

Working Paper No.1995/9  
**INDUSTRY POLICY IN EAST ASIA:  
A LITERATURE REVIEW**  
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*Canberra  
September 1995*

National Library of Australia

Cataloguing-in-Publication Entry

Smith, Heather.

Industry policy in East Asia: a literature review.

ISBN 0 7315 2187 0.

1. Industrial policy – East Asia. 2. East Asia –  
Economic policy. I. Australian National University.  
Department of International Relations. II. Title.  
(Series: Working paper (Australian National University.  
Dept. of International Relations); 1995/9.)

338.95

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## **ABSTRACT**

This literature survey examines the role of industry policy in the industrialisation of East Asian economies since the early 1980s. The first section outlines the 'neoclassical' model and the interventionist literature that has arisen to challenge it. It distinguishes three strands in this literature: the 'structuralist' and the 'strategic' trade models and the 'fair trade' argument. The following sections evaluate the empirical evidence for Northeast and Southeast Asian countries, discuss the analytical and empirical validity of the interventionist literature and in conclusion draw attention to the diminished relevance of industry policy, given the rapid market-driven integration taking place in the Asia-Pacific region.



## INDUSTRY POLICY IN EAST ASIA: A LITERATURE REVIEW\*

*Heather Smith\*\**

The source of East Asia's industrial success lies in the eye of the beholder. Typically, the historical interpretation of the East Asian industrial experience differs depending on the chosen paradigm. Some contend that the 'East Asian evidence falsifies the idea that a high degree of state intervention in the economy is incompatible with successful capitalist development' (Berger 1987: 156). Others view the East Asian experience as an exception; they admit the important influence of government in this experience, but argue that the same results could not be achieved in countries which are 'soft states' characterised by weaker political institutions, low administrative capacity and a high risk of 'government failure'.

It is difficult to draw definite conclusions about the overall effect of the role of government intervention in East Asian development. As Garnaut (1990: 10) says, 'it depends on the nature of the intervention and of the society and the polity within which it operates'. East Asian regimes were undeniably interventionist. What remains controversial is the contribution of industry policy interventions to this success. In the context of East Asian industrialisation, this is at the centre of a lively debate.

Industry policy can be thought of as having two main elements: functional interventions and selective interventions (Lall 1994: 65). Functional interventions are those that remedy market failure without favouring any one activity over another. Selective interventions are designed to favour individual activities or groups of activities in order to correct suboptimal resource allocation, in a static or a dynamic sense. The definition adopted in this survey is the latter, which refers to policy measures to change the inter-industry allocation of resources ('picking winners'). The instruments of selective industry policy to be found in the literature include trade policy (especially protection from imports and/or promotion of exports); financial sector policies (affecting the demand and supply of industrial credit); tax benefits and investment incentives; direct government investment and ownership; highly selective foreign investment regimes; measures to encourage industrial agglomeration; and labour market regulation.

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\* This is a longer version of an article which appeared in *Asian-Pacific Economic Literature*, vol. 9, no. 1, pp. 1995, pp. 1739.

\*\* Thanks are due to Ross Garnaut, Stuart Harris, Hal Hill and Peter Warr for helpful comments and discussions, and to the ANU's Northeast Asia Program for financial support.

There is now an influential literature which asserts that East Asian—especially Northeast Asian—industrial success owes much to governments selectively intervening to overcome alleged market failure. Since the early 1980s, two distinct political-economy thrusts behind ‘industry policy’ have emerged to challenge what is known as the neoclassical (market forces) interpretation of East Asian industrialisation. The first, the ‘structuralist’ opposition to market-oriented policies, argues that the state in East Asia anticipated shifts in comparative advantage and intervened aggressively to develop new export industries. The second, the ‘strategic trade’ view, aims to show how a country that promotes industries characterised by particular external economies can help shift its pattern of comparative advantage and can accelerate growth. East Asian governments are said to have been accomplished practitioners of such policies. The two versions of industry policy overlap in that both identify high technology industries as those which are ‘strategic’, enjoying beneficial externalities and having high export potential.

A by-product of the strategic trade view has been emergence of the protectionist ‘fair trade’ opposition to free-trade policies, centred on the belief that the United States (and other developed countries) cannot hold their own *vis-à-vis* the East Asian countries if they rely on the ‘level playing field’. In the main, this literature focuses on Japan and the Northeast Asian newly industrialising economies (NIEs). But as Hill (1995: 3) notes,

...there is an intellectual spillover, already evident, to the next tier of high growth, but lower income East Asian economies. There is a presumption both in policy circles and in some of the literature that the path to industrial success lies in following the Northeast Asian recipe.

More recently, the ‘fair trade’ argument has been extended to include issues such as labour rights and the environment and has been applied to China and Southeast Asia.

Aspects of the literature have been covered by Islam (1992) on the political economy of Asian–Pacific development and by Adams and Davis (1994) on the role of government policy in East Asian economic development. Comprehensive surveys of industry policy in the Asian–Pacific region have been undertaken in recent years by Ariff and Hill (1985); Findlay and Garnaut (1986); Hughes (1988; 1993); Arndt (1987); Chowdhury and Islam (1993); and the World Bank (1993).

The industrial experience of Hong Kong and Singapore will not be discussed here. There is almost unanimous agreement concerning the non-interventionist role of the Hong Kong government, while the Singapore industrialisation experience will be discussed by Dr Goh Keng Swee in a future issue of *Asian–Pacific Economic Literature*.

## **The debate on the East Asia ‘miracle’**

### *The neoclassical model*

The beginnings of this debate can be traced to the literature on the relative merits of import substituting industrialisation and export-oriented industrialisation of the late 1960s and early 1970s. The body of empirical research on trade and industrialisation undertaken in the 1970s,<sup>1</sup> along with improvements in the theoretical analysis in the 1960s,<sup>2</sup> undermined the 1950s arguments for protection and import substitution strategies by documenting ‘the failures and disasters of regulatory, interventionist states’ (Bardhan 1990: 3). Many of these studies related to the economic success stories of the export-oriented East Asian economies and suggested that their development accelerated as they liberalised their foreign trade regimes and adopted an outward-looking strategy of export promotion.

The original East Asian ‘miracle’ was Japan, followed by South Korea and Taiwan which shared some similar conditions. With little in the way of natural resources, all three began rapid capital accumulation in their first decade of development. South Korea in particular followed the Japanese model by competing directly in large industries such as steel, shipbuilding, and automobiles. Taiwan relied more on a range of smaller firms in most sectors, while Hong Kong and Singapore were initially entrepôt exporters. Export development was helped by the expanding United States market of the 1960s and 1970s.

However, the outstanding performance of East Asia cannot but be attributed to favourable external conditions. Other regions faced similar external conditions but did not do nearly so well. The East Asians committed themselves, almost from the outset, to become players on the global scene. Indonesia, Malaysia, and Thailand were resource rich, but they did not really take off until manufactured exports were developed. These second-generation NIEs laid the foundation for their growth with stable macroeconomic policies and political stability which, together with low labour costs, appealed to foreign investors, increasingly from East Asia—Japan in the first instance, but later also from South Korea and Taiwan. Japanese-led foreign investment, followed by NIEs, provided the transfer of technology that the first generation NIEs had to secure by other means (World Bank 1993).

The neoclassical approach to the role of industry policy in East Asia has been to argue that, while relying on assistance at various stages, these economies ensured

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1 See for example Little, Scitovsky and Scott (1970); Balassa (1971, 1982, 1983); Krueger (1978); Bhagwati (1978); World Bank (1983, 1987).

2 These included the distinction between domestic and foreign trade distortions (Bhagwati and Ramaswami 1963; Johnson 1965); the concept of effective protection; (Balassa 1965; Corden 1966); and the concept of domestic resource cost (Krueger 1966).

that their trade regimes were more neutral as between import substitution and export activities than those of most economies. This facilitated specialisation on the basis of comparative advantage. In other words, local prices of traded goods, on average, departed much less from world prices than in other developing regions, even though there were substantial variations for some individual items and for some countries. Neoclassical writers stressed that the successful economies were, by and large, those that had 'got their prices right' and had not greatly inhibited market signals driving resource allocation. To cite the World Bank (1987: 71) definition, 'they had maintained a competitive exchange rate and implemented policies that do not in aggregate discriminate between broad groups of industrial activity'. The most important prices to get right were those 'governing incentives for export, relative to production for the home market'. 'Open foreign exchange policies and regimes were also important for getting the foreign trade prices right' (Garnaut 1990: 14–5).

On this view, government industry policy interventions are not the *sine qua non*. Rather, good economic management is thought to account for superior economic performance. Specifically, 'the soundness of underlying policies—fiscal, monetary, financial, trade, labour and infrastructure—determined the speed, sustainability and equity of growth' (Hughes 1993: 5). Macroeconomic stability and high rates of saving and investment, combined with judicious investment in human capital and infrastructure, are emphasised as the cornerstones on which East Asia's export success was built (World Bank 1993).

In highlighting the disadvantages of interventionist industry policy the neoclassical school did not argue that the state has no role to play in the process of economic development. Mainstream neoclassical economists stressed that 'dynamic' effects, such as learning-by-doing and externalities arising from research and development (R&D), provided the strongest, if not the only valid, reason for promoting industrialisation in the sense of allocating resources between industries on a discriminatory basis (Corden 1974). Functional measures, such as across the board R&D incentives, provision of training facilities and incentives to develop a broad-based venture capital market, were advocated rather than industry and firm-specific interventions (Baldwin 1969).

If government cannot deliberately create industrial 'winners', how do such winners emerge? Mainstream neoclassical economics treated the theory of changing comparative advantage as the central element in the analysis of industrial development. The comparative advantage case for free trade simply stated that a country would attain a higher level of welfare if it permitted trade at international prices, producing those commodities that are comparatively cheaper at home and exchanging them for those that would be relatively more expensive to produce

(Krueger 1990: 69). Trade generates gains by allowing specialisation between countries.

The neoclassical interpretation suggests that a great deal of empirical evidence can be found in support of the view that East Asian countries followed their comparative advantage based on factor endowment.<sup>3</sup> In East Asia, the shift from traditional labour-intensive industries to new industries characterised by more capital and technology-intensive processes and the adoption of new technologies was facilitated by the simultaneous growth in the stock of human capital (Pack 1992: 102). Successful economic growth itself changed comparative advantage through accumulation of capital and through changes in relative technological efficiency across industries.

A country pursuing its comparative advantage also derives dynamic benefits in terms of learning-by-doing, technology acquisition and productivity growth (see Krueger 1993: 27–8). An export-oriented trade regime tends to encourage the expansion of industries with a comparative advantage by concentrating resources in a country's most productive industries. Competition induces greater attention to costs, and greater effort to cost reduction, than a sheltered domestic environment. Export growth assists the process of 'catching up' technologically by allowing imports of goods embodying new technology and by increasing overseas contacts and thus access to new ideas on production and management. There was thus a "virtuous trade cycle" linking trade expansion to technological improvement and back to trade expansion again' (Garnaut 1989: 43).

### *The structuralist model*

Since the early 1980s, an alternative explanation has emerged which has attributed the economic success of the Northeast Asian economies to selective intervention by the state. The neoclassical explanation has been challenged, in the words of Islam (1992: 70), by a 'statist counter-revolution'. The dynamism of the Northeast Asian economies has been re-interpreted as flowing from 'the logic of the development

According to Henderson and Appelbaum (1992: 14), the neoclassical orthodoxy has been successfully challenged in a steady stream of publications. Beginning with Chalmers Johnson's (1982) account of the role of the Ministry of International Trade and Industry (MITI) in Japan's postwar industrialisation, this literature includes Amsden's contributions on South Korea (1989) and Taiwan (1985); Gold

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3 A common theme in the industry policy literature is that the theory of comparative advantage has lost its relevance in the sense that it no longer captures the determinants of exporting success in the modern international economy, so-called 'competitive advantage'. For a discussion of the concepts of competitive advantage and comparative advantage, see Warr (1994).

revisionist', 'statist', 'new political economy', 'development state'—have been applied to this literature. In originating the expression 'corporate state' or 'development state', Chalmers Johnson (1982) attributed Japan's postwar industrial growth to the 'special nature' of the government's approach to policy-making, which in turn was thought to result from Japan's historical experience. In particular, the interventionist role MITI in influencing corporate decision-making and other commercial outcomes was given much of the credit for Japan's strong industrial performance.

A large crop of theories has since grown to explain the success of the Japanese economy. At one end of the spectrum stands a group of political scientists, business executives and government officials who see Japan as embodying a state-guided capitalist system in which MITI and industry policy have played a central role. Strategic industries have been backed by MITI with the collaboration of the private sector. Government leadership has been the key to Japan's economic success, with business a willing follower. An extreme version of this approach is encapsulated in the phrase 'Japan Inc.', though most scholars agree this concept is too simplistic and naive for what is a much more complex, variegated, multi-dimensional set of relationships between politicians, central government and business (Patrick 1986: 17). But several authors have put Japan's industrial and trade policies at the heart of explanations of Japan's economic success (Chalmers Johnson 1982; Shinohara 1982; Tyson 1992; Zysman 1983; and Prestowitz 1988). The implication is that if Japanese firms were forced to compete on a 'level playing field', they would lose their advantage.

At the opposite end of the spectrum stand a group of mainstream economists who see the basic source of Japan's economic growth as being in a vigorous private sector which, taking advantage of the market mechanism, has energetically engaged in productive business investment and commercially oriented research and development, while also employing a supportive system of labour-management relations. Entrepreneurs were and are the engine of growth, but government is given credit for having pursued macroeconomic and industrial policies beneficial to private sector growth (Trezise 1976, 1983; Patrick and Rosovsky 1976; Lincoln 1984; Abegglen and Stalk 1985; and Patrick 1986).

One of the more prominent structuralists, Robert Wade (1990a: 26) has argued that Chalmers Johnson's 'development state' theory of East Asian industrial success 'is not much of a theory'. The theory is not clear what the developmental state is contrasted with. It also says little about the nature of policies and their impact on industrial performance. Instead, Wade encapsulates the central tenets of the structuralist literature in his 'governed market model'.

Wade argues that in Taiwan, as well as in Northeast Asia generally, governments have guided or governed market processes of resource allocation so as to produce production and investment outcomes different from those that would have occurred in a free market. Government intervention of a 'leadership' kind is considered to have focused on industries which are capital intensive, or which use technology that must be imported from a small number of potential suppliers (Wade 1990a: 303). The state is thought to have anticipated shifts in comparative advantage and intervened aggressively to develop national champions for international markets (Wade 1984: 65). Leadership is thus applied to a shifting band of industries (Wade 1990b: 249). Sectoral interventionist policies are considered to have been important in supporting export expansion in the late 1960s, industrial deepening in the 1970s, and technological upgrading in the 1980s (see for example Simon 1992: 119; Amsden 1992: 46, 1991: 284–5; Wade 1990a: 11). In turn, sector-specific interventions are supported by a certain kind of organisation of the state and the private sector. In particular, the corporatist and authoritarian political arrangements of East Asia are said to have provided the basis for market guidance.

While acknowledging that the theoretical basis for a selective industrial strategy is less well developed than that which supports a non-interventionist approach, Wade argues that this merely reflects the neoclassical emphasis on trade rather than technological change as the central process of industrialisation (Wade 1988: 152–3). When technological change is made the centrepiece, an economic rationale for selective promotion follows from two propositions. The first is that national comparative advantage is not simply the result of given endowments of resources, but also results from government promotion. The second is that some sectors have major 'externalities', in the sense that far more people are affected by a decision about production and price than the buyer and seller (Wade 1988: 153). According to Wade,

[s]ome of their [East Asian] industrial policies make sense as an attempt to lower entry barriers and thereby allow quick capture of economics of scale and learning-by-doing...[and some] make sense as an attempt to capture externalities (or spillover effects) within the national boundaries (Wade 1990b: 262).

Moreover,

Unassisted entrepreneurs may not have either the foresight or the access to capital to follow long-term potential. Their decisions may lock the country into specialization in industries with inferior prospects (an issue beyond the scope of comparative advantage theory) (Wade 1990a: 355).

This view suggests that the nature of the debate on industry policy has now shifted from a concern with old-fashioned protection of domestic markets (import substitution) to one aiming at export markets through strategic intervention in key industries—a view which is often summarised in the phrase ‘strategic trade policy’. It is now argued that the risk of government failure inherent in activist industry policy can be minimised through appropriate institutional arrangements and that the East Asian experience supports such a contention (Islam 1992: 70).

Amsden (1989) has proposed another variant of the structuralist view, drawn from the Korean experience. She argues that through the allocation of subsidies the Korean government has acted not only as a banker, but also as an entrepreneur, using the subsidy to decide what, when, and how much to produce (Amsden 1989:143–4). Moreover, it has deliberately distorted the price structure by way of subsidies, protection, price controls, and restrictions on finance and investment. The end result has been an industrial structure different from that which the market would have produced.

The most controversial contention is that the state intervened to foster development through the creation of differential prices for loans—the implication being that a repressed financial system facilitates rapid economic growth (Amsden 1989, 1991; Wade 1988, 1990a). Credit, it is argued, was allocated by the government to selected firms at negative real interest rates in order to stimulate specific industries. In addition, importers and exporters faced different prices for foreign currency. By intervening to establish multiple prices in the same market, the state cannot be said to have got relative prices ‘right’. Rather, it has set relative prices deliberately ‘wrong’ in order to create profitable investment opportunities (Amsden 1989: 13–4). What distinguishes the experience of East Asia is that the state exercised discipline over subsidy recipients. In exchange for subsidies, the state imposed performance standards on private firms (Amsden 1989: 14).

*Incentive regimes.* There are features of the industrial experience of East Asia that some structuralists agree fit the neoclassical accounts better than the structuralist explanation (Wade 1990a: 71–2). Generally, it is agreed that the real exchange rate has been kept relatively stable and undistorted, and that East Asian economies have been outward-oriented in the sense that the inequality between incentives for producers to sell abroad or on the domestic market has not been significant (exports have not been discriminated against). However, structuralists claim that neoclassical research, particularly in the case of Taiwan and South

Korea, has understated both the level and dispersion of assistance to sectors<sup>4</sup> (Wade 1990a; Alam 1989; Amsden 1989; and Luedde-Neurath 1988). Because the empirical research used to support the neoclassical explanation has methodological weaknesses, caution is required in accepting the conclusion that protection in the domestic market has generally been quite low by international standards (Biggs and Levy 1988: 22; Alam 1989: 31–4; Wade 1990a: 116). In particular, the dispersion of incentives is said to imply intersectoral differences and that this dispersion results from intended differences between industries rather than from accidental causes. Others argue, and supply evidence, that price distortions do not in fact correlate closely with inward or outward-oriented trade regimes or with measures of national economic performance (Bradford 1984). This questions the proposition that market liberalisation could have been the driving force behind the success of East Asia.

*Authoritarian states.* All proponents of the structuralist view emphasise the virtues of a strong state in being able to formulate and implement policies broadly in line with the national interest, as contributing to East Asian growth. The original proponent, Chalmers Johnson (1982), argued in the case of Japan—and this was later extended to South Korea and Taiwan—that state intervention in East Asian capitalist countries relied on organisational and institutional links between politically insulated state development agencies and major private-sector firms (Johnson 1987). The efficacy of intervention was amplified by fostering powerful, state-linked, private-sector conglomerates, banks and trading organisations that tended to dominate strategic economic sectors (Deyo 1987: 19, 136–64). According to Amsden (1989), South Korea has an outstanding growth record because the institutions on which its late industrialisation has been based have been managed differently, and have functioned more effectively than elsewhere. In Taiwan, the bureaucracy is thought to operate as a ‘filtering mechanism’, focusing the attention of policy-makers (and the private sector) on sectors, products and processes crucial to future industrial growth (Wade 1990a).

Haggard (1990: 128), along with several others has qualified this argument. With the reform process during the 1980s phase of industrial restructuring the political context has changed. With political liberalisation, interest groups and opposition parties have mobilised around economic policy, and governments have become more responsive to public demands, including those from previously excluded groups, especially labour. For example, as a result of both the costs of financial repression and international pressures, financial market policies in both

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4 Reference is made in particular to Balassa and contributors (1982). See Smith (1994a: 30) for a discussion of how Wade has a tendency to exaggerate these ‘methodological

Taiwan and South Korea in the 1980s began to converge around a liberalisation strategy (Haggard and Lee 1993: 17).

### *The strategic trade model*

While the structuralist literature was gaining prominence, some economists were developing a new theoretical rationale for active intervention by government to pursue a 'strategic trade policy'. Krugman (1984, 1987b) sought to encapsulate empirically what Givens (1982) referred to as the Japanese 'narrow moving band'. The government, it was said, targets a series of new industries in succession, leaving subsidies in place just long enough for long-run competitiveness to be assured. In this way, industries are 'sliced off' one after another. Baldwin and Krugman (1988) suggest that this policy may have been adopted by Japan as a means of overcoming the 'early start' advantage of the United States semiconductor industry and enabling Japan's industry to become a significant exporter of the 16K random access memory chip. Other East Asian economies are said to have pursued similar policies to establish export industries. Reference is often made to Yamamura (1986) on Japanese televisions, and Amsden (1989: 85–8) on Korean and Wade (1990a, 1990b) on Taiwan exports. None of these studies, however, has established a convincing causal relationship between trade policy and establishment of the industry, and none measures the welfare effect of such policies. Yet while increasingly being applied in the context of developing countries, the theoretically-based strategic trade literature has largely ignored the debate surrounding East Asian industrial development.<sup>5</sup> The structuralist literature, on the other hand, has sought support for selective government intervention by drawing on the insights of the strategic trade literature (Komiya, Okuno and Suzumura 1988; Wade 1990a; Matthews and Ravenhill 1994).

From the mid-1980s, much of the more informal academic discussion of strategic trade theory increasingly emphasised externalities as a reason for protecting or promoting strategic sectors.<sup>6</sup> Krugman (1992: 436) and other, predominantly US, academics raised the possibility that a country could advance its standard of living at the expense of other countries by systematically promoting industries subject to external economies of a particular kind. They cited the importance to modern industrial competition of economies of scale, of learning-by-

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5 Exceptions are Srinivasan (1989); Krugman (1989); Rodrik (1988); and Stewart and Ghani (1992).

6 However, the case for promoting externalities was not new. The role of positive externalities as a justification for special promotion of particular sectors was a central theme of the postwar literature on economic development (see Arndt 1955 for a survey of this literature). What this literature, along with the postwar literature on domestic distortions, successfully demonstrated was why trade interventions are a particularly inefficient way of dealing with the problem.

doing, and of externalities stemming from research and development. These 'dynamic effects' associated with the development of 'strategic' high-technology industries were said to enhance productivity. Support for industries possessing these characteristics therefore was crucial if a country was to stay at the technological frontier (Tyson 1990).

Much of this research emerged from the United States at a time of increasing American fears of an East Asian challenge in trade and technology. A number of authors argued that the Japanese government's targeting of industries on the basis of their technological potential was the foundation of Japan's dramatic competitive success in world markets (Dosi, Tyson, Zysman 1989: 3–34). Other East Asian governments were also said to have pursued such policies (Tyson 1990: 4). In a survey of the literature and its relevance to the Asia Pacific region Richardson suggests that:

Many Europeans and North Americans believe that Japan, Korea, Singapore and Taiwan have been the most active practitioners of new-view trade policies. They fear that Thailand, Malaysia and perhaps others will follow. Out of that perception has come questionable dependence on anti-dumping defences and voluntary restraint arrangements, and also more constructive experimentation with special bilateral, sectoral and 'structural' negotiations over integrated trade and competition policies aimed at establishing new ground rules and more level playing fields (Richardson 1993: 102).

But proponents of the more recent theoretical literature are not dogmatic on the issue of intervention to capture technological externalities. In arguing that the presence of externalities in high technology industries may provide a legitimate case for intervention, some new trade theorists have stressed that the circumstances giving rise to such externalities are likely to be very limited. Krugman (1987a; 1989) has discussed how a special national advantage from an externality-generating sector is likely to arise only if the sector generates broad spillovers to the rest of the economy which are country-specific. Even if technological or linkage externalities are national in scope, the benefits of the externality may still end up being shared internationally. The limited circumstances in which externalities may in fact give rise to a legitimate case for intervention suggests that the case for intervention to ensure their capture has been somewhat overstated.

Lawrence and Schultze (1990: 46) pointed out that the case for protection of high technology industries based on external economies was misleading.

An important part of the output of high-technology industries is intermediate products, whose availability at reasonable prices is important to the pace of productivity and innovation in other high-technology-using industries...Rather than promote productivity-raising spillover, policies that restrict the availability and raise the price of high-technology parts

and components, as the new protectionism often does, may actually suppress them.

Empirical research does show significant patterns of spillovers or externalities arising from R&D and innovations that range from moderate to important (Richardson 1990). But these are not always associated with high technology industries. Moreover, most of the empirical research on government subsidies justified on these grounds concludes that subsidies are counterproductive.<sup>7</sup> Even if spillovers and linkages are detectable, they would appear to be more accurately detected by information gathered efficiently by private sector agents (Richardson 1993: 99). Moreover, an increasing trend among countries to share the burden of R&D costs or gain access to foreign markets via joint ventures and strategic alliances is complicating any definition of national economic interest, weakening the role of government in industry policy.<sup>8</sup>

### *The 'fair trade' argument*

Another strand in the policy debate of the early 1980s was the view that the economic structure of some countries (especially Japan) was rendering the principle of free trade unachievable in practice. This argument justified government intervention by the need to counteract 'unfair' practices of other countries, as evidenced either by excessive penetration of domestic markets or by foreign 'discrimination' against imports. The view that Japan's success is due to unfair trade practices is strongly held, particularly in the United States at both the official and the popular levels.

Bhagwati and Patrick (1990) note that the emergence of the fair trade view in the United States can be traced to the surge of import protectionism with the rise of the dollar during the Reagan administration. But according to Bhagwati (1988: 65), the 'diminished giant syndrome' has also helped. The persistent belief that the East Asian countries are 'not playing by the rules' and that 'level playing fields' must be established to compete with them, owes much to this syndrome. Since the mid-1970s market penetration by Japan and the developing East Asian economies has intensified competition, particularly in labour-intensive sectors. These developments, combined with increased popular awareness of strategic trade literature,

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7 See Smith (1994a: 94) for a survey of this literature.

8 After several years of theoretical and empirical investigation, Krugman (1993) concludes that while an important contribution to the literature, the strategic trade argument is probably of minor importance. The theoretical foundation of strategic trade policies are sound, but rather narrow. Small changes in assumptions lead to large changes in conclusions. These models have been applied to industries with a few large, dominant firms operating on global markets. It is largely of relevance to industrialised rather than the developing countries.

have lent critical ideological support to the export lobbies seeking larger shares in foreign markets. Politicians also welcome a justification for aggressively opening foreign markets (Bhagwati and Patrick 1990: 14).

Evidence for the view that Japan is 'different' rests on two features. The first, it is argued, is to be found in the peculiar nature of Japan's trade structure. Krugman (1991: 3) notes that for much of the 1980s, economic controversy over Japanese performance concentrated on two rather crude questions: 'Does Japan import abnormally few manufactures?' and 'Does Japan engage in an unusually low proportion of intra-industry trade?' That Japan's trade regime may have been responsible for the very low level of manufactured imports and for the low level of its participation in intra-industry trade is an issue widely discussed in the literature (see Balassa and Noland 1989). On the face of it, this comparison seems to confirm the anecdotal evidence of a closed domestic market. But as many economists (Bergsten and Cline 1987) pointed out, this raw comparison is unfair. The United States is a resource-rich nation, able to pay for its oil imports by exporting agricultural products; Japan must pay for its raw materials by running a trade surplus in manufactures, presumably by importing less (Krugman 1991: 3).

A particularly influential paper by Lawrence (1987) suggested that, after taking resources and location into account, Japan still imports only a little more than half as much manufactures as one would otherwise expect. In contrast, Bhagwati (1994: 10) concludes that while econometric studies of the question are badly divided, the better crafted of these do not support the thesis that Japan imports too little, nor do they indicate a special and extraordinary effect of informal trade barriers that make Japan a fit case for unusual treatment. Also highlighted is the rapid growth in Japan's manufactured imports since the mid-1980s (Bhagwati 1991).

Saxonhouse (1986a, 1989, 1993) contends that by the traditional rules of the game of the international economic system, with tariffs low, quotas few and with a relatively low level of non-tariff barriers, foreign access to the Japanese market would have to be considered excellent. Along with Leamer (1984, 1988), Saxonhouse (1983, 1986b) finds that much of Japan's distinctive trade structure can be explained by Japan's distinctive factor endowments. Others argue however that Japan's economic institutions are so different from those of other industrialised economies that traditional standards used to assess compliance with international agreements and norms do not apply (Prestowitz 1988; Fallows 1989; Dornbusch 1990; Kuttner 1991). These authors contend that densely linked and strongly preferential trading systems, such as those found in the Japanese *keiretsu*, are likely to be impervious to fluctuations in exchange rates or to government liberalisation efforts. Thus, even when the government reduces policy barriers to market access in Japan, foreign firms continue to confront barriers that stem from

long-term contractual relationships among Japanese firms (Gerlach 1989: xix; Dosi, Tyson and Zysman 1989: 34).

That various aspects of Japanese corporate organisation represent non-tariff barriers to trade and even that corporate organisation is a contributing factor to the alleged distortion of Japan's trade structure has gained popularity and attention in recent years. Sheard (1992: 21) notes:

Much of the discussion of this issue has taken place in the context of Japan–US trade friction and trade negotiations. In particular, American businessmen, policy-makers and academics have argued that close inter-firm ties in Japan in financial markets, intermediate product markets, and parts supply systems represent 'structural impediments' to penetration by foreign firms into the Japanese market...It is fair to say that so-called *keiretsu* corporate organisation has become one of the most contentious issues in the analysis of Japan's international economic relations...A strong theme in this literature is that the prevalence of long-term contractual arrangements in Japanese business makes penetration of the Japanese market inherently difficult and gives Japanese industry a form of 'natural immunity' against import competition (Dore 1986: 248).

The very informality of these alleged Japanese restrictions makes it very difficult to attempt to estimate their impact by analogy with the way formal policies are treated. However, Hoffman (1989: 34) contends that plenty of studies in the early 1980s showed that initial Japanese gains in market share derived from the extraordinary advantages the Japanese enjoyed over Western firms in productivity and product quality. This superiority stemmed from the fact that Japanese producers had developed an entirely new approach to production management that differed fundamentally from both the European craft tradition and the United States mass production model. Quality control as a source of competitive advantage was by the 1960s firmly entrenched as a principal preoccupation of workers and senior management—an approach that has proved enormously successful.

## **The evidence: country cases**

### *Northeast Asia*

*Japan.* Among specialists on Japanese political economy there is no clear consensus regarding the effectiveness of Japan's industry policy:

The results of MITI's policies in targeting specific industries have been mixed in practice. One can credit the combination of MITI policy, market forces, and the mixture of Japanese business leadership and follow-the-leader business behaviour for having created a generally high competitive environment in Japan. And there have been industries targeted successfully. However, industry policy has not been successful in a number

of industries, with consequent high costs to consumers, savers or taxpayers (Patrick 1986: 21).<sup>9</sup>

MITI's record in 'picking winners' is by no means unblemished. As Arndt (1989: 41–2) points out:

MITI initially opposed the establishment of the steel industry (and, it is said, of Sony). It sought unsuccessfully to prevent the emergence of new motor car manufacturers and only thus failed to kill at birth one of Japan's success stories, Honda...MITI, like others, failed to foresee the rise in energy prices that rendered these industries even less competitive. MITI encouraged a huge expansion of shipbuilding that was widely, and as it turned out, correctly expected to run into world-wide excess capacity. Among industries which MITI at various times saw as potential winners but had to abandon in the face of foreign competition were the production of construction equipment, chain saws, marine engines and plate heat-exchanges. The chemical industry that MITI pushed vigorously has remained fragmented and plagued by high costs.

There are a number of important industries, such as automobiles, consumer electronics and most consumer goods, which did not receive government support but succeeded on their own (Patrick 1986: 18).

MITI has long targeted the commercial aircraft industry with no commercial success. It could not prevent what it saw as excessive domestic entrants into vehicle production for the domestic market, and later was unable to effect mergers among competing smaller producers (Patrick 1986: 26).

Bergsten and Noland (1993: 68–9), in a survey of the relevant literature, conclude that direct subsidies have played little role in fostering changes in Japan's industrial composition. On balance they have probably been welfare-reducing by shifting resources from high-to-low productivity uses.

Imai (1986) evaluated the effectiveness of Japanese industry policy over a wide range of high technology industries. Along with Okimoto (1986) he concluded that MITI has been most successful in the information industry and concurred with Saxonhouse (1986c) that it has not been successful in biotechnology. Imai also found that industry policies have not done well in computer software, new materials, chemicals and new energy sources.

One problem that makes evaluation difficult is that Japan's industry policies were generally designed to allocate resources in conformity with already existing domestic and foreign market pressures (Lawrence 1993: 5). MITI chose to target industries with high income demand elasticities and rapid productivity growth. But

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9 A recent study by Sazanami, Urata and Kawai (1995) estimates the cost of Japan's trade barriers to Japanese consumers at around 15 trillion yen (\$US110 billion at 1989 exchange rates) or 3.8 per cent of GDP.

as Komiya (1988: 6–7) points out, these are precisely the sectors that would be expected to grow rapidly in the absence of such policies. Aron (1986: 234) argues that industries labelled as infant (such as computers and semiconductors) were infants also in every country of the world.

Both Japan and the United States encouraged these industries, but under different auspices: the Department of Defence in the United States and MITI in Japan. This gave a military bias to United States efforts and a consumer bias to Japanese efforts. Ultimately the United States dominated military electronics and Japan dominated consumer electronics.

Since the late 1970s, two major trends have been discernible in the evolution of Japanese industry policy. Industry policy has become less important in overall government economic policy, and MITI is losing its historic role as the predominant initiator, agent, and implementor of industry policy (Patrick 1991: 14). MITI has placed great emphasis on other aspects of industry policy—assisting in the structural adjustment process of major uncompetitive, declining ‘sunset’ industries such as those hit by high energy costs (aluminium, petrochemicals), low world demand (shipbuilding), or high labour costs (textiles, simple assembly operations). Japanese industrial policy during the 1980s has been most effective in dealing with industries in trouble and needing structural adjustment (Patrick 1986: 29; Arndt 1987). On the whole these policies have been market-conforming, rather than market-obstructing, helping resources to get out of, rather than stay in, declining industries.

*South Korea.* During the 1980s Korean industry policy underwent a fundamental reorientation (Young 1986; Smith 1994a). Its shift to technology-intensive industries was designed around functional policies supportive of industrial upgrading. This contrasted with the industry-specific interventions during the previous major shift in industrial structure in the 1970s when the government used trade and financial policies to direct resources to the heavy and chemical industry sector. The highly politicised heavy industry drive left a legacy of distorted credit markets, heavily indebted firms, and a high concentration of industrial power (Nam 1991, 1992). In contrast, the industry policy strategy of the 1980s was based on the premise that direct intervention was no longer feasible or desirable in light of the economy’s changing industrial structure and greater reliance on private sector decision-making.

What is conspicuously missing from the structuralist literature is a discussion of the most intractable problem in industry policy-making in Korea since the late 1970s, namely, how to deal with financially distressed firms and the large volume of non-performing debts that has accumulated in the banking system. Industries such as shipping and foreign construction which had been selected and fostered by the government as ‘strategic’ industries in the 1970s faced financial difficulties in the

early 1980s. Overall, opinion differs as to whether the heavy and chemical industry policy should be judged a failure or a success. Some argue that Taiwan outperformed South Korea without undertaking the costly heavy and chemical industry drive and that the rapid increase in these exports could equally have resulted from several other factors which gave Korean exports a competitive stimulus (Yoo 1990); others like Amsden (1989) and Chang (1993) judge it a success, and the World Bank (1993) a qualified success in that Korea paid a high price.

I have suggested that the structuralist and strategic trade models would appear to have limited relevance in explaining the role of the Korean government in technological upgrading in the 1980s (Smith 1994a). This upgrading has largely been driven by the private sector's push into high technology industries through R&D investment. Rather than directing resources to industries considered 'strategic', the government's industrial initiatives have instead focused on the restructuring of declining industries and measures to promote a greater role for small-scale enterprises. This tendency for the Korean government, like Japan's, to become less *dirigiste* in response to changing economic circumstances has received little attention in the structuralist literature.

Moreover, despite occasional early backsliding, Korean progress on trade liberalisation, particularly since the mid-1980s, has been both consistent and significant. The government has considerably reduced border protection, wound back its use of direct production subsidies and no longer employs extensive export subsidies. South Korea will have reduced its (unweighted) average tariffs from around 32 per cent in 1982 to 8 per cent by 1995, and the coverage of quantitative restrictions to less than 5 per cent of items. Ongoing financial liberalisation is improving the access of small and medium firms to finance. While several significant formal barriers still remain, industry promotion policies, particularly with respect to the high technology sector, are being tailored to avoid trade friction.

*Taiwan.* In the early 1980s Taiwan embarked on a development program designed to shift its economy away from reliance on labour-intensive industries towards the development of technology-intensive products and industries. External pressure, particularly from the United States, was influential in bringing about trade reforms in the early 1980s. But trade liberalisation was also taking place in response to domestic pressures. The pace of trade liberalisation accelerated after 1985. Non-tariff barriers were considerably reduced and average tariff rates wound back from 31 per cent to 9 per cent between 1985 and 1990 (Smith 1994b).

While continuing to pursue ongoing trade liberalisation, the Taiwan government in 1982 also adopted a sectoral policy of identifying and promoting 'strategic' industries as a means of furthering industrial development and restructuring industry. Preferential fiscal measures (tax exemptions, tax credits, accelerated depreciation) and financial incentives (long-term, low interest loans)

were made available to high technology sectors, with the following criteria for selection of strategic industries: high technology intensity, market potential, high value-added, and large linkage effects between industries.

However, empirical investigation into this policy has revealed that the beneficiaries of industry policy interventions in this period were not strategic industries. The incentive structure to industry was aimed more at sustaining losers than picking winners (Smith 1994c). Relative to other sectors, those industries regarded as 'strategic' (high technology) industries, such as the electronics, machinery and information sectors, exhibited low rates of effective assistance and subsidy. The major recipients of subsidies were in fact those with a declining comparative advantage such as textiles, and industries in which Taiwan did not have an established export specialisation or comparative advantage. Indeed, the incentive structure discriminated against high technology industries, in favour of industries with low skill and technology-intensity and with low international competitiveness.

*Singapore.* In Singapore, the government has mostly sought to create an environment conducive to growth of private enterprise. Apart from stable macro-economic policy, the favourable environment has been based upon public investments in human capital and infrastructure and the maintenance of good labour relations. While government efforts in the area of education and industrial training have not received much publicity, they have been very important. Simultaneously, the Singapore government has also intervened through the market to guide private sector development where private investors have not responded to financial incentives (Soon and Tan 1993). Huff (1994) notes, for example, that while Singapore is a very open economy with little restriction on foreign trade and investment, the government exercises a very strong influence on the process and direction of industrialisation in the areas of the labour market, state-owned enterprises, and through a program of forced saving. While such policies have successfully raised Singapore's investment ratio, Young (1992) suggests that they have also resulted in a situation in which the contribution to growth of total factor productivity (TFP) is very small, implying that the investment ratio may be limited. He suggests that the relatively low growth of TFP in Singapore during the 1980s was due to its industrial policies which targeted 'premature' industries, defined as industries that were too high up the technology ladder given the level of sophistication of Singapore's industrial sector.

Like Korea, Singapore initiated its industrial restructuring program in the early 1970s, but abandoned it due to problems arising from the first oil price shock, only to introduce it again in 1979. The aim of the program was to shift manufacturing activities towards certain 'priority' industries which are more skill and technology-intensive (Chowdhury and Kirkpatrick 1987). The main policy

instrument was high wages to phase out labour-intensive activities and promote more 'high-tech, high value-added' activities. It is now recognised that along with external factors, the wages policy played a role in pushing the economy into recession in 1985, primarily through a reduction in Singapore's international competitiveness (Chowdhury and Islam 1993: 96). These problems were officially recognised when the government then decided to take a more market-oriented approach to industrial policy (Ministry of Trade and Industry 1986).

*Hong Kong.* Hong Kong has always been unique, particularly in the small and non-interventionist role of its government. Small enterprises have flourished, supported by a government dedicated to stability and 'positive non intervention'. Interpreted correctly, this means that the government will not reject every proposal for intervention as a matter of principle, but has a strong bias against intervening (World Bank 1993). There has been little attempt by the state to guide the direction of Hong Kong's industrial development. There is almost unanimous agreement within the literature that government has seen its primary role as providing public services (including heavy government investment in higher education and infrastructure) and guaranteeing a stable macroeconomic environment (Yeung 1991; Chau 1993).

### *Southeast Asia*

In a recent book, MacIntyre (1994: 2) notes that the absence of careful cross-regional comparisons has contributed to the emergence of a popular—but untested—perception that the economic transformations under way in Southeast Asia are largely replicating what might be thought of as a Northeast Asian model. This vacuum is now beginning to be filled by a number of contributions which, while noting the diversity of individual country experience, show that Southeast Asian countries (with the exception of the Philippines) are industrialising within a policy and polity quite different from that of Northeast Asia.<sup>10</sup> Interventionist industry policies appear to have played a less substantial role in the transition to export-led growth than in the Northeast Asian NIEs—the bureaucracies are less competent and the governments less insulated from political pressures.

*Indonesia.* Indonesia, like Malaysia and Thailand, was initially import-substitution oriented. In the 1970s growth was high, but based on the oil boom. Industrial development was state-led and inefficient. Manufacturing began to grow rapidly following the major liberalisation in the 1980s, led by exports and private investment. Hill (1995), as one of the first to test the Northeast Asian interventionist literature against the Indonesian experience, concludes that there is

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10 Apart from the empirical literature surveyed here, this literature includes MacIntyre (1994); Islam (1992); and Haggard, Lee and Maxfield (1993).

little evidence that Indonesia's rapid industrial growth can be attributed to the kind of selective industry policy advanced by the structuralists.

From 1973 to 1985 the government sought to accelerate industrialisation through a combination of import substitution policies, regulation of investment and state ownership (Hill 1988). The participation of the state in the manufacturing sector was justified on strategic grounds (cement, fertilisers and steel), technology (aircraft) and increasing value added (oil refining, LNG, petrochemicals, pulp and paper) (Pangestu 1993: 272). But the productivity and long-run financial performance of most of the state enterprises have been poor, and it is difficult to discern any compensating features in their record. Moreover, their concentration in sectors that faced limited domestic or import competition, meant that their output was often priced well above world prices, putting a burden on other segments of the economy (Bhattacharya and Pangestu 1993). 'The much-vaunted "high-tech" projects of Minister Habibie, for example, have yet to earn a profit, despite over a decade of operation and a range of implicit subsidies' (Hill 1995: 27; see also McKendrick 1992).

Fane and Phillips (1991) and Warr (1992a) find that while the distorting effects of Indonesia's trade policies declined markedly during this period, the most highly protected industries, unsurprisingly but damagingly, continue to be those in which its comparative advantage is least. After twenty years of heavy intervention, the automotive industry is intensely regulated with tariffs in the range of 175–275 per cent in 1993. It remains an infant industry, with no evidence that production has approached minimum average cost levels. Other unsuccessful examples include plywood and the state-owned steel industry which until 1988 received very high protection.

Similarly, most authors writing on the political economy of Indonesia concur that one does not find in Indonesia, the 'strong state' so widely credited with steering the Northeast Asian NIEs through rapid economic transformation. Bureaucratic agencies have lacked the institutional capacity to monitor the use of government subsidies by industry (MacIntyre 1994; Biggs and Levy 1991; Bhattacharya and Linn 1988; Hill 1995). Certainly, there is no sign of the state attempting to 'discipline' corporate recipients of preferential credit along the lines Amsden has described in Korea (MacIntyre 1993: 150). Hill (1995: 30–32) suggests that the Indonesian government has been a 'hard state' in macroeconomic management. But in its micro interventions, it displays all the hallmarks of a 'soft state'—corruption prone and vulnerable to capture.

*Malaysia.* Bowie (1994) suggests that Malaysia, like Indonesia, has never closely resembled the developmental state model often associated with South Korea and Taiwan. In the early 1980s, frustration at the pace of economic development prompted a state-led attempt at industrial upgrading. The 'Look East' policy

adopted in 1981 (Awanohara 1987) was an explicit attempt to emulate the heavy industrialisation efforts of Japan and South Korea. The government created a holding company, the Heavy Industries Corporation of Malaysia (HICOM), to 'plan, identify, initiate, invest [in], implement and manage projects in the field of heavy industries' (Malaysia (HICOM) 1985: 10) by creating a nucleus of industries, including basic metals, machinery and equipment, automobiles, building materials, pulp and paper, and petrochemicals (Bowie 1991: 111–52). Several of these state-owned enterprises have been poor performers (Salleh and Meyanathan 1993). The record of HICOM's best-known project, Proton, the national car manufacturer (a joint venture with Mitsubishi) has been a decidedly chequered one (Jayasankaran 1993). Until recently Proton has recorded large losses, operating well below the minimum efficient scale for car plants.<sup>11</sup> Unlike Korea's HCI push, which was aimed at achieving international competitiveness, HICOM industries, although monitored by the government, were under no such compulsion. Faced with mounting deficits, the government changed policy and began a major program of privatisation (Salleh and Meyanathan 1993: 19).

The period 1986–90 was a period of adjustment and liberalisation, prompted by a sharp recession in 1985, which highlighted the costs of the drive toward industrial upgrading and the large external debt it had generated. Investment incentives were introduced in an attempt to increase foreign direct investment (FDI) and stimulate private enterprise, state enterprises were privatised, and state expenditure now concentrates on infrastructure provision (Lim 1992; Hill 1993). These policies have been successful: Malaysia has recorded rapid growth since 1986 and is a favoured location for FDI among the Asian NIEs. The flexibility of Malaysia's government has been a crucial factor—it has been willing to pronounce certain policies and their implementation as outright failures (Salleh and Meyanathan 1993).

*Thailand.* Thailand has had consistent and fairly rapid growth since 1955, with government emphasis on private sector development, outward orientation, and macroeconomic stability. In the 1960s and 1970s, the government made various efforts to protect and promote domestic industry by interventionist policies but, compared with Korea, they were not highly coordinated. Balance of payments problems and concerns about the pattern of industrialisation prompted a shift in the early 1980s to export development and import liberalisation. Protection for manufacturing was reduced by the mid-1980s (although it was much higher and more variable than in Korea and Malaysia), and again quite sharply in the early 1990s.

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11 Currently Proton commands nearly 74 per cent of Malaysia's car market, largely because the preferential treatment accorded Proton has made its competitors prohibitively expensive. The cost to consumers has been high, with a tripling of car prices in Malaysia over the past decade (*Far Eastern Economic Review* 1994).

The main instruments of industry policy have been the trade regime and the Board of Investment (BOI), which have combined to favour large industry (Christensen et al. 1993). In the 1960s and 1970s, they supported capital-intensive, import-substituting activities, discriminating against agriculture and labour-intensive manufacturers, sectors in which Thailand enjoys a comparative advantage. In the 1980s, they shifted in favour of exporters, but were still biased towards large-scale producers. However, Christensen et al. (1993) emphasise that the importance of the BOI in this export drive should not be exaggerated. For example, the BOI began to favour electronics in the early 1980s, yet the industry did not make much progress. It was not until the mid 1980s, with the large devaluation in the real exchange rate, that electronics really took off. There are other sectors that the BOI did little to promote until they were already very successful: canned tuna, canned fruit, and jewellery are examples.

Warr (1995: 220–22) argues that while, in the mid-1970s, ‘export promotion’ was stressed over ‘import substitution’ in the plan documents, this change of language was more a matter of intellectual fashion than policy commitment. Protection of inefficient manufacturing sectors actually increased during this period, as it did through the remainder of the 1970s. While export promotion policies were introduced, supposedly to promote manufactured exports. Warr finds little empirical evidence that industry policy interventions were being designed to promote manufacturing exports. It was industries whose export performance worsened, not successful exporters, that received increasing support. There is evidence that import-substituting policies did not succeed in ‘picking winners’ either. Wiboonchutikula’s (1987) study found that TFP growth has been low in import-competing sectors and relatively high in export industries.

Following reforms in the mid-1980s, the level of state involvement in the Thai economy has been modest, although policy continues to discriminate against small producers. State-owned enterprises in Thailand have been relatively few, tariff and non-tariff barriers have not been particularly high by developing country standards (with the exception of automobiles), there has been relatively little state intervention in credit allocation for industrial purposes, and foreign investment has generally been welcome (Warr 1993; Doner and Unger 1993; Findlay and Garnaut 1986).

*Philippines.* Hutchcroft (1993: 18) argues that the Philippine state is more often ‘plundered than plunderer’, with public policy almost wholly captured by interests of a narrow élite. Despite its rich endowment with human capital and access to foreign aid and credit, the Philippines stands out as a country that has yet to achieve sustained export competitiveness. There is fairly general agreement in the literature that domestic structures, in particular deeply entrenched class divisions and weak political institutions, have prevented the government from

adopting export-promotion policies. The Philippines has long had an extensive system of preferential credit, but the allocation of credit has done little to promote goals of economic development. Although the government has repeatedly published lists of economic activities to be targeted by selective credit, these lists commonly have become so all encompassing as to lose their ability to achieve specific development goals. Because of the state's vulnerability to particularistic interests, it is incapable of playing a more coherent role in guiding economic development.

Trade reform, aborted during severe balance of payments difficulties in 1983, resumed in 1986. As a result of the cumulative actions of ongoing liberalisation efforts undertaken in the early 1980s, the Philippine economy is now more open and transparent in its trade regime than it has been in the last three decades. The average nominal tariff was reduced to about 24 per cent in 1992, and the dispersion narrowed from 0 to 100 per cent to 10 to 50 per cent with a few exceptions (Soesastro 1994a: 13).

### **The structuralist interpretation: summing up**

The bulk of the structuralist literature on East Asia presents evidence of various forms of government assistance to specific industries and then argues that they were provided in anticipation of comparative advantage. It is doubtful whether the structuralist writers have satisfactorily established the effectiveness of such policies. Islam (1992: 77–8) suggests that the developmental state is a historically specific phenomenon, more relevant in some periods than in others. Several authors have pointed out that the dense organisational network which, according to the structuralist model, exists between policy-makers and the private sector is of a subtle and informal nature and hence not readily observable. Structuralists tend to treat the policy-making process in a too-mechanical fashion, with the private sector responding passively to bureaucratic initiative and guidance (Chowdhury and Islam 1993: 54).

Hughes (1993: 11–3), in her critique of the structuralist case, argues that Wade (1990a) and Amsden (1989) have neglected the distortions created by the unreformed components of policy and the extent to which interventions were necessary to offset these distortions. They pay too little attention to the costs imposed by rent seeking corporations and public officials. Reformers were not politically strong enough in either Taiwan and South Korea to abolish protection or to induce a competitive financial system because of the build-up of vested interests in protection and regulation during the 1960s and 1970s. Both countries therefore attempted to reach 'neutral' policies by offsets to protection in agriculture and for exports and by credit rationing. The fiscal and macroeconomic costs created by distorting policies reduced the availability of funds for social and environmental concerns.

Financial 'repression' distorted investment among, and within, sectors. Elaborate rural poverty alleviation programs were introduced to offset the effect of biases against agriculture [which] by the 1980s...had become agricultural protection policies...They damaged the Korean and Taiwan economies (Hughes 1993: 11).

The structuralist literature cannot accommodate the conspicuously high levels of inefficient agricultural protection with which Asia was saddled (Anderson and Hayami 1986). It does not explain why the agricultural sector, although lacking economic clout, constituted such an important political constituency (Islam 1992: 78).

A more general criticism of structuralist writers is that they have failed to come to grips with the neoclassical theory of government failure. Since the early 1970s, many studies have analysed in quantitative terms the relationship between the level of protection afforded different industries and the political and economic characteristics of sectors or groups that appear to influence the level of protection.<sup>12</sup> Since protection builds up and entrenches vested interests, governments tend to protect industries with low and decreasing comparative advantage. It has little to do with the promotion of industries which are expected to become internationally competitive in the future.

A general criticism of the industry policy literature is that its advocates have not convincingly demonstrated its effectiveness. As Haggard (1990: 14) has pointed out:

...the effect of industry policy was...never measured against the more substantial influence of consistent and credible macroeconomic policies, the provision of public goods and incentives to private risk taking.

Chowdhury and Islam (1993), however, note that the structuralist literature has made a contribution in drawing attention to some of the less balanced neoclassical interpretations of East Asian economic success. Brander (1987: 36), while concluding that much of the industry policy literature is logically flawed, points out that professional economists are inclined to discount the popular industry policy work simply because it does not meet the standards of precision and logical rigour that are normal in economic research. This is unfortunate because this literature does contain substantive ideas that should be addressed carefully.

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12 The quantitative approach to analysis of industry-government interaction has been most frequently applied to the area of tariff policymaking in developed countries. See Baldwin (1984) for a survey of the relevant literature for industrial countries. In the case of the Asia Pacific, see Findlay and Garnaut (1986) for ASEAN and Australia, Miller (1987) for Japan, and Smith (1994a) for Taiwan.

### **Where from here?**

Earlier interventionist policies are probably not replicable today, given a less receptive trading environment for export subsidies, more open capital markets, and freer labour markets. Several developing East Asian countries still have fairly high tariff rates—for example, around 20 per cent in Indonesia and the Philippines and 30 to 40 per cent in Thailand, while effective rates of protection, particularly in manufacturing remain in the 30 to 60 per cent range (Soesastro 1994a: 1, see table 1). There are also informal, quantitative restrictions to trade and investment in the developing and industrial economies of East Asia. However, as Soesastro (1994b) notes, governments are now committed to continuing the process of opening their markets in the interests of achieving increased efficiency. This process of progressive opening amongst Northeast and Southeast Asian economies, has been described as a game of ‘prisoners delight’—each country’s success in internationally-oriented economic growth depends on its own trade liberalisation (Drysdale and Garnaut 1993a, 1993b).

Some have suggested a role for APEC in speeding up this process by, for example, preparing sectoral liberalisation agreements to be negotiated globally through the World Trade Organisation. Sectors where significant gains could be expected from early liberalisation would include: steel and steel products, processed minerals (such as aluminium), grains, textiles, clothing and fibres, and aviation. Recent analysis suggests there are potential gains to Asia Pacific economies through such joint initiatives (see for example Garnaut and Ma 1992). Results in a specific sector such as steel could act as a model for future cooperation efforts in specific areas of regional trade and industry policy (Drysdale 1993).

As the economies of the region become more intertwined, government policies encouraging particular sectors are increasingly irrelevant. The economic interdependencies being created by the burgeoning economies of Hong Kong, Taiwan and parts of China are the most obvious examples. Other examples of open economic associations are the ‘growth triangles’ around Singapore, the increased interaction between China and Korea and the ‘production networks’ being created all around the Asia Pacific by investment from Northeast Asia (Elek 1994: 6). Arguments for domestic industry policies are being weakened by the rapid growth of FDI. The World Bank (1994: 41) has pointed out that ‘to attract multinational companies and state-of-the-art technology, governments must offer an economic environment as free as possible from import barriers, regulations, taxes, and other interventions’. Some of the most spectacular recent stories of East Asian development, in Malaysia and Thailand, for instance, have been led by export-oriented FDI from Japan and the NIEs. China is using FDI for development of competitive industries in textiles and electronics. Foreign investment promotion will continue to be helped by liberal trade regimes, and is in turn creating economic and political pressures for further

trade liberalisation. This virtuous circle, not sector-specific industry policy, is the key to the future development of sophisticated manufactures in East Asia.

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