

MAJOR ISSUES IN THE ROLE OF TRADE AND INDUSTRIAL POLICIES IN DEVELOPING COUNTRIES

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The nature, extent and objectives of industrial and trade policies and consequent implications for state intervention in the economies of developing countries may change over time. There exist no universal optimal industrial and trade policies for all developing countries. The initial conditions of a given country may dictate largely the kind of optimal policies needed and the nature and scope of state intervention required. At the initial stages of industrialization, where there are no functioning markets, state intervention could be quite extensive. On the other hand, as the economy advances along the trajectory of industrialization, and its structure becomes more complex and sophisticated, the role of the state becomes progressively diminished, and resource allocation will be increasingly guided by market signals.

I. Overview

Trade and industrialization have been metaphorically described as the Siamese twins in development literature. One can hardly be discussed in isolation from the other. However, in recent years there has been a fundamental shift in the way economists and policy makers think about the symbiotic relationship between trade and industrialization, and particularly the role of trade in industrialization. The key notions seem to be the demise of the inward-looking import substitution industrialization (ISI) strategy based on State intervention and the ascendancy of the export-oriented industrialization (EOI) strategy based on trade liberalization and free-market principles.

“Getting the prices right” is clearly the slogan of the day. Market reforms and trade liberalization have been the heart of stabilization and adjustment programmes supported by IMF and the World Bank in developing countries. In particular,

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inward-looking industrialization through aid has been replaced by outward-oriented industrialization through trade. The crucial questions concern: the universality of the efficacy of free-market and free-trade principles across economies regardless of the level of industrialization and social and economic conditions; and the relative importance of trade as opposed to non-trade factors in accelerating industrialization.

Moreover, recent rapid changes in the global economic environment have considerably altered the traditional role of trade and its relative importance as an instrument to promote industrialization in both developed and developing countries. The increased globalization of production and investment lubricated by the worldwide integration of financial and capital markets raises some fundamental questions about the validity and relevance of traditional competition and trade policies which are formulated on the basis of a conceptual distinction between national firms and foreign enterprises. In developed countries, ever-increasing foreign direct investment (FDI) and off-shore production, partly motivated by the desire to circumvent mounting protectionism and ensure a market share, as in the case of Japanese investments in the United States and Europe in recent years, present an alternative to trade between developing countries, and would reduce its volume. On the other hand, FDI in developing countries is often attracted by lower labour costs and access to raw materials, with a substantial part of the output being re-exported, as in the case of Japanese investments in South-East Asia, and hence may increase the volume of exports from developing countries.

More significantly, according to a recent United Nations study [UN, (1993)] transnational corporations, which are currently estimated to number around 37,000, accumulated more than \$2 trillion worth of foreign direct investment with the addition of \$150 billion in 1992. They accounted for one-third of all private-sector productive assets all over the world. Moreover, for the first time in history, foreign sales by transnational corporations reached \$5.5 trillion, which exceeded total world exports of around \$4 trillion in 1992. It is uncertain, however, how much of the total sales by transnational corporations outside their countries are for the domestic markets of host countries, as in the case of Japanese FDI in the United States, and how much of the sales are for re-exports, as in the case of Japanese FDI in South-East Asia. From the perspective of the corporations, FDI is an alternative to exports, but from the viewpoint of the recipient country, FDI is viewed as either a vehicle for promoting exports or for increasing production for domestic consumption. Whether trade-augmenting or domestic-consumption augmenting, policy issues related to FDI seem to have an importance equal to, if not greater than, that of trade barriers and other trade issues.

II. The Market and the State

The relationship between trade and industrialization, and consequent trade and industrial policies have been a topic of intense debate, often charged with ideologi-

cal passion, in the literature of development economics for the several decades. It is beyond the scope of this study to provide a comprehensive survey of a voluminous literature on the subject.¹ Instead, the study will focus on a balanced analysis of selected key issues in trade and industrialization, and derive their policy implications.

Within the last decade, the dominant thinking in development economics focused on the central role of the State in economic development and a widespread acceptance of the managed and even planned economy has been replaced by the supremacy of the "neoclassical school", with greater reliance on market forces and consequent economic and trade liberalization. In the earlier decades, from the 1950s to 1970s, the strong role of the State in the process of economic development was predicated on the theory of market failures and externalities. The case for the free market system as a means of achieving the dynamic optimal allocation of resources and welfare maximization under a set of restrictive assumptions can be hardly disputed. Above all, the market provides a decentralized and efficient system of coordinating and reconciling millions of decisions taken daily by countless economic agents in an economy. Guided by the "invisible hand" of self-interest, the market imparts stimulus to growth and technical change through incentives and flexibility, and leads to a harmony between the pursuance of individual self-interest and collective social welfare, while ensuring a fairly close relationship between costs and prices, that is, a competitive equilibrium price is equal to marginal cost and average cost. It is not difficult to see why Adam Smith, in his classic book *The Wealth of Nations* envisioned the role of the State narrowly confined to defence, law and order, provision of public goods and enforcing competition. The remaining vast area of economic affairs is left to the guidance of *laissez-faire* or free market forces.

It is equally evident, however, that certain preconditions have to be met for the price mechanism to achieve the optimal dynamic resource allocation and production. As cogently explained by Scitovsky (1954), they include complete and functioning markets, which entails: perfect information and resource mobility with numerous economic agents, none of which is big enough to influence prices and conditions in all markets whether product, labour, financial or capital markets; an absence of economies of scale; and complete tradeability. Obviously, these preconditions rarely exist in reality. In fact, there are many so-called specific "market failures" and externalities which may result in a socially suboptimal allocation of resources in the absence of corrective policies. Many different forms of market failure could be identified. An often-cited example is labour market distortions resulting from labour training externalities. Namely, the benefit of labour training cannot be appropriated by the firm, since trained labour may move to other firms

¹ For extensive references to the literature, see, H. Pack (1992); G.K. Helleiner (1993); and papers presented at the World Institute for Development Economics Research (WIDER) Conference on Trade and Industrialization Reconsidered, held at Ottawa from 5 to 7 September, 1990.

after a period of training. This may cause firms to invest in training less than at the socially desired level. There are also legally imposed or institutional barriers to perfect functioning of the labour market, such as a minimum wage or the bargaining power of trade unions, keeping urban and industrial wages higher and their employment lower than would be in the absence of such barriers. Second, there are informational and technological externalities associated with activities of entrepreneurs related to the development of new techniques of production or exploration of new markets whose benefits can accrue to other entrepreneurs at no cost, and hence may force them to underinvest and underproduce. Third, in case of scale economies, the firm produces at the point where price equals average costs, but is less than marginal costs, thus producing less than at the socially optimal level. Fourth, financial and capital markets are inadequately developed to induce long-term industrial investment in many countries, and particularly in developing countries.²

It is against this backdrop of hotly debated market imperfections that the Latin American structuralists and other development economists emerged in the 1950s, beginning with the works of Prebisch (1950), Singer (1950) and Hirschman (1958). Among other things, they emphasized structural rigidities and institutional barriers preventing the smooth functioning of free market systems. Public intervention is, therefore, required to remove these bottlenecks and create an environment conducive to the perfect functioning of free market systems. Such public intervention was justified particularly at the initial stages of industrialization where market imperfections can be more pervasive than at later stages of development characterized by greater economic integration.

The structuralist's advocacy of the active role of the State in initiating and accelerating industrialization in the 1950s and 1960s had given rise to an avalanche of neoclassical reactions culminating in the recent dominance of neoclassical thinking firmly embedded in free market principles, free trade and minimum public intervention. The theory of development economics which was constructed around active State intervention was attacked on various fronts. Most of all, the neoclassical critique argues that market distortions *per se* do not provide the rationale for State intervention, even if the sources of such distortions are identified and their quantitative importance can be gauged, tasks which are extremely difficult to perform. The representative view of the new neoclassical school is that public intervention not only fails to correct market distortions, but also would exacerbate the problem. In short, government failures are worse than market failures [Bauer, (1984), Lal, (1985)]. Moreover, public intervention would create breeding grounds for rent-seeking activities or "directly unproductive profit-seeking" activities in Bhagwati's terms [Bhagwati, (1982)]. Namely, seeking government favours and competition for government contracts and other largesse will distort normal economic activity, which will lead to the suboptimal allocation of resources.

² For a more complete discussion on the subject, see, Dani Rodrik (1992).

The crux of the issue surrounding the controversy on the State versus the market between traditional development economists and neoclassical followers seems to lie in the ability of the State to "get things right" and bring about structural change by intervention. The neoclassical critique shows profound distrust in active public policy to correct market failures, while development economists have implicitly assumed the unlimited capacity of the State to direct the development process. In many cases, development economists correctly pinpointed the causes of underdevelopment, but contributed little in the way of explaining how, when and where to intervene, or developing a coherent theory of policy intervention valid for diverse economic and social conditions.

Empirical evidence on the relationship between active State intervention and economic development is not conclusive. On one hand, there are a few economies like that of Hong Kong which has thrived on the relatively *laissez-faire* free markets and free trade regimes. On the other hand, there are a number of success stories as well as failures associated with active State intervention in the economy. Today few doubt that many of the successful East and South-East Asian industrialized countries and areas such as Japan, the Republic of Korea, Taiwan Province and most of the ASEAN countries were strongly interventionist. In particular, in the early stages of industrialization in the 1960s and 1970s, the Republic of Korea heavily supported export industries through export subsidies and other financial incentives, while shielding these industries from foreign competition in the domestic markets where their products were allowed to be sold at prices higher than world market prices. In fact, Amsden (1989) argues that the relative prices were manipulated on purpose to shift resources to the key targeted sectors. This is a direct contradiction of the principle of "getting prices right".

The scope for intervention seems to depend on the stages of industrialization at which a given economy finds itself. Based on his study of European industrialization, Gerschenkron argued long ago that the nature and extent of State intervention would change at different stages of industrialization. At the initial stage, where there are no functioning markets, the State has to engage in pump-priming to mobilize resources to create an enabling environment for the smooth functioning of market systems [Gerschenkron, (1962)]. On the other hand, as the economy advances along the trajectory of industrialization, and its structure becomes more complex and sophisticated, the task of selective policy intervention aimed at specific sectors becomes increasingly difficult to implement without unforeseen distortions in other sectors. In the advanced stages of industrialization, the role of the State will be highly restricted to establishing and maintaining a competitive environment for private enterprise, and the resource allocation will be primarily guided by price signals and market incentives.

One important intervention at the initial stage of industrialization is public investment in infrastructure for transport, communication and utilities, and institution-building for the development of an indigenous business class, educational and

legal systems and financial and capital markets. Infrastructure and institution-building would be a precondition for building the industrial supply capacity. A correct price signal alone may not be sufficient to induce and enhance industrial supply capacity without adequate physical and social infrastructure and institutions. In this regard, it must be emphasized that public investment should be viewed as complementary to private investment, since the availability of adequate infrastructure services may be a necessary condition for inducing private capital investment, whereas public investment may "crowd out" private capital and raise interest rates in industrialized countries with well-developed infrastructure and other supporting systems.

State intervention is obviously not a panacea for extricating the economy from the vicious circle of underdevelopment. As correctly pointed out by the neoclassical school, there are many historical cases where bad government prescriptions have proven to worsen the disease that they attempted to cure. Yet, there are also a number of success stories of active government intervention in the development process, particularly in East Asia.³ The question is not whether State intervention *per se* is good or bad, but what matters is the nature and quality of intervention. In the final analysis, there is no better alternative to the free market and free trade to stimulate and sustain industrialization and economic growth. As emphasized earlier, "getting prices right" alone is not enough to set in motion the market forces in many developing countries. Many structural and institutional barriers or market failures have to be removed before free market principles could be applied. Perhaps, the State alone may be a sole economic agent to carry out the task of laying down the foundation for working of capitalism in the early stages of industrialization. However, the outcome of such intervention will depend critically not only on the strong political commitment to reforms, but also on the objective of intervention, for instance, the development of an inward-or outward-oriented economy, and above all on the capability of the State to initiate and guide structural transformation leading to the functioning of free markets. In the past, active policy interventions in most East Asian countries were targeted at the creation of competitive export industries and an outward-oriented economy after the initial phase of import substitution. This process was considerably facilitated by the political flexibility to change and the development of efficient government machinery which is capable of overriding the pressure of vested interest groups and of disciplining various economic actors of implement technocratic policies. In many other developing countries, State intervention was equally active, but failed often by misdirecting efforts at an unsustainable strategy such as inward-looking industrialization compounded by the problem of relatively weak government capacity and lack of political commitment to pursue a coherent policy.

³ For a recent comparative study on pervasive government intervention in five Asian countries, Republic of Korea, Singapore, Malaysia, Thailand and Indonesia, see Yuen, N.H., S. Sudo and D. Crone (1992).

III. Trade Regime and Industrialization

It is evident from the foregoing discussion that the nature and extent of State intervention should differ substantially, depending on the kind of industrial strategy and trade regime adopted. For instance, an ISI strategy by nature relies on market restriction to protect domestic industries from external competition, and hence the nature of State intervention has an anti-export bias. On the other hand, EOI may require the kind of State intervention that facilitates the transformation of protected domestic industries into competitive export industries. Therefore, incentive structures and implications for rent-seeking activities of special interest groups are likely to differ markedly for both strategies.

The paradigm of the day is undoubtedly EOI strategy. It must be noted, however, that export promotion usually means manufactured exports, excluding exports of primary products. It is well known that raw materials exports could not provide a viable growth strategy, because of low price and income elasticities of demand for primary goods relative to manufactured goods. Commodity exports may not only be subject to a frequent boom-bust cycle characterized by violent price fluctuations, but also their export revenues may fall short of manufactured import bills in the long run. Worse yet, any productivity increase in raw materials would depress world commodity prices instead of generating income and employment gains in the producer country.⁴ This study is mainly concerned with manufactured exports, and hence exports hereafter refer to manufactured exports rather than exports in general, unless otherwise specified.

In recent years, attention has been increasingly focused on the link between exports and industrialization in the light of recent export-led success stories in East Asia. The favourable effects of EOI strategy are numerous and discussed extensively in the literature. They include, among other things, promoting efficient resource allocation, exploiting economies of scale, removing foreign exchange constraints, stimulating competition, generating production externalities (such as the creation of new skills and technological upgrading), facilitating technology transfer, limiting the use of quantitative restrictions, removing the distortions of economic incentives caused by such restrictions, and above all, faster productivity growth.

It seems, however, that the link between exports and productivity is central to the EOI strategy. Manufactured exports may increase industrial productivity from three possible sources. The first source is productivity gains resulting from improved resource allocation. Exports and foreign competition could force a resource

⁴ This is part of the so-called Singer-Prebisch thesis, which argues that primary product-exporting developing countries have been experiencing a systematic deterioration in their terms of trade, and have had to export increasing amounts of primary products to import the same amount of manufactured goods from developed countries. This was considered to be one of the major causes for economic stagnation in developing countries [see, Prebisch (1950) and Singer (1950)].

transfer from less productive sectors to more productive ones. The second source of industrial productivity growth consists in an improvement in technical efficiency, involving a potential output increase for the same inputs. The third source of industrial productivity increase linked to manufactured exports is through lifting scale efficiency, that is, a potential efficiency gain in production resulting not only from greater capacity utilization in industries where the minimum efficiency size is large relative to the domestic market, but also from moving the optimum scale itself from one level to another as exports expand.

Empirical evidence seems to suggest that industrial performance is likely to be affected by trade more through allocative efficiency than through technical efficiency, particularly at the early stages of an export orientation [Bergsman, (1974), Leibensheim, (1966)]. However, as a country advances along the path of EOI strategy, the potential efficiency gain from reallocating disequilibrium factor markets will rapidly diminish, and any further gain in real income has to come from improved technical efficiency or total factor productivity growth, as in the case of the East Asian countries. In short, export-led industrial growth from better allocation of resources may be limited to its early stages of export orientation, and further sustained growth must be driven by productivity growth or improved technical efficiency. However, empirical evidence is not conclusive on whether export orientation would generate greater productivity growth than import substitution [Pack, (1992)].

The process of trade-induced technical change in the manufacturing sector is not well understood and a better understanding of the process is often hindered by the concept of a mythical representative firm, as described in traditional economy theory. In reality, efficient and innovative firms are distributed unevenly across all industries, and the distribution of such firms will determine the technical efficiency of the industry in question, and not vice versa. In this regard, it has been suggested that an export orientation may facilitate the exit of inefficient firms and the growth of efficient firms through exposure to external competition, which will lead to improvements in the general level of technical efficiency and reductions in the across-the-firms dispersion in technical efficiency, but the patterns of exit and entry of firms are not clearly associated with trade orientation [Tybout, (1992)]. Ultimately, industrial productivity and not trade *per se* will serve as an engine of growth in the long run, and how trade will affect industrial productivity beyond the initial stimulating effects of resource reallocation is not yet well understood.

It is widely accepted that certain preconditions need to be established before launching an EOI strategy. Above all, export supply capabilities could be built up by providing a period of protection for so-called "infant industries" in the domestic market. Almost every successful exporter started with import substitution of light consumer goods. The rationale for the infant industry argument is that the period of protection is provided to increase technical efficiency and improve the competitive edge in the world market. It is based on the premise that it is worth taking the risk

of "getting prices wrong" through tariffs, other protections, and domestic price controls temporarily in order to reap the dynamic benefits of the production externalities associated with economies of scale, learning-by-doing, and other elements of productivity growth. The key element in the infant industry argument is a relatively quick transition of protected industries producing for the domestic market to exports, supported by the political will to phase out protection for laggards, once production externalities and learning-by-doing potentials are exhausted or substantially reduced. Otherwise, the strategy of infant industry protection is doomed to failure through perpetuating the production inefficiency of protected industries. The cost of protracted protection could be indeed considerable in terms of artificially high profits maintained for the protected firms, higher costs of local inputs induced by the higher costs of imported inputs, and higher production costs associated with a lower scale of production for small domestic markets, apart from social and political implications of encouraging unproductive rent-seeking activities.

The Republic of Korea is often cited as a successful example of selective protection and promotion of infant industries and subsequent rapid transformation of these industries to export capabilities with interventionist tariffs and export subsidies. Such a transformation in the Republic of Korea in a relatively short period of time was possible because of the existence of a skilled labour force and rapid capital accumulation embodying the leading edge of world technology, and most important of all, the capacity of the State to discipline and lead the private sector toward export promotion. The experience of the Republic of Korea may not provide a good model for other countries, if the competent stewardship of government over the private sector does not exist. However, it points among other factors to the crucial importance of the dedication and commitment of the State to economic development and its capacity to guide structural transformation from protected ISI strategy to a more open EOI strategy at the initial stages of industrialization. In particular, it seems essential to have a better understanding of the political economy of protection and the administrative capacity to design and implement export-targeted policy interventions.

It is argued that trade-related reforms and particularly import liberalization are necessary conditions for export promotion, because producers will not be induced to compete in foreign markets while protected domestic markets offer them assured profits. There is no empirical support for this argument. In Sierra Leone and many other African countries import liberalization was introduced in the 1980s, but abandoned soon after a surge of imports for which foreign finance could not be found [UNCTAD, (1989)]. This is a typical problem encountered when a small undiversified economy with a small manufacturing base liberalized trade. What is needed most before undertaking trade-related reforms at the early stages of industrialization is the build-up of supply capability. The conventional wisdom is that import substitution precedes export promotion to develop supply capability, which

underpins strong growth of manufactured exports in the long run. In fact, it may be logical to introduce import liberalization only after domestic supply capability is sufficiently developed and a successful export drive is launched. Perhaps the deliberate managed pace of import liberalization in step with the export drive as opposed to a so-called big-bang approach to trade liberalization may warrant serious consideration. Well after an export base is firmly anchored, managed trade liberalization may be achieved through a combination of time-phased relaxation of import controls, selective opening of domestic markets for foreign suppliers, rationalizing the tariff structure, establishing a realistic exchange rate, more transparent effective protection via tariffs rather than quantitative restrictions etc. In this manner, a foreign exchange squeeze could be avoided by the use of growing export revenues to pay for the increasing imported inputs needed for the export drive.

On the other hand, the big-bang approach to trade reform may establish the overall credibility of the reform programme and lay the foundations for sustained growth at the early stages of development. However, the success of such a radical approach may depend not only on the political commitment to undertake drastic reforms, but also on the ability of the bureaucracy to formulate and implement the reform programme as well as the availability of an adequate industrial supply capability. For most developing countries with relatively narrow manufacturing base, the radical approach may run the risk of severe balance-of-payment deficits and macroeconomic problems such as hyperinflation due to a limited domestic supply capability. The export responses of an economy with a limited manufacturing capacity to real exchange rate changes would obviously be almost nil.

The first necessary step in the EOI strategy appears to be the development of export supply capabilities even before considering trade reform. Price signals such as realistic exchange rates favouring production for export are necessary but insufficient for building an export base. The basic conditions for rapid industrialization must be laid down first. They include many interrelated factors which are not directly related to trade and precede the design of a policy framework for export promotion. For instance, the basic physical infrastructure – transport, communication, water, gas, electricity, etc., – is essential for manufacturing. On the intangible side, human capital accumulation and skill development through education and training along with the development of an entrepreneurial class are equally, if not, more important. Closely related to human capital development is a concomitant development and continuous upgrading of technological absorptive capacity to assimilate the latest technology, and product design capacity through institution-building for science and technology. Institution-building should also include a key element of development, namely the development of efficient public administration along with a corps of competent technocrats.

The initial task of building human capital, physical infrastructure, and economic and social institutions, often from scratch as in the case of many African developing countries, is undoubtedly a daunting and time-consuming process. The develop-

ment of social overheads, institutions and human resources is precisely the area where market failures exist, and efficient State intervention rather than non-intervention may be called for. However, a large number of developing countries and particularly those at the initial stages of industrialization may lack the administrative capacity to mobilize resources and direct human and physical capital formation and institution-building to underpin a manufacturing capacity, and at the same time create an enabling environment for a well-functioning price mechanism.

A partial solution to this problem may be the development of manufacturing industry through FDI. The increasing importance of FDI vis-a-vis trade has been already underscored earlier. FDI could bring with it not only necessary technical know-how along with foreign capital and inputs, but also export marketing capability. Unlike primary commodities, manufactured exports depend not only on price competitiveness and world-standard product quality, but also the ability to seek potential export markets, and to design and target the product for such markets. FDI may facilitate the process of export market penetration as well as initial import substitution for domestic markets.

Leaving aside the problem of providing adequate financial and fiscal incentive packages, many developing countries may find it difficult to attract FDI, unless adequate infrastructure is already put in place and a reasonably skilled cheap labour force is readily available. The analysis thus goes back to the starting-point, namely the crucial importance of human capital formation and infrastructure building. However, an additional critical factor for inducing FDI, which is often left out of the analysis, is the lack of a legal system protecting ownership rights, enforcing contractual obligations, granting recourse against abuses, and guaranteeing the repatriation of profits. The absence of a legal framework required to establish sound business conditions is today a major stumbling-block deterring foreign investments in the new States that emerged from the former USSR, despite the availability of a skilled labour force and basic infrastructure.

It must be cautioned, however, that FDI is not a panacea for rapid industrialization. Foreign firms do bring in with themselves skills, capital, technology and marketing capability, but they cannot by themselves override the more dominant effects of macroeconomic and microeconomic mismanagement. Moreover, given the potential shortcomings of foreign ownership (such as exploitation, causing pollution and many other types of behaviour contrary to the interests of a host country), the benefits of an alternative to FDI should also be assessed. For instance, foreign capital and inputs could be imported through loans, technology acquired through licenses and marketing capability built through marketing consultancy, while avoiding FDI and foreign ownership, as was done by Japan from 1950 to 1970.

Once the conditions for industrial supply capability are established through skill development, social and economic infrastructure, and macroeconomic stabilization as appropriate, export promotion measures could be carefully selected and machinery for implementing them be developed. Among many export incentive schemes

are preferential export financing, fiscal and investment incentives, export processing zones, bonded warehouses and factories, duty drawbacks and tax rebates on imported inputs, new export credit, pre-shipment financing, export credit guarantees, establishment of an export-import bank etc. Meanwhile, protection measures designed for initial import substitution and particularly for infant industries should be streamlined and rationalized. Preferably, quantitative restrictions should be replaced by tariffs, since quantitative restrictions supplant the price mechanism, and yield an economic rent to the winner of an import quota or license, thus further encouraging rent-seeking activities and possible corruption, while tariffs are transparent and revenues go to the Government. However, it takes more than the transparency and rationalization of the structure of trade incentives to build an export base. What is needed here is the stability and predictability of incentive schemes over time, with *ad hoc* measures and frequent amendments kept to a minimum. A stable and predictable policy environment is required to elicit individual responses to trade incentives. As discussed earlier, once export competitiveness is established, most incentive schemes could be dismantled.

It seems apparent from the foregoing discussion that a proper sequencing of various policy reforms is critically important to the EOI strategy. At the risk of oversimplification, the following reform sequence may be suggested. First of all, apart from the crucial importance of basic infrastructure, the overall manufacturing production capacity must be developed before building up export supply capabilities. It is based on the hypothesis that industrial supply capacity would lead to the export capability and not vice versa. If this is the case, at the early stages of industrialization, the role of manufactured exports as an instrument to accelerate industrialization becomes less important than non-trade policy measures such as selective industrial targeting and encouragement of infant industries, those designed to strengthen intersectoral linkages between manufacturing and agriculture, and between manufacturing and services, backward and forward linkages within the manufacturing sector, rural industrialization etc. Export supply capabilities should be built up after a reasonably broad industrial base is developed. At this juncture, macroeconomic stability may be necessary to create a favourable macroeconomic environment for rapid industrial growth. Therefore, macroeconomic stabilization should precede structural reforms including trade reforms. Moreover, import liberalization should be introduced well after the upsurge of exports. Finally, the liberalization of capital markets should come after trade reforms in order to gain some degree of control of an international capital flow, which is essential to an orderly transition to an export-oriented economy and stability in financial and capital markets.

It is true that each export success story, particularly in East Asian countries, has more to do with unique country experiences than general characteristics of trade and industrial policies and reforms, and hence may not provide lessons for other developing countries. Nevertheless, it seems reasonable to deduce and generalize a

different set of optimal policies for each stage of industrialization from a broad spectrum of country experiences of both success and failure. At the embryonic stage of industrialization, the State could speed up the growth process through direct resource allocation and other selective interventions as long as it uses market prices as a planning guide. As an economy grows and becomes more complex, it should be guided increasingly by market forces, and the role of government should be reduced to infrastructure and institution-building. Once a firm manufacturing base is developed, the State could help the private sector to build a beachhead for manufactured exports, initially by tariffs, export subsidies, and other export promotion schemes and then replace them with competitive real exchange rate mechanisms once the foothold for manufactured exports is firmly established.

IV. The Republic of Korea Experience

The Republic of Korea is a well-known success story of export-led industrialization steered by active State intervention. Emerging from the initial period of easy import substitution which lasted for the end of the Korean War to 1960, the Republic of Korea reached a turning-point in its industrialization drive in 1963 when the first five-year economic development programme (1962-1966) was launched with a clear shift to an export-oriented strategy. The first plan emphasized the expansion of light manufactured goods and their exports. The second programme (1967-1971) was an extension of the first programme and stressed further consolidation of economic growth and export expansion achieved in the first period. It was in the third programme (1972-1976) that heavy and chemical industries were fostered in order to broaden the country's industrial base and to upgrade its international competitiveness. The gain made in the third programme was further consolidated in the fourth programme (1977-1981) as manifested in the sophistication of industrial structure, expansion of capital and intermediate goods industries, and institution-building for science and technology. However, emphasis was shifted to macroeconomic stabilization in the fifth programme (1982-1986) because of various macroeconomic disequilibria caused by rapid growth in the previous periods such as price instability and worsening income distribution.

A general overall picture emerging from a series of these five-year development programmes is a shift in policy emphasis from exports of light manufacturing in the 1960s to the development of heavy industries (mainly iron and steel) and capital goods industries (particularly transport equipment) in the 1970s, and the consolidation of export capabilities of these industries and upgrading of industrial structure along with economic stabilization and trade liberalization in the 1980s.⁵

⁵ For a detailed account of industrial policy in the post-Korean war period, see K.S. Kim (1985) and S.J. Kim (1993).

During the period 1975-1985, export-led growth had brought about a phenomenal structural change in the Republic of Korea. Real GDP grew 2.7 times between 1975 and 1985 at an annual growth rate of 10 per cent. The share of agriculture in total output declined sharply from 13.6 per cent in 1975 to 7.7 per cent in 1985, while the manufacturing share increased from 44 per cent to 50 per cent during the same period. The service share was slightly down from 33 per cent in 1975 to 31 per cent in 1985. Particularly notable is structural change within the manufacturing sector. The production of capital goods increased rapidly at an annual rate of nearly 19 per cent with its share of total output rising sharply from 5.7 per cent in 1975 to 12 per cent in 1985. By contrast, light manufacturing grew at an annual rate of around 8 per cent and its share of total output dropped considerably from 20 to 16 per cent between 1975 and 1985. The intermediate goods industry also grew fast at the rate of 12 per cent per year, with its output share increasing from 18 per cent to almost 22 per cent during the same period (Table 1).

During the period, manufactured exports, whose share in total exports increased from 72 per cent to 77.5 per cent between 1975 and 1985, grew by about 13 per cent per year during the period. Manufacturing exports increased by almost 3.5 times from 6,245 billion won in 1975 to 21,481 billion won in 1985 (Table 2). The most striking change in trade occurred again in the capital goods industry. Capital goods exports jumped six-fold from 1,364 billion won to 8,149 billion won between 1975 and 1985. This increase represents an impressive real annual growth rate of almost 20 per cent with its share of total exports steeply rising from 16 per cent in 1975 to 30 per cent in 1985. It seems evident that the cumulative effects of active policy interventions for export promotion since the 1960s as manifested in a series of five-year programmes were reflected in the rapid economic growth and structural transformation of Korea's economy. Such export-led transformation was possible due to existence of skilled labour force and rapid capital accumulation embodying the world frontier technology, and most important of all, the political commitment to development coupled with the capacity of the state to discipline and lead the private sector toward export promotion. The Korean experience may not provide a good model for other developing countries, if the competent stewardship of the government over the private sector does not exist. However, it underscores among other factors the crucial importance of the dedication and commitment of the State to economic development and its bureaucratic capacity to guide structural transformation from protected import substitution strategy to more open export-oriented strategy at the initial stages of industrialization.

At this juncture, it is interesting to note a close historical parallel between Japan and the Republic of Korea in the pattern of industrialization and particularly in the evolution of industrial policy. Shifting away from light manufactured exports such as textile, the Ministry of International Trade and Industry (MITI) targeted a number of industries for rapid development in the 1950s and 1960s. The targeted industries include iron and steel, automobiles, ship building and machine tools. In particular,

TABLE 1
Structural Change in the Republic of Korea, 1975-1985
(1985 constant prices)

	1975		1980		1985		Annual Growth Rates		
	Production (billion won)	Percentage	Production (billion won)	Percentage	Production (billion won)	Percentage	1975-80	1980-85	1975-85
1. Agriculture, Forestry, and Fisheries	9,702.0	13.6	11,410.7	8.9	14,643.3	7.7	3.3	5.1	4.2
2. Mining and Quarrying	938.5	1.3	1,145.5	0.9	1,353.5	0.7	14.3	11.8	11.5
3. Manufacturing,	31,525.7	44.2	62,089.8	48.5	95,300.3	50.0	14.5	8.9	11.7
Light Manufacturing ¹	14,308.8	20.1	24,261.8	19.0	31,262.2	16.4	11.1	5.2	8.1
Industrial Materials ²	13,119.5	18.4	27,572.7	21.5	41,243.2	21.6	16.0	8.4	12.1
Capital Goods ³	4,097.4	5.7	10,255.3	8.0	22,794.9	12.0	20.1	17.3	18.7
4. Electricity, Water & Gas	1,299.9	1.8	2,559.9	2.0	4,459.4	2.3	14.5	11.7	13.1
5. Construction	4,237.2	5.9	9,422.6	7.4	15,462.5	8.1	17.4	10.4	13.8
6. Services	23,625.6	33.2	41,374.9	32.3	59,445.1	31.2	11.9	7.5	9.7
Total	71,328.9	100.0	128,023.4	100.0	190,664.2	100.0	12.4	8.3	10.3

Source : Bank of Korea, 1975-1980-1985 Link Input-Output Tables, Seoul, Korea, 1989.

¹ Food, beverage and tobacco; textile and leather.

² Lumber and wood products; paper, printing and publishing; chemicals and chemical products; primary metals; non-metallic minerals.

³ Fabricated metals; electrical and non-electrical machineries; transport equipment; scientific instruments.

TABLE 2
Structure of Exports, 1975-1985

	1975		1980		1985		Annual Growth Rates		
	Exports (billion won)	Percentage	Exports (billion won)	Percentage	Exports (billion won)	Percentage	1975-80	1980-85	1975-85
1. Agriculture, Forestry, and Fisheries	625.3	7.2	615.7	3.6	554.3	2.0	-0.3	-2.1	-1.2
2. Mining and Quarrying	69.5	0.8	51.3	0.3	27.7	0.1	-5.9	-11.6	-8.8
3. Manufacturing, Light Manufacturing ¹	6,244.8	71.9	12,655.4	74.0	21,480.7	77.5	15.2	11.2	13.1
Industrial Materials ²	2,874.9	33.1	4,668.8	27.3	6,513.5	23.5	10.2	6.9	8.5
Capital Goods ³	2,006.3	23.1	4,224.2	24.7	6,818.4	24.6	16.1	10.0	13.0
4. Electricity, Water, & Gas Construction	1,363.6	15.7	3,762.4	22.0	8,148.8	29.4	22.5	16.7	19.6
5. Services	26.1	0.3	51.3	0.3	194.0	0.7	14.5	30.5	22.2
	1,719.7	19.8	3,728.2	21.8	5,432.5	19.6	16.7	7.8	12.2
Total	8,685.4	100.0	17,101.9	100.0	27,717.0	100.0	14.5	10.1	12.3

Source: See, Table 1.

iron and steel was designated as a strategic sector under the "Five Year Plan for Economic Self-Reliance", and the "New Long-Term Economic Plan" in the second half of the 1950s, and automobiles under the "National Income Doubling Plan" during the second half of the 1960s. In the 1970s MITI shifted the focus of industrial policy to high-technology industries such as computers, semi-conductors, industrial robots, and new materials.⁶ The growth of these industries was generally fostered under various protective measures such as import controls, restriction of foreign investment in targeted industries, preferential treatment of selected industries in importing foreign technology, and various fiscal and financial supports.

The list of industries favoured by the Government of the Republic of Korea as a strategic sector is also strikingly similar to that of Japan, whether by design or by coincidence, namely, automobiles, shipbuilding, machine tools, iron and steel, and semi-conductor. Today, both Japan and the Republic of Korea enjoy a high degree of international competitiveness in these sectors. It must be noted, however, that in both countries, the State intervention in the development of these key industries was largely facilitated by a favourable macroeconomic environment characterized by high domestic savings, stable prices, favourable conditions for technological change, and above all, a highly skilled labour force.

V. Concluding Remarks

One of the major conclusions of this paper is that the nature, extent and objectives of industrial and trade policies and consequent implications for State intervention in the economies of developing countries may change over time. Perhaps the succession of policy changes over time could be viewed as an evolutionary process towards a completely functioning free market. This further implies that there exist no optimal industrial and trade policies for all developing countries. There are different optimal policies for different groups of developing countries at different stages of industrialization. Stated differently, the initial conditions of a given country may dictate to a large extent the kind of optimal policies needed and the nature and scope of State intervention required to implement them.

At the initial stages of industrialization, where there are no functioning markets, State intervention may be quite extensive, undertaking public investment in infrastructure and institution building and forcing industrialization, given the inability of the private sector to mobilize financial resources and undertake huge investment projects. At the early stages, building manufacturing supply capacity is the primary focus of industrialization, and trade policies and particularly trade liberalization become relevant only after the basic supply capacity is firmly in place and a strong base for manufactured exports is developed. On the other hand, as the economy

⁶ For further details, see Francks (1992).

advances along the trajectory of industrialization, and its structure becomes more complex and sophisticated, the task of selective policy intervention aimed at specific sectors becomes increasingly difficult to implement without unforeseen distortions in other sectors. At the advanced stages of industrialization, the role of the State will be highly restricted to maintaining a competitive environment for private enterprises, and resource allocation will be primarily guided by price signals and market incentives.

The Korean economy is a case in point. As described earlier, at the early stages of industrialization in the 1960s and 1970s, the Republic of Korea Government heavily intervened to force export-led industrialization as manifested in a series of five-year economic development programmes implemented since the early 1960s. Today, in sharp contrast, there are already visible signs of a policy shift towards the diminished role of the State and the greater reliance on market mechanisms in the Korean economy. For instance, the next Five-Year Plan for "The New Economy" (1993-1998) which was launched on 2 July 1993 was aimed at deregulating fiscal, financial and administrative systems, and accelerating the liberalization of trade and investment.⁷ Evidently, the Korean economy has outgrown the nurture by the State.

Perhaps the East Asian export success story based on the selective interventionist approach may be historically a unique experience, and hence may not be replicable in other developing countries. As discussed earlier, the central question is not whether the State intervention *per se* is good or bad, but what matters is the nature and quality of intervention. The outcome of intervention will not only depend on the objective of intervention, for instance, inward or outward-oriented industrialization, but also the capability of the State to initiate and guide structural transformation leading to the functioning of free markets. The State could plan an important role in such an economic transformation. After all, it takes an efficient and competent bureaucratic machinery to get certain basic things right in the early stages of industrialization such as price stability, a transparent legal framework, promoting domestic and international competition, investment in education, etc. In this regard, one of the key variables which are often overlooked in the study of industrialization is a strong political commitment to industrialization and the bureaucratic capacity to implement well-conceived industrial policies. The subject matter may merit further research.

Finally, it should be noted that many industrialized countries today are pursuing a variant of industrial policy, the so-called strategic technology and trade policies to enhance their national competitiveness in manufacturing. Such policies entail, among other things, a range of government interventions with a view to assisting firms in developing and adapting new technologies for commercial applications. In most cases, high technology industries are targeted for such pro-active innovation

⁷For further details on the new Five-Year Plan of the Republic of Korea, see, Yi (1993).

and technology policies. The new trade theory as opposed to the traditional trade theory based on comparative advantage provides the basic rationale for pro-active government intervention. In contrast to traditional trade theories focused on the pattern of trade determined by countries' relative factor endowments (comparative advantage), the new theories attempt to explain the pattern of trade in terms of trade among countries with similar factor endowments and the dominance of intra-industry trade in similar products instead of trade in different products among countries with different factor endowments. Theoretical justifications for government interventions are derived from the theories of imperfect competition, dynamic scale economies and positive externalities which accompany research and development, and high technology industry. It is further argued that in such a world, competitive advantage can be created by a wide range of government intervention such as government support for research and development, targeting knowledge- and technology-intensive industries for support, access to intellectual property, the modification of competition rules to permit national firms to gain a dominant position, restrictions on foreign investments in strategic sectors, restrictions on the exports of technology-intensive goods and services, etc. Whatever theoretical and empirical validity of the strategic technology and trade policies might be, the simple fact is that these policies which are actively pursued in many industrialized countries call for pro-active State intervention, and hence they are not basically different from industrial policy pursued in developing countries.

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