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The East Asian Miracle: Growth Because of Government Intervention and Protectionism or in Spite of It?

By Reuven Glick and Ramon Moreno*

East Asia's growth performance highlights the benefits of pursuing an outward-oriented trade strategy. This paper discusses the nature of the development policies followed by economies in the region and the lessons for other emerging countries. While these policies in some cases did involve government intervention and protectionism, East Asia's success is more attributable to "neutral" export promotion and a "market friendly" approach encouraging industries that could most successfully compete in world markets.

EAST ASIA has been the fastest growing area in the world for the past three decades. The economies of Japan and the Newly Industrializing Economies (NIEs) of Hong Kong, Singapore, Korea, and Taiwan have been hailed as models of achievement for other emerging economies. Many factors have been identified as the cause of East Asia's relative success – outward orientation, high saving and investment rates, macroeconomic discipline, and other good public policies – although the relative weight of each in explaining the region's success is still a matter of considerable debate (World Bank, 1993; Rodrik, 1996). However, no matter how the relative weights are assigned, the experience of East Asia, supported by recent research on growth, has convinced many observers that an outward-looking development strategy, particularly a dynamic export sector, is conducive to growth.

East Asian economies did not adopt greater outward orientation according to a common model or blueprint. In fact, only Hong Kong and Singapore have adopted totally free trade policies, with virtually no tariff or nontariff barriers. To varying degrees, the other NIEs and countries in the region adopted interventionist although "market friendly" policies, involving some use of export promotion, selective import barriers, and industrial policies. These interventionist aspects of trade policy in East Asia have had great appeal to a number of more recently emerging economies. How essential were these interventionist elements to East Asia's growth success? Did countries in the region grow despite this policy? Can this approach be replicated by other countries, particularly in the current international environment?

This paper discusses why greater openness can be conducive to growth. It also discusses the nature of the trade policies followed by Asian countries and the extent to which the interventionist approach helped foster growth. Lastly, it discusses the lessons of the East Asian experience for other developing countries.

GROWTH, OPENNESS, AND TRADE POLICIES

Most economists and policymakers appear to agree that policies promoting openness to international trade are most likely to be conducive to growth. This consensus has in part been shaped by the sharply contrasting experiences of East Asia and Latin America. In both regions, high tariff and nontariff barriers were used to promote industrialization and growth in the period following World War II by the substitution of domestically produced goods for imported goods. However, the more advanced East Asian countries abandoned a pure import-substitution strategy in the 1950s and 1960s in favor of policies promoting openness, whereas similar efforts by a number of Latin American countries in the 1960s and 1970s were not sustained.[1]

The implications of the differences in growth strategies are apparent from a comparison of economic

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[1] See footnotes at end of text.

performance in the four East Asian NIEs (Korea, Hong Kong, Singapore, and Taiwan) with that of four major Latin American economies (Argentina, Brazil, Chile, and Mexico). Between 1965 and 1993, real GDP in the East Asian economies grew at an average annual rate of nearly 9 percent, more than twice as fast as their Latin American counterparts. The effects of differing growth performance have been profound. In 1965, real income per capita (in 1985 dollars) averaged about $2,000 in East Asia, considerably less than the average of $3,400 in Latin America. By 1992, income per capita in the four East Asian NIEs averaged $11,100, about twice as high as in the Latin American economies.

The more rapid growth in East Asian economies can be associated with much greater openness. As can be seen in Table 1, both exports and imports grew about twice as fast in East Asian economies as they did in Latin America, a discrepancy similar to that of the relative GDP growth in the two regions. In addition, East Asian economies have maintained much higher ratios of exports and imports to GDP than have the Latin American economies.[2]

Table 1
Indicators of Openness
(in percent)

	Real Export Growth*	Real Import Growth*	Exports/GDP 1965	Exports/GDP 1990	Imports/GDP 1965	Imports/GDP 1990
Japan	8.7	6.7	10	9	9	7
Korea	18.1	15.6	5	26	13	28
Hong Kong	12.1	12.2	46	114	64	114
Singapore	12.0	11.5	99	153	125	177
Taiwan	14.3	13.2	19	41	22	32
Average	14.1	13.1	50	84	67	88
Argentina	4.4	4.4	6	12	5	4
Brazil	8.7	7.4	7	8	5	5
Chile	7.4	5.6	12	21	13	27
Mexico	6.6	7.1	6	16	7	19
Average	6.8	6.1	8	13	8	14

* 1964-93, annual rate

How do policies favoring greater openness and international trade lead to better growth performance?

1. International trade can contribute to growth by creating a channel for the diffusion of technological and managerial know-how. On the import side, producers in less advanced countries may learn from training by more advanced foreign suppliers and from the innovations embodied in imported goods. On the export side, producers may learn from foreign buyers about how to meet international market standards through the use of more advanced technology.[3] Technology diffusion through such channels is a key source of growth in modern models of growth (for example, see Barro and Sala-i-Martin, 1995).
2. Outward-oriented policies create an incentive for domestic firms to compete in world markets, rather than produce for a protected domestic market. Unsheltered by trade barriers, domestic firms have an incentive to become efficient and to innovate, contributing to growth.
3. International trade may promote growth by providing access to larger markets. In economies with imperfectly competitive markets and increasing returns to scale in production, a country's ability to grow can depend on its ability to sell to a large market. If the domestic market is so small that a single sector cannot make a profit from investing, growth can be achieved if there is a leading sector, such as the export sector, which creates a sufficiently large market.

These theoretical arguments are supported by a large empirical literature suggesting that openness (typically measured by the ratio of exports plus imports to GDP) is associated with faster growth. Some have questioned this interpretation, arguing that it may be rapid growth that is causing a large trade to GDP ratio, rather than the reverse. However, even in studies that control econometrically for any reverse causation through the use of instrumental variables, trade has a quantitatively large and significantly positive effect on income (Frankel and Romer, 1996).

Given the evident merits of more open economies, how can openness best be achieved? There are generally two different approaches to liberalizing trade and achieving greater openness. One approach is to move towards free trade by dismantling the import substitution policies initiated previously. This includes measures reducing import tariffs and quotas, as well as dismantling other measures protecting domestic industries, and lessening the degree of overvaluation of the domestic currency. In fact, the successive rounds of multilateral trade negotiations under the auspices of the General Agreement on Tariffs and Trade (GATT) since World War II have sought freer trade among both industrial and developing economies.

An alternative trade strategy is to leave some existing import barriers in place, but to add policies promoting exports in order to overcome, at least in part, the bias against exports created by an import substitution regime. A "neutral" export promotion policy counterbalances the incentives to produce for the domestic market created by import barriers with offsetting incentives to produce goods for export. Often this strategy is accompanied by efforts to maintain the exchange rate at levels that do not penalize exporters by overvaluing the domestic currency and avoid any excess demand for foreign exchange requiring exchange controls.

With perfectly competitive conditions, a free trade liberalization strategy is theoretically superior to an export promotion plan, as import restrictions are likely to create distortions that are not easily remedied by export subsidies. There are also deadweight costs as well as potential adverse incentive effects (including the potential for corruption) that may be associated with the administration of trade barriers and government subsidies.

However, government intervention can, at least in theory, be justified in models with imperfect competition. For example, a protectionist or "strategic" trade policy may benefit a country if such a policy can shift profits from foreign to domestic producers (Eaton and Grossman, 1992). In "learning-by-doing" models where firms do not take into account the aggregate benefits to society of their own investment (Romer, 1990), government subsidies to remedy the resulting underinvestment can produce a socially preferred outcome. In addition, when significant fixed costs to investment by new firms limit industrialization by keeping markets too small, government spending (for example, on railroads) may create the demand needed to achieve industrialization and correspondingly higher income levels.

In spite of the potential theoretical justification for government intervention in models of imperfect competition, there is little systematic empirical evidence supporting such intervention in practice. The experience of Eastern Europe and most developing countries indicates that government intervention in the economy can in many cases be counterproductive. Has East Asia been an exception?

EAST ASIAN TRADE AND INDUSTRIAL POLICIES

East Asia's accomplishments appear to highlight the benefits of pursuing an outward-oriented trade strategy, and both approaches to openness cited earlier were followed. In Hong Kong and Singapore (after the end of its experimentation with import substitution in the early 1960s), openness was achieved by ending all restrictions on imports and giving free rein to the export sector.

In contrast, Japan, Korea, and Taiwan maintained significant trade barriers during their periods of rapid growth (which ended in the early 1970s in Japan). Japan lowered its tariffs in successive rounds of multilateral trade negotiations under GATT, so that they were in line with those of other OECD countries by the early 1970s. The decline in Korea's and Taiwan's tariff rates was more gradual than in Japan. Korea's nominal tariff rates averaged nearly 40 percent in the mid-60s, 21 percent at the beginning of the 1980s, and around 12 percent at the beginning of the 1990s. The corresponding levels for Taiwan were 35 percent, 31 percent, and 10 percent (Chen and Hou, 1993). Significant nontariff barriers also were maintained, although they too were later reduced. For example, in Korea, 40 percent of import items were either prohibited or restricted in 1973. By 1981, this ratio had fallen, but to a still high 25 percent. Further declines in the 1980s lowered the ratio to 3 percent by 1991 (Nam, 1995). In Taiwan, commodities subject to varying kinds of import restrictions fell from about half of all importables in the mid-1960s to less than 3 percent by the early 1980s.

In Latin America, trade barriers similar to those in East Asian economies created a strong incentive to produce for domestic markets, but with ultimately adverse growth consequences. East Asian economies avoided this by export promotion. Import barriers for certain capital goods or for inputs to the export sector were offset by subsidies or nullified by exemptions allowing duty-free entry. In addition, East Asian economies supported exporters by ensuring access to rationed credit, providing tax breaks, and implementing a number of other preferential measures designed to stimulate export growth. These measures were generally implemented uniformly across sectors, applying to all potential exporters, in order not to discriminate among export activities. Thus policymakers in these countries appear to have been committed to increasing exports generally, with less regard for the specific commodity exported. The net outcome of this mix of policies is that the effective tariff protection rates in a number of manufacturing sectors – reflecting the incentive for firms to target domestic rather than international markets – were "moderate" and at times negative.[4] East Asian policies tended to favor close integration with world markets. This was ultimately reflected in their trade and growth performance.

The other component of the growth policies adopted by East Asian economies, again to varying degrees, was an industrial policy intended to support selected industries – or pick "winners" – by nonneutral subsidies and other measures. The overall emphasis and approach to industrial policies varied from country to country, but Japan and Korea provide examples of how these policies were implemented.

In the early postwar period, Japan targeted five basic industries: steel, shipbuilding, coal, power, and fertilizer. Inputs to these industries could be imported duty free, and firms in these sectors enjoyed accelerated depreciation benefits, preferential loans from government banks and other preferential treatment. In the 1950s, after some significant opposition, the automobile industry was targeted, while computers became the focus in the 1960s (Rapp, 1975). While industrial targeting was scaled back in the 1970s and 1980s, the Japanese government has continued to promote the development of certain sectors (such as high definition TV and advanced computer technologies), with varying degrees of success.

In the late 1960s and early 1970s, the Korean government promoted targeted infant industries, typically by supporting the creation of large-scale enterprises that were accorded temporary monopolies. Notable examples include cement, fertilizer, and petroleum refining in the early 1960s; steel and petrochemicals in the late 1960s and early 1970s; and shipbuilding, other chemicals, capital goods, and durable consumer items in the mid-to-late 1970s. More recently, preferential treatment has been given to more medium- and small-sized firms, particularly in the electronics sector. These industries received preferential access to credit, reduced taxes, and most significantly, protection from foreign competition.

Industrial policies were utilized to some extent in Taiwan and Singapore as well. For example, as Taiwan has gradually lost its comparative advantage in labor-intensive manufacturing, it has provided preferential loans, technological help, and management support to certain "strategic" industries since the early 1980s (Yang, 1993).[5] Since the late 1960s, the Singapore government has invested in state-owned enterprises and provided incentives attracting private investors into certain key sectors, although without an explicit effort to pick individual "winners." From the mid-1970s until the mid-1980s, Singapore also tried to steer production towards more skill-intensive industries by raising wages through administrative guidance.[6]

A number of general features of East Asian export promotion and industrial policies are worth highlighting. First, government support was by and large given to firms according to their success in the market place, particularly world markets. Somehow East Asian policymakers avoided the temptation to direct most resources to subsidize loss-making firms or to benefit well-connected rent-seekers.

Second, all East Asian exporters had fairly uniform incentives for exporting across virtually all industries and activities, with varying degrees of import barriers. These export subsidies were intended to offset the incentives created by existing tariff and nontariff import barriers to produce for protected industries in the domestic market. Some observers argue that export success was linked more to successful efforts to prevent an overvalued exchange rate than to the direct impact of subsidies. For example, Nam (1995) observes that explicit export subsidies in Korea were important in offsetting trade barriers only up to the mid-1960s. He estimates that effective export subsidies amounted to 37 percent of the official exchange rate in 1963 and 23 percent in 1964, but not more than 7 percent in 1971. By 1982, all subsidies had been eliminated.

Third, free entry for imports providing inputs to the export sector appears to have sufficed to open the import sector significantly, in spite of trade barriers. As the export sector diversified, the range of goods imported also increased, accounting for some of the tendency towards liberalization cited above. For example, in Korea, the number of automatically approved import items increased from 800 in the late 1960s to 5,600 in the early 1980s and nearly 10,000 in the early 1990s. This partially reflected the impact of exemptions for goods directed to the export sector. In addition, as the export sector boomed, so did the volume of imported inputs. This may explain why import/GDP ratios in East Asian economies increased to much higher levels than in Latin America, even in the more protected Korean and Taiwanese economies. The main effect of trade restrictions may have been to bias the composition of imports towards intermediate goods rather than final goods. However, East Asian economies could still benefit from technological spillovers associated with imports.

Fourth, industrial policies targeting certain favored sectors were characteristic of a number of East Asian economies and appear to have been pursued particularly vigorously in Japan and in Korea. Were these industrial policies the key to the growth and export success of the Asian economies? There is no easy way to answer this question empirically. Clearly, government intervention policies appear to have allowed Japanese as well as some Korean firms to establish themselves in imperfectly competitive industries, such as steel, ship building, and automobiles, where the costs of entry were high. However, there were evident costs and risks associated with these efforts. For instead of encouraging "winners," policymakers often wound up subsidizing "losers."

For example, in both Japan and Korea efforts to subsidize some industries in the 1970s turned out to be counterproductive and costly. Beason and Weinstein (1993) find that industrial policies in Japan were not directed towards the higher-growth industries; the cross-sectoral correlation between sectoral growth and the degree of government support provided by various industrial policy instruments was in fact negative (-0.3 for cheap credit, -0.1 for net subsidies, -0.3 for trade protection, and -0.6 for tax relief). Korea's industrial policy efforts also proved to be very costly, as support for seventy-eight bankrupt companies in the mid-1980s required the write-off or rescheduling of billions of dollars in loans (*Far Eastern Economic Review*, 1989). Poor quality policy loans extended by domestic banks to poorly performing firms are still a concern. It is also worth noting that the perception the government would cover the losses of firms is believed to have prompted workers to escalate their wage demands at double digit rates in the 1980s. In Taiwan, after two decades of government support, the car industry has never succeeded in export markets.

Another cost of an interventionist industrial policy is that it may shut out potentially successful firms and discourage innovation. For example, Japan's Ministry of International Trade and Industry (MITI) attempted to discourage individual firms that eventually turned out to be "winners" in international markets. Honda is a notable example. What is undoubtedly true is that efforts to pick winners have failed in most countries. Left on their own, private investors have an incentive to pick much more carefully than governments.

Industrial policy appeared to be most successful when governments tried to "encourage" rather than "pick" individual winners to compete in world markets, with the marketplace being the ultimate arbiter of whether continued support of an industry was warranted. For even when East Asian governments did support infant industries, it was always expected that those industries would become competitive exporters. Indeed, the signal to the Korean government that the heavy and chemical industry drive was not achieving its intended results was that the new industries could not, with few exceptions, export profitably. Thus, there were few activities within the domestic economy for which producers could anticipate continued shelter from international competitive pressures. In this sense, the ability to export competitively became the "market test'" that was used by the authorities. The expectation that firms should eventually export provided a clear discipline on both businessmen and government officials.

LESSONS FOR OTHER COUNTRIES

It is clear from the East Asian experience that economies that have adopted sustained outward-oriented trade strategies have experienced economic performance superior to those that have not. This suggests that other emerging markets should pursue a development strategy that relies on integration with the world economy, rather than one that relies on insulation. The viability of this approach is disputed by "export pessimists," who maintain that export-oriented industrial development is bound to fall sooner or later because markets for labor-intensive manufactures are limited and increasingly constrained by protectionist policies in industrial countries. However, pessimism about the opportunities for exports flies in the face of empirical evidence and ignores the dynamics of international trade. Other countries in East Asia have steadily increased their exports of manufactures to industrial countries and, more particularly, to each other in the form of burgeoning intra-industry trade.

It is also clear that growth policies in some East Asian economies did involve interventionist and protectionist elements. The interventionist model continues to be favored by some recently emerging Asian economies, such as China. However, the decision by members of the Association of Southeast Asian Nations (ASEAN) to create a free trade area by the year 2003 points to an awareness of the benefits of more liberal trading arrangements. In addition, the appeal of interventionism has declined considerably in a number of the more advanced Asian economies, notably Japan and Korea, which are energetically pursuing reforms that will give much greater play to market forces, particularly in the financial sector.

Three important problems associated with an interventionist growth strategy suggest that other emerging countries should be very cautious in considering it.

First, East Asia's experience reveals that government intervention may not be effective in picking "winners," and mistakes can be very costly. A particular concern is that, in response to political or other pressures, or due to lack of incentives to focus on profitability, government intervention may subsidize loss-making enterprises rather than investment in productive sectors.[7] Reliance on market forces reduces the risk of inappropriate resource allocation.

Another difficulty in pursuing such a strategy today is that closing domestic markets to imports while encouraging exports and generating large trade surpluses involve many measures that are not permitted by current international trade agreements, and are less likely to be tolerated by major trading partners. In particular, overt limits on imports by countries whose growth depends on international trade can lead to retaliation by trading partners and ultimately prove counterproductive.

Finally, as has apparently been recognized by policymakers in the more advanced East Asian economies, industrial policies may succeed in promoting certain types of firms but may discourage the type of innovation and entrepreneurship needed to achieve higher levels of development. It is apparent that the development of some of the most innovative industries in the world today (e.g., electronics, biotechnology) require the type of flexibility and intense competition that only the freest markets can provide.

FOOTNOTES

[1] For example, Argentina undertook a tariff reform in 1967 that was reversed in the early 1970s; a second trade liberalization effort was undertaken in the second half of the 1970s but was abandoned in the early 1980s. In Brazil, efforts to liberalize trade in the late 1960s and first half of the 1970s were subsequently reversed. Chile undertook a significant trade liberalization after 1974 that was partly reversed in the 1980s. In Mexico, sustained trade liberalization was not successful until the first half of the 1980s.

[2] A number of other East Asia countries, such as Malaysia, Thailand, and Indonesia, also have been more open and grown more rapidly than Latin American economies. In 1990, export-GDP and import-GDP ratios in these

three economies ranged from 30 to 40 percent. The corresponding averages for the four Latin American economies were less than 20 percent. However, our discussion focuses on the more advanced East Asian economies for the lessons they may provide other emerging markets, including those in Asia.

[3] Coe and Heolman (1993) provide evidence on the extent of technology diffusion through trade. They estimate that about a quarter of the worldwide benefits of R&D investment by the seven largest industrial economies spilled over to their smaller trade partners.

[4] Yoo (1995) estimates effective protection rates in manufacturing of 24 percent in 1978 and 32 percent in 1982. Effective protection rates for manufacturing were highest in heavy and chemical industries, and were low or negative for light industries producing consumer goods. The estimated protection rates for agriculture were much higher - 65 percent in 1978 and 86 percent in 1982.

[5] Taiwan targeted "strategic" industries meeting six criteria: high linkage effects, high market potential, high technological intensity, high value added, low energy usage, and low pollution. Targeted sectors included mechanical products, information, and electronics.

[6] This high-wage policy actually contributed to a loss of investment and export competitiveness (Yue, 1995).

[7] This is a significant concern in economies like China, where often unprofitable state-owned public enterprises employ millions of workers. It is also a concern in many Asian economies where special interest groups can lay claim to government resources.

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