic production falls (perhaps because of adverse exchange-rate movements) the domestic producer has a tariff cushion to fall back on. Similarly, quantitative restrictions give domestic producers an assurance that, whatever the price advantage of imports, the domestic market will remain unaffected by them. The use of quantitative measures, therefore, even where the number of goods covered by them is not large, gives domestic manufacturers of those goods a guaranteed share of the market, enabling long-range, and virtually risk-free, investment planning to take place.

Korea and Taiwan (data are much scantier for Japan) show very high legal (that is, scheduled tariff, rates, even where the good in question is produced relatively efficiently. For example, both countries had high protective rates for textiles, clothing and footwear in the late 1960s — industries in which, because of their low wage levels, they were highly-competitive internationally (Tables 1A and 1B). The legal tariff rate on

TABLE 1A
KOREA: RATES OF PROTECTION ON DOMESTIC SALES BY SELECTED
INDUSTRY GROUP, 1968

	Legal	Nominal	Effective
Processed Foods	61	3	- 18
Beverages and Tobacco	141	2	- 19
Nondurable consumer goods*	92	12	- 11
Consumer durables	98	39	64
Machinery	53	30	44
Transport Equipment	62	55	163
All manufacturing	68	12	- 1

Source: Larry E. Westphal and Kwang Kim, 'Korea', in Bela Balassa (ed.), *Development Strategies in Semi-industrial Economies*, Johns Hopkins University Press, Baltimore, 1982, Table 8.7.

* Includes textiles clothing and footwear

TABLE 1B
TAIWAN: RATES OF PROTECTION ON DOMESTIC SALES BY SELECTED
INDUSTRY GROUP, 1968

	Legal	Nominal	Effective
Processed Foods	79	12	5
Nondurable consumer goods*	74	15	13
Consumer durables	52	32	50
Machinery	35	11	1
Transport Equipment	59	18	28
All manufacturing	66	18	28

Source: T.H. Lee and Kuo-shu Liang, 'Taiwan', in Bela Balassa, *Development Strategies in Semi-industrial Economies*, Johns Hopkins University Press, Baltimore, 1982, Table 10.7.

* Includes textiles clothing and footwear

domestic sales of non-durable consumer goods in Korea in 1968 was 92 per cent; for Taiwan, the adjusted rate for the same category (that is, taking the effects of quantitative restrictions into account) was 74 per cent.²

Tariffs aside, the extent of quantitative and other restrictions on imports was high for South Korea, Taiwan and Japan. Many of these restrictions were 'opaque' in the sense that their existence was not apparent from published import procedures.³ In Taiwan, up until 1970, 40 per cent of commodities (by import commodity code) were subject to import licensing. Moreover, certain categories of imports not subjected to licensing (classed as permissible) could be imported only from specified countries. For example, garments could be imported from Europe and America, but not from more competitive suppliers in Hong Kong, Japan and South Korea.⁴

Japan applied probably the most wide-ranging system. Until well into the 1960s, as Krause and Sekiguchi note, Japanese policy did not permit entry of competitive imports.⁵ A sound working assumption until that time was that Japanese import demand was perfectly inelastic with respect to price. While substantial liberalisation occurred as a result of the Kennedy Round of tariff reductions, strategic industries continued to receive special protection, often through non-tariff measures. For example, import restrictions on computers and parts were still in place in late 1971.⁶

Protectionist purpose having been established, how protectionist in effect were the three Asian countries and how did their protectionist stance change over time? A considerable literature dating from the 1970s maintains that export-oriented programs of industrialisation succeeded precisely because they cancelled-out the bias towards the domestic market inherent in import substitution, thereby approximating a free-trade regime.⁷ Westphal and Kim, writing on Korea, have sought to show that trade distortions were less significant in practice than they appeared because for many goods differences between world and domestic prices were minor, and that tariff exemptions for export production corrected for the domestic market bias inherent in the tariff regime.⁸ For present purposes, however (as compensating action is considered in a later section), protectionist effect need be demonstrated only in relation to domestic sales.

Certainly, when overall nominal rates of protection are calculated the levels are much lower than the legal rates — in 1968 the average nominal rate of protection for manufactured goods was 12 per cent for Korea whereas the corresponding legal rate (on domestic sales) was 68 per cent. For certain goods, the extent of unused protection could be quite startling. In Korea in 1968, for example, imports of men's suits were totally prohibited. Yet for men's suits, the domestic price was actually ten per cent below the world price.⁹

Even largely redundant tariff regimes may perform a significant policy

purpose, as already noted. Moreover, price comparisons may underestimate the degree of protection by not taking quality and other differences between goods into account.¹⁰ Even if we accept that, for many types of goods at least, the Asian nations were already internationally competitive by the late 1960s, there were many classes of goods which showed high effective rates of protection, suggesting that key areas of domestic production were being sheltered from more efficient international competition.

According to estimates prepared in the 1960s by Balassa, the overall effective rate of protection of Japanese industry was 29.5 per cent in 1962. Balassa found that the highest rates of protection applied to consumer goods.¹¹ In 1967, according to Japanese estimates, the effective rate of protection on Japanese-made cars was 66.5 per cent, and on rolled steel 35.1 per cent. After the Kennedy Round of tariff reductions was completed in 1972, the average effective rate of protection on capital goods was 13.7 per cent and on consumer goods 13.9 per cent.¹² Within this structure of protection, however, there was a bias towards capital intensive goods, as by the 1960s, a deliberate strategy was being pursued of pulling resources away from labour intensive industries in which Japan had previously enjoyed a comparative advantage into those believed to hold more promise for the future.¹³

TABLE 2
KOREA AND TAIWAN: EFFECTIVE PROTECTION RATES ON DOMESTIC
SALES BY TRADE CATEGORY, 1968

	Taiwan	Korea
Export	24	-18
Export-import-competing	36	73
Import-competing	155	93
Non-import-competing	-7	-16

Sources: Larry E. Westphal and Kwang Suk Kim, 'Korea', in Bela Balassa, *Development Strategies in Semi-industrial Economies*, Johns Hopkins University Press, Baltimore, 1982, Table 8.8; T.H. Lee and Kuo-shu Liang, 'Taiwan', in Bela Balassa, *op. cit.*, Table 10.8.

Table 2 shows the structure of effective protection for Taiwan and Korea in 1968, classified according to trade category. For both countries, the highest effective rates were applied to those industries for which imports constituted more than ten per cent of domestic sales, suggesting that the respective governments were prepared to protect domestic value-added even where domestic production was inefficient compared to imports.

For Korea, import-competing industries (those which exported less than ten per cent of production and in which imports accounted for more than ten per cent of domestic sales) had an average effective rate of protection of 93 per cent on domestic sales; export-and-import-

competing industries (industries which exported more than ten per cent of production and in which the import share of domestic sales was greater than ten per cent) had an average of 73 per cent. Taiwan showed a similar pattern. The average effective protection on domestic sales for import-competing industries in 1969 was 155 per cent; for export-and-import-competing industries it was 36 per cent. Taiwan's lower rate for these latter activities suggests that the government may have been pursuing a more specialised pattern of import substitution than was the case in Korea.

On the basis of this general survey, it seems reasonable to conclude that all three Asian countries, at least in the period 1950 to 1970, were protectionist both in purpose and (although on a more restricted basis) in effect. High legal tariff rates and extensive use of quantitative restrictions signalled to domestic firms the intention of the state to secure local production against competition from imports. High effective rates of protection for categories of production in which imports constituted more than ten per cent of domestic sales indicate a commitment to import substitution as an industrial development strategy.

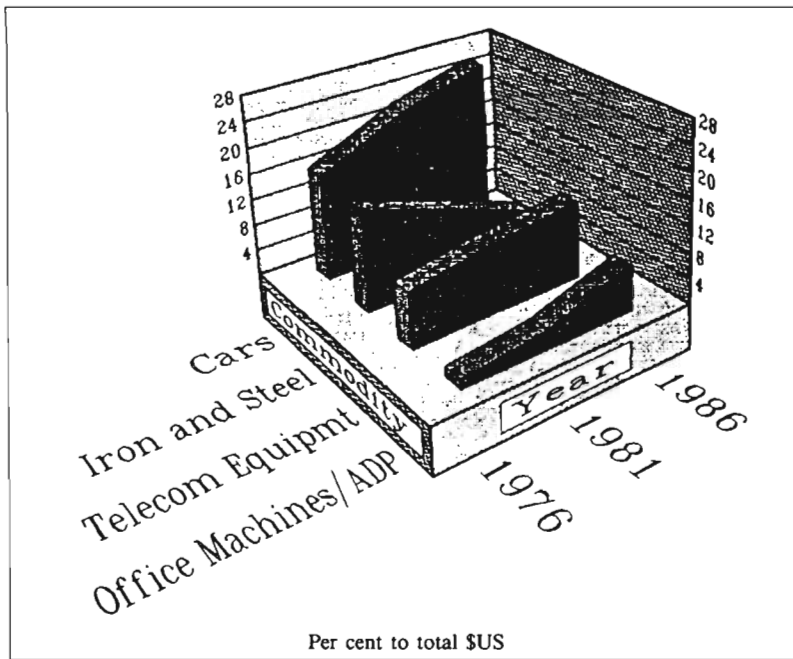
It cannot, however, be assumed from these data that import substitution and catering to domestic market growth account for the phenomenal success of many industries in Japan, Korea and Taiwan. Exports were also encouraged, in many cases by rebating tariffs and taxes on inputs to export production. In this way, as described later in this paper, industries in the Asian countries prospered and grew in competitiveness under a protectionist regime.

HOW SUCCESSFUL WERE THE PROTECTED INDUSTRIES?

If Japan, South Korea and Taiwan — at least at the formative stages of their post-war industrial development — can legitimately be described as protectionist, it would seem reasonable to conclude that, even if all protected industries were not successful, all successful industries must have been protected in the sense that assured dominance of the domestic market was crucial to their success. Nevertheless, it is possible that the successful industries would have been successful anyway.

A more exacting test would be to determine the extent to which industries which were initially highly protected because they were much less efficient than overseas competitors ended up being price-competitive on world markets. Some support for this proposition could be adduced by comparing domestic and international prices for highly protected import-competing goods over time.

FIGURE 1: PRINCIPAL EXPORTS FROM JAPAN



* Source: UN Yearbook of Trade Statistics

We know that for Japan, import liberalisation following the Kennedy Round did not lead to marked increases in imports of protected goods. In 1965, when quantitative restrictions were in place, imports of transport equipment comprised only 1.8 per cent of all Japanese imports. In 1975, after the Kennedy Round was completed, imports in this category accounted for only 1.3 per cent of all imports. The effective rate of protection for motor vehicles had fallen from 66 per cent to between 40 and 50 per cent (assuming that the average decline of 35 per cent for the Kennedy Round was reflected in the rate for cars).

These figures suggest that, by the early 1970s, Japanese car manufacturers still lagged behind other countries in competitiveness. Nevertheless, exports of Japanese cars grew by an average of 3.6 per cent per year in the 1970s, largely as a result of the improved price-competitiveness of the Japanese product.¹⁴ By 1986, over one-quarter by value of Japan's prodigious export sales was accounted for by motor vehicles (Figure 1). The Japanese car industry is clearly a case in which competitiveness was gradually built-up over a considerable period, based on strict protection of the domestic market from imports coupled with subsidies to export production — a classic infant industry progression.

TABLE 3
KOREA AND TAIWAN: EFFECTIVE SUBSIDY RATES BY INDUSTRY GROUP 1968

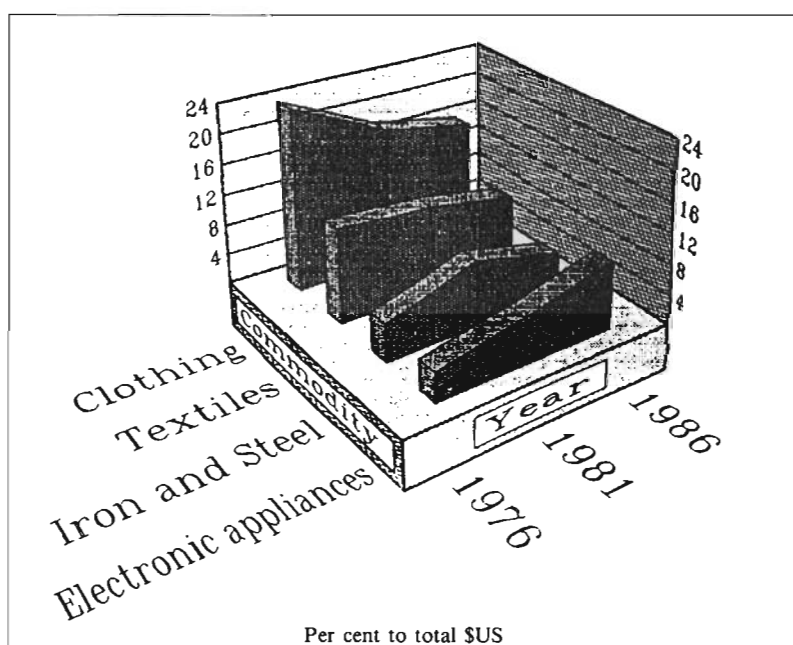
	Korea		Taiwan	
	Exports	Domestic	Exports	Domestic
Processed foods	2	-25	30	1
Nondurable consumer goods*	5	-21	10	9
Consumer durables	2	38	30	44
Machinery	5	31	11	-3
Transport equipment	-23	1599	10	66
All manufacturing	12	-9	23	24

Sources: Westphal and Kim, in B. Belassa, *Development Strategies in Semi-industrial Economies*, Table 8.7; L and Liang, *ibid.*, Table 10.7.

* Includes textiles, clothing and footwear

This pattern — of improving price competitiveness being achieved in a context of high rates of assistance both to domestic production

FIGURE 2: PRINCIPAL EXPORTS FROM KOREA



* UN Yearbook of Trade Statistics

and exports — is also observable for Korea and Taiwan. In 1968, the consumer durables industries in both countries showed relatively high effective rates of subsidy to both domestic sales and to exports, with high rates of assistance for sales on the domestic market (Table 3). By 1976, the effective rate of protection to household electronic appliance

manufacture in Taiwan had become negative, indicating a higher rate of assistance to inputs than to outputs and (at least putatively) a considerable reduction in the price of domestic value-added as compared to world value-added. For Korea, the effective rate for the same category in 1982 was actually higher than it had been in 1968.¹⁵ The rate of subsidy to exports may also have increased.

Thus, while assistance to the car industry was falling for Japan, it was increasing in sections of Korea's key industry of consumer durables. Nevertheless, export performance continued to improve in both categories in both countries in the 1970s and 1980s. Figures 1 and 2 show the changing structure of exports for Korea and Japan between the years 1976 and 1986. The proportion of total exports accounted for by electronic appliances for Korea and motor vehicles for Japan increased steadily over the decade. These industries were clearly winners

TABLE 4
KOREA: EFFECTIVE INCENTIVE RATES BY TRADE CATEGORY 1968-1978

	Domestic Sales		Exports	
	1968	1978	1968	1978
Export	-26.2	-0.5	13.5	15.4
Export-import-competing	55	26.2	8.7	17.9
Import-competing	91.4	35.2	35.3	24.9
Non-import-competing	-24.3	-12.8	6.1	13.7

Source: Westphal and Kim in B. Balassa, *Development Strategies Semi-industrial Economies*, p235; Nam, 'Trade and industrial policies and the structure of protection in Korea', in Hong and Krause (eds), *Trade and growth of the advanced developing countries in the Pacific Basin*, Korea Development, 1981, Table 7.

for the countries concerned, although in Korea's case, the price of success appears to have been high. Nevertheless, for Korea between 1968 and 1978, the level of assistance to domestic sales of manufactured goods fell in the import-competing and export-and-import-competing categories, suggesting that overall efficiency was increasing. In addition, the overall incentive pattern favoured exports more than it had in 1968, although there was still a bias towards domestic sales in the import-competing and export-import-competing categories (Table 4).

PROTECTION AND COMPETITIVENESS

The theoretical case for protection relies, fundamentally, on dynamic economies of various kinds — on learning by doing. Unless an industry is sheltered from competition in its earliest stages, so the argument runs, it cannot establish itself even if markets for capital and skill are working efficiently because the development of production and marketing techniques takes time and the growth-path of the business will be determined by changes both internal and external to the firm. Financial

backing, therefore, will be forthcoming for many potentially competitive businesses only if the early, vulnerable period is safeguarded from import competition.

The argument against protection is as much practical as theoretical. How are the infant businesses and industries to be chosen? How is political lobbying and pressure to be counteracted? How is the structure of protection to be managed over time so that the allocation of resources is not systematically biased against the more efficient industries? How is the bias against exports to be counteracted, particularly in a small economy where domestic economies of scale are soon exhausted?

Our knowledge of the way in which these problems were dealt with in Japan, Korea and Taiwan is incomplete. However, if Japan, Korea and Taiwan were protectionist and industrially successful and Australia was not, it would seem *a priori*, that the three Asian nations must have found a way of using the strong investment incentive properties of protection while neutralising its adverse effects on competitiveness. How did they do it?

TABLE 5
AUSTRALIA: RATES OF ASSISTANCE ON OUTPUT BY INDUSTRY GROUP,
1968/69 — 1978/79

	1968/69		1978/79	
	Nominal	Effective	Nominal	Effective
Food, beverages, tobacco	14	16	7	14
Textiles	25	43	24	46
Clothing and footwear	53	97	65	143
Wood products and furniture	22	26	12	17
Paper, paper products	29	52	15	26
Chemicals, petroleum	21	31	11	19
Non-metallic minerals	12	15	4	5
Basic metal products	14	31	6	10
Fabricated metal products	38	61	20	31
Transport equipment	34	50	36	53
Other machinery	34	43	17	20
Miscellaneous	30	34	23	30
Total manufacturing	24	36	15	24

Source: Industries Assistance Commission, *Assistance to Manufacturing Industries: Information Paper*, Canberra, Australian Government Publishing Service (AGPS), 1985.

The most effective way of investigating this proposition is to compare the incentives inherent in the Australian system of industry support with those applying in the three Asian countries. As the defects of the Australian system have been well-documented, it will be instructive to determine whether and to what extent these defects were avoided or neutralised in the three Asian countries.

Selectivity

The Australian system was based on made-to-measure protection, which was awarded to firms on the basis of economic and efficient production

in Australia. In practice, almost any type of production was regarded as desirable, so that activities in which Australia lacked cost-competitiveness were heavily assisted (Table 5). Firms were assisted according to their needs, rather than according to any planned program of development. Thus, firms which were relatively efficient (requiring low levels of assistance) were discriminated against in the competition for resources. In addition, the system of tariff protection allowed employers to pass on cost increases brought about by rises in nominal wages. In turn, wage increases were determined according to judicial rather than economic principles through a complex arbitration system. The result was a system of incentives which, within each industry group, encouraged manufacturers to produce for the domestic market rather than for export (Table 6).

TABLE 6
AUSTRALIA: EFFECTIVE ASSISTANCE RATES BY INDUSTRY GROUP 1977-78

	Exporting	Import-competing
Food, beverages, tobacco	9	15
Textiles	6	62
Clothing and footwear	-15	151
Wood products and furniture	5	19
Paper, paper products	-1	30
Chemicals, petroleum	-1	20
Non-metallic minerals	0	5
Basic metal products	5	17
Fabricated metal products	-7	34
Transport equipment	-18	67
Other machinery	-3	24
Miscellaneous	5	28
Total manufacturing	4	30

Source: R.G. Gregory and J.J. Pincus, 'Industry assistance', in L.R. Webb and R.H. Allan (eds), *Industrial economics: Australian studies*, Allen and Unwin, Sydney, 1982, pp. 113-62.

Japan, South Korea and Taiwan, on the other hand, pursued planned programs of development in which particular industries or particular types of activities received special assistance. This assistance took the form of removing disincentives to export for industries which were already competitive in world terms and encouraging both import substitution and exporting in activities which were considered to be potentially competitive. Thus, the systems adopted in the three Asian countries self-selected for competitiveness (by rebating duties on products which were used to produce exports) and, where competitiveness required special fostering, the industries concerned were nominated in special indicative plans. Wage levels were determined through bargaining with company-based unions.

Thus Japan, South Korea and Taiwan, from an initial position of high protectionism gradually internationalised their economies by

encouraging industries considered to have present or future comparative advantage to export. Thus there were three groups of industries: those in which competitiveness had already been achieved and which were lightly assisted — these included textiles, clothing and footwear. A second group enjoyed higher levels of assistance, biased towards the domestic market, and a third, well-established domestically, enjoyed net export subsidies.

For Korea in 1968 the second group included steel ships (a very slight bias), electronic equipment and components, transformers, farm machinery, office machines, optical instruments, watches, jewellery, optical instruments, knitted fabrics and basic chemicals. In Taiwan this group included electronic and communications equipment, household appliances, clothing, rubber products, fertilisers, medicines, industrial chemicals, glass and glass products, steel and iron products and aluminium.

In Taiwan in 1969, key groups of activities enjoyed net export subsidies: aluminium products; steel and iron; plastics; leather and leather products; printing and publishing; paper products; wood products; and woollen and cotton fabrics. For Korea this same group included electric motors, generators, metal processing machinery, glass products, toys, clothing, wigs, shoes, rayon and cotton yarns, and cosmetics.¹⁶

In both countries at any one point in time, therefore, we see evidence of assistance regimes which have been adjusted according to the degree of competitiveness targeted industries have attained. In both countries, incentives favoured exports in labour-intensive activities such as textiles, clothing and footwear, as well as some more skill-intensive activities such as machinery manufacture. Industries being groomed for export included labour-intensive manufactures such as electronic and communications equipment and household appliances; labour and skill-intensive activities (such as optical instruments, transformers and steel and iron products) and, particularly in Taiwan, a number of activities of a more capital-intensive nature (aluminium, chemical fertilisers and industrial chemicals.).

Incentives for exports were wide-ranging in character as well as being selective in application. Supported by efficient producers of intermediate goods, and assisted by a range of additional incentives, Japan's strategic industries — its producers of heavy machinery and consumer goods — were expected to (and did) penetrate export markets. The methods chosen were similar in all three countries — export credits and guarantees, cheap finance, export tax incentives such as accelerated depreciation and customs exemptions for specified imported machinery.

As well as encouraging exports, the governments of the Asian countries were attempting to move their economies in more capital- and skill-intensive directions. Protected industries were encouraged to

improve their productive efficiency by means of state-supported testing and quality-improvement measures.¹⁷ In addition, Taiwan encouraged export-oriented foreign investment, principally through export-processing zones.¹⁸

The more sophisticated the industry, the greater the need for protection to be complemented by effective institutions for trade-training, industrial research and information diffusion and for the acquisition and deployment of technology. As South Korea and Taiwan moved from simple to more complex manufactures, training systems capable of delivering increasingly sophisticated skills were developed accordingly.¹⁹ Perhaps the most nationalist and interventionist aspects of Japanese industrial policy concerned technology. All technology imports were subject to individual licensing by MITI until the late 1960s; moreover, MITI participated in all royalty negotiations so as to influence in Japan's favour the terms on which technology was acquired.²⁰

Selective industry assistance in Japan, South Korea and Taiwan, therefore, took two forms. Pre-eminently, it stressed competitiveness (and in this sense might be said to be market compatible). But it was also tailored to the changing requirements of the economy over time. Thus the type of assistance was selected as well as its object.

Structure of production

One of the main problems of the Australian system was that it resulted in fragmentation of production. While the existence of numerous domestic producers created a competitive environment behind the tariff wall, the achievement of economies of scale, so important in key industries such as the manufacture of consumer durables and automobiles, became virtually impossible.

For the three Asian governments, operating highly interventionist industry policy based on heavy protection for new industries, there was a need to find the right balance between encouraging competition on the one hand and on the other finding the most effective way to employ scarce domestic resources, particularly of technological know-how.

Pushing industries into exporting was one obvious way of encouraging competitiveness without fragmenting the domestic market. Different types of incentives were employed, many of them difficult to quantify. (Indeed, according to Alam it is likely that the generally-available figures understate the export bias in the assistance regimes of the three countries).²¹

Another method was to maintain key activities in public ownership as a means of concentrating domestic resources. The principal Taiwanese ship-building works, for example, were state-owned. A third method was to encourage mergers where it was considered that excess competition was developing. MITI, in particular, sought to encourage (and sometimes to force) firms to merge in response to competitive difficulties.²² Entry to scale-intensive industries (such as petrochemicals) was controlled by

MITI to ensure that firms were technically proficient and that plants were built at the minimum economic scale. Where a technology was required by a group of firms, MITI ensured that only one license agreement was concluded and that all firms in the industry had access to the technology.²³

Direction-setting

The Australian tariff system was, to a large degree, self-directing. There was no plan for industry development as such. The system of tariffs grew incrementally in response to changing technology. Rates were formed as a result of application by firms wishing to establish production or facing difficulties because of import competition. There were few incentives or sanctions pushing protected firms towards maturity.

By contrast, the Asian governments formed general plans which set out objectives for industrial growth and development, identified problems and shortcomings and specified priorities.²⁴ The degree to which these plans actually influenced the allocation of resources has been disputed. Certainly, they did not constitute a command system in the manner of centrally planned economies. However, they undoubtedly guided the activities both of government officials making decisions affecting firms and of the firms themselves.

Perhaps most importantly, the plans represented a kind of agreement between business and government as to what their mutual expectations were. Production targets were arrived at by consultation and were not binding, but did constitute a yardstick for measuring progress. In addition, the act of formulating a plan brought the best economic expertise and commercial and administrative judgment to bear on the all-consuming problem of industrialisation. The sharing of information and diagnosis and monitoring of problems were functions as important as the guidance encapsulated in the plan itself.

At least in their formative stages, industries were sheltered from imports in a way and to an extent which their Australian counterparts rarely experienced. At the same time, firms were expected — and expected it of themselves — that they would become internationally competitive. If an industry failed to meet expectations, further action would be taken to overcome its problems. When established industries lost competitiveness (as was the case with the Japanese aluminium industry) collective action would be taken to move the industry offshore.

CONCLUSION

With some differences of emphasis and of timing the Japanese, Korean and Taiwanese industrial development strategies bear strong similarities: in each case infant industries in areas considered to have strong comparative advantage were heavily protected and subsidised in their earliest years and, once established, encouraged to export by a further

range of incentives which resulted in a higher effective rate of subsidy to export sales as compared to domestic sales. Foreign investment was strictly controlled in Japan and in Korea; and in Japan, controls on technology imports were used to augment national bargaining power in negotiations with foreign suppliers.

In these ways, the problems of tariff-dominated industrialisation were, to a large extent, avoided. The lack of competitiveness which continues to plague Australian manufacturing was overcome in each of the three Asian countries by preventing fragmentation of production in industries where economies of scale were important and by counteracting the domestic bias inherent in import substitution by means of specific subsidies to exports. In Australia, on the other hand, industry policy strongly favoured import-competing activities rather than exports.

The evidence of successful protectionism is indisputable in Japan, South Korea and Taiwan. Had Australia chosen to develop internationally competitive industries by using the methods adopted by these governments it is probable that a degree of success (although necessarily less spectacular than that of the three Asian nations) would have attended our efforts. Yet the question remains as to whether, in the Australian system of government as we know it, protection and competitiveness could have been successfully combined. Protection is all-too-readily destroyed as an industry development measure when political rather than economic criteria are used to determine assistance. Agricultural protectionism in Japan and South Korea shows that such societies are by no means immune to the political forces inherent in protection of less-efficient activities.

The Japanese, Koreans and Taiwanese were able to select industries which it was sensible for them to target for development. There is no reason to believe that, in consultation with industry, Australian officials could not make similarly sensible choices. But in a system of (at best) patchy accountability and without the challenge of public plans and objectives, the motivation to succeed of those involved might not (and from recent experience would not) be sufficient to ensure success. Without the export-or-die mentality of the Japanese and Koreans and the ever-present knowledge that it was success in manufacturing or none at all, it is doubtful if Australians, even with a more rational policy orientation, could have made a success of protection, at least on the scale on which it was practised by the three Asian nations.

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