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## *Chapter 12*

# **Liberalization, Direction of Bias, and Economic Growth**

In Chapter 11 the intermediate-term impact of devaluation on resource allocation and economic growth was examined. A major conclusion was that a successful Phase III episode has its major effect through the reduced bias toward import substitution and the resulting improvement in export performance. While there are numerous microeconomic changes that accompany devaluation, liberalization, and altered bias, it was not possible to detect significant effects of those changes on growth performance.

It may be that the effects of Phase III are so complex that simple tests fail to reveal them. An alternative hypothesis is that the benefits frequently thought to emanate from microeconomic changes may depend on the long-run direction of the bias in the trade and payments regime and not on the intermediate changes that follow devaluation and liberalization. It is the purpose of this chapter to examine the long-run response of economies in which the bias of the regime was purposely and systematically altered. This does not refer to regimes, such as those in the Philippines and Turkey, in which import substitution continued with somewhat reduced bias; it includes only those that shifted incentives in order to rely upon export growth as a dynamic sector spurring economic development. Unfortunately, among the countries in this project, only two—Brazil and South Korea—switched from import substitution to export promotion. We start, therefore, by examining the Brazilian and South Korean experiences. While some aspects were reviewed earlier, especially in Chapter 9, the factors leading to apparent success in the two cases deserve more careful assessment than they have so far been given.

It seems evident, based both on comparison of Brazilian and South Korean growth under alternative biases and on the contrasts between their growth and that of other countries, that the export-promotion bias of the trade

and payments regime accounts for a substantial increment in the growth rate, over and above that explained directly by the growth of exports. The important question is why this should be so. It is to that question that the second section of this chapter is addressed. A final section then summarizes the findings with regard to the questions posed in Chapter 4, evaluating the role of liberalization, bias reduction, rationalization, and reduced variance in affecting economic performance.

## I. THE BRAZILIAN AND SOUTH KOREAN EXPERIENCES

### The Transformations

A great deal has already been said about the Brazilian and South Korean export-oriented growth. Nonetheless, it seems desirable to review some of the salient facts.<sup>1</sup> There are significant differences between the two countries. Brazil's population, land area, and resource base are large. South Korea has a population one-third the size, but she also has the highest population density of any country in the world and one of the poorest resource bases per capita. Although in the 1950s both countries followed development strategies heavily oriented toward import substitution, their growth performance differed. Brazil's growth rate was rapid throughout most of the decade partly because she managed to attract private foreign investment which softened the impact of stagnant foreign exchange earnings. South Korea was recovering from the combined effects of Japanese occupation (which lasted from 1910 until the end of World War II), partition of the country, and the Korean War. Despite that the South Korean growth rate averaged just under 5 percent for the five years after 1954, and that was possible only by virtue of large inflows of foreign aid.<sup>2</sup> South Korea embarked upon an export-promotion strategy in the early 1960s, after several years of very slow growth, and the growth rate rose sharply. Brazil's growth rate fell off markedly after 1961 and remained sluggish until 1967.

Despite all the differences the turnaround in economic performance has been strikingly similar in a variety of ways. Each economic system was altered to provide a bias toward exports,<sup>3</sup> but the consequent growth of exports was substantially more rapid than had been anticipated by even the most optimistic planners. In South Korea the numbers seem almost implausible: export earnings grew from \$33 million in 1960, to \$175 million in 1965, to \$882 million in 1970, and to \$4,460 million in 1974—an average annual rate of growth in excess of 40 percent. Simultaneously, foreign aid tapered off in the mid-1960s; policies were deliberately adopted to attract private foreign capital, and this contributed to South Korea's ability to maintain a sizable current account deficit. The rate of growth of GNP was 8.6 and 6.1 percent in 1964 and 1965, rising to an average rate of 10.3 percent from 1966 to 1972.

The Brazilian transformation started in late 1967. Brazilian export earnings did not reattain their 1954 peak of \$1,558 million until 1965, when they were \$1,596 million. After an increase in 1966, they fell back to \$1,654 million in 1967 but thereafter rose steadily to \$6,199 million in 1973. This represented an average annual rate of increase of over 25 percent per annum, contrasted with zero growth in the preceding period. The average annual rate of growth of real GDP from 1962 through 1967 was 3.7 percent, whereas from 1968 through 1973 it averaged 10.15 percent. The earlier period, therefore, witnessed virtual stagnation in per capita income, and the latter period saw a growth rate of about 7.5 percent per capita annually.

There is little doubt that both the qualitative and quantitative nature of economic growth changed sharply in 1964-1966 in South Korea and after 1967 in Brazil. Savings rates, which had been stagnant in earlier periods, rose sharply. Marginal capital/output ratios fell. In both countries, interestingly enough, inflation, which had been very rapid in earlier years, slowed remarkably.

The important issues pertain to the role of the switch from import substitution to export promotion in altering the quality and type of economic growth experienced. For Brazil there seems little doubt that the outward-looking strategy of the late 1960s was responsible for the heightened pace of economic growth. Fishlow concludes that it was the appropriate policy for that time, that earlier import-substitution policies had outlived their usefulness, and that it was the shift in policies which made rapid growth possible.<sup>4</sup>

For South Korea, Frank, Kim, and Westphal cited a number of special factors they believe contributed in important ways to South Korea's rapid growth. Those special circumstances are considered in more detail below. But even after taking them into account, the authors reached the following conclusion:

These special factors, however, are not sufficient in themselves to explain the success of the South Korean economy. Economic policies made an important contribution: tax and government expenditure reforms, the interest rate reforms, the exchange rate reforms, and the general emphasis on export promotion and reliance on international prices were some of the most critical. There is some evidence that export promotion was a bit overdone—greater reliance on tariffs particularly as a source of revenue may have generated slightly more growth—but the bias toward exports was far preferable to a strong bias in favor of import substitution. The export bias allowed efficient industries to establish themselves without being limited in size by the domestic market. The export bias led to an increasingly open economy and generated a growing share of the foreign exchange that lessened the economy's dependence on foreign capital imports. . . .<sup>5</sup>

The questions, therefore, are twofold: (1) Were the Brazilian and South Korean situations unique, and to what extent did special circumstances make the success of the export promotion strategy possible in those two cases?

(2) Why should export orientation reduce variance and otherwise contribute indirectly, as well as directly, to a higher rate of economic growth?

### **Contribution of Special Circumstances**

Special circumstances surround the determination of real GNP in every country in every year. It is always difficult to distinguish the factors that truly make a particular situation unique from those that simply happen to coincide with the systematic determinants of growth patterns. This is especially true in considering the contribution of a particular factor—in this case the export-push policies—to economic growth. All that can be done is to consider some of the factors that are often thought to be special about the Brazilian and South Korean experience; isolating these factors permits evaluation of the hypothesis that export bias accounts for a considerable part of the high growth rates achieved by those two countries and that their experience can probably be duplicated. Fortunately there are two countries—not just one—which had the same general experience, and that fact helps in identifying the role of special circumstances.

A number of particular factors have been mentioned as alternative explanations of Brazil's and South Korea's excellent growth performance. They include: (1) South Korea's proximity to the rapidly growing Japanese market may have made it relatively easy for her to increase exports; (2) in both South Korea and Brazil a strong government assured the continuity of the export-promotion policy, prevented undue increases in wages, and took the other measures necessary for export growth that might not have been possible under a weaker government; (3) foreign aid to South Korea, and private capital flows into both countries, made a sizable contribution to total investment; and (4) financial markets were reformed in both countries, and those changes may account for the higher growth rates.

No one knows how to measure the contribution—if any—of each of these factors, but a number of considerations cast doubt on the extent to which they downgrade either the contribution of export promotion or the repeatability of the experience. These considerations are outlined below.

1. The first contention, that South Korea's proximity to Japan facilitated export growth, undoubtedly has an element of truth to it. However, expansion of South Korea's exports to other markets was more rapid than the growth of her exports to Japan. Japan received 63 percent of all South Korea's exports in 1960 and only 38 percent in 1973; in contrast, the United States' share of South Korean exports was 7 percent in 1960 and 32 percent in 1973 (after being as high as 52 percent in 1968). Moreover, Indonesia, Thailand, and the Philippines, as well as other countries, had equal access to the Japanese market. In those countries, growth rates for exports were satisfactory, but none achieved

an overall performance or growth rate that can compare with the South Korean.<sup>6</sup>

2. While it is evident that Brazil had a very strong government when it embarked upon the shift to export promotion, that is not as apparent for South Korea. It will be recalled that there was a student revolution in South Korea in 1960. Further, the government that presided over the switch in policy had just assumed office, and although its powers increased in later years it cannot be regarded as having been firmly in command in the early years of the export-promotion strategy. Moreover, some countries which have had strong governments have not adopted successful policies; the Philippines and Indonesia are cases in point in recent years. The Ghanaian government before 1966 was certainly strong enough to impose whatever economic policies it deemed desirable, and most observers would have regarded the Turkish government of 1950-1958 and the Egyptian government of the fifties and sixties as "strong." While it seems to be very important that exporters be assured of the commitment of their government to an export-promotion strategy, that commitment can grow from the very success of the export-promotion efforts and the popular consensus that then emerges in its support. In a sense it may well be that the success of the export-promotion strategy, itself, strengthens the government while simultaneously generating support at all levels for continuing the strategy.

3. The policies that made the export-promotion strategy possible were also policies that attracted private foreign capital flows into South Korea and Brazil. It is difficult to imagine that those countries would have received capital inflows of the size they did had their exchange rates been overvalued and their domestic markets sheltered by import prohibitions. Although Brazil had been the recipient of private foreign investment in the 1950s under her import-substitution strategy, that investment had fallen off sharply in the early 1960s when opportunities for "easy" import substitution dried up. For South Korea, aid was very extensive in the 1950s, but that was not the period of rapid growth. While the reconstruction that those aid inflows allowed may have been a necessary condition for later success, the high growth rate experienced in the late 1960s occurred after aid had largely ended. Indeed, part of South Korea's export growth replaced aid inflows.

4. The financial reforms undertaken in Brazil and South Korea undoubtedly contributed to improved economic performance. In the South Korean case, however, those reforms took place four to five years after exports began growing rapidly. In the Brazilian case the reforms were much less far-reaching and, in any event, were necessary for export growth. They provided greater assurance about the future of the real exchange rate, certainly a prerequisite of significant improvement in export performance. Therefore, while those reforms were significant, their contribution was in their interaction with the export-push growth strategy.

### **Importance of Bias toward Exports, Realistic Exchange Rates, and Liberalization**

Estimates of the contributions of exports and of liberalized trade regimes to growth were presented in Chapter 11. If those estimates in Table 11-2 are applied to the South Korean and Brazilian data, they suggest that the contribution of rapid export growth was sizable compared with previous periods of export stagnation. The estimates would indicate that Brazil's 25 percent rate of growth of export earnings increased her growth rate by 2.75 percentage points; the 40 percent rate of growth of export earnings in South Korea increased GNP growth by 4.4 percentage points. Those numbers are far larger than the direct contribution that would be calculated by simply taking the increment in exports relative to the increase in GNP.

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What distinguishes the South Korean and Brazilian export-push strategies from the Phase IV periods of other countries, such as Turkey and the Philippines, is not necessarily the level of the real exchange rate relative to some standard, but rather the fact that South Korea and Brazil were systematically promoting exports in addition to having liberalized their regimes. And while it is true that an export-promotion strategy would be extremely difficult, if not impossible, to carry out without a fair degree of liberalization and a relatively realistic exchange rate, the converse is not the case. Many countries have had—for shorter or longer periods—fairly liberal trade and payments regimes and have nonetheless maintained a bias toward import substitution.

The conclusion is not that export push itself accounts for all of the difference in performance that is not explained by special factors or the extent of liberalization of the regime; it is rather that the logic of an export-promotion strategy seems to condition a number of other policies and to permit a number of other favorable factors to appear in a fairly systematic way. However, the mere absence of an import-substitution bias does not seem to provide this push. Although economic theory suggests that incentives for exports and for import substitution should be equated at the margin, in fact neither Brazil nor South Korea did so; during the rapid growth years the bias in their regimes was toward exports. In some regards the sorts of intervention undertaken on behalf of exports in those regimes appear to have been similar to those undertaken by other countries in support of their import-substitution approaches.

There are numerous countries where incentives for export and import substitution have been about equal, and the results have not been spectacular.

Sri Lanka in the 1950s and Indonesia since 1966 (although export earnings have grown rapidly due to expansion of oil exports) are two instances of countries where the trade and payments regime was exceptionally liberal but where there were few incentives to stimulate domestic production in any direction.

There have also been countries that have fostered import substitution under a liberalized trade and payments regime, and that, too, has resulted in a less-than-spectacular growth performance; of the countries covered by the project, the Philippines is the outstanding instance. Philippine export growth was undoubtedly greater than it would have been had QRs, rather than tariffs, been the instrument of protection of domestic industry in the 1960s, and the Philippines probably performed better than would have been the case had QRs been applied to maintain a more overvalued exchange rate. Nonetheless, Baldwin believes that the bias toward import substitution left the economy performing at a far less satisfactory rate than was feasible. The Chilean sliding-peg experience of 1965-1970 represents another instance of a country where export earnings were adequate (due to rising copper prices) but where a liberalized trade and payments regime did not result in any marked change in the performance of the economy. The reason, it seems, lies in the Chilean failure to alter the bias in the regime and also in the maintenance of the sliding peg at a rate Behrman judges to have been substantially overvalued.

While examples can never prove a case, the evidence available from the country studies is certainly consistent with the hypothesis that it was the bias toward exports which accounts for the spectacular performance of South Korea after 1964 and Brazil after 1968. This export bias, in turn, placed implied limits on the degree to which QRs could be used and on the degree to which the exchange rate was overvalued. Other factors, of course, explain some of the difference, but the commitment to an export-oriented growth strategy is the factor that was absent from the Indonesian, Philippine, Chilean, and other experiences with liberalizing the trade and payments regime.

## **II. EXPORT-PROMOTION VERSUS IMPORT-SUBSTITUTION GROWTH STRATEGIES**

The above considerations strongly suggest that bias toward export promotion resulted in faster growth than did bias toward import substitution. Economic performance seems to have improved by considerably more than the direct contribution of the increment in exports. The important question is why that should have been so. Unfortunately, data with which to attempt a quantitative answer to the question are simply unavailable. All that can be done is to consider a variety of factors that might account for the rapid growth that seems to result when bias is toward exports.

There are, broadly, two classes of influences that appear to make an export-oriented growth strategy more conducive to rapid growth than one based on import substitution. First, there are some strictly economic factors, such as returns to scale, indivisibilities, and the impact of competition, that probably produce a more satisfactory economic performance under an export-oriented strategy than under import substitution. Second, an export-promotion strategy appears to place certain kinds of constraints upon economic policy and its implementation; those constraints, in turn, limit the magnitude and duration of policy mistakes and also tend to force policies to work through pricing, rather than quantitative, interventions. These influences suggest a certain logic to the evolution of economic policy under each strategy. It is possible that it is the evolution of import-substitution over time, rather than the level of bias itself, that accounts for the generally less satisfactory performance of such regimes.

The factors whose influence on growth performance may differ according to the bias of the regime are considered on the following pages. The alternative of a strictly laissez-faire regime is not explored; rather, the comparison is between two conscious, active policies to encourage growth. Perhaps what is really at issue is that a growth strategy oriented toward exports entails the development of policies that make markets and incentives function better, while an import-substitution strategy usually involves policies designed to frustrate individuals' maximizing behavior under market incentives. Both strategies are nonetheless interventionist and activist, at least as they were carried out by developing countries since 1945.

### **Economic Factors**

There are four major economic considerations, *a priori*, which support the presumption that growth performance under export promotion may be superior to that under import substitution. They are: (1) relaxation of the link between agriculture and industry; (2) the degree to which economies of scale can be exploited; (3) the effects of competition on the performance of individual firms; and (4) the likelihood of "foreign exchange shortage," with its deleterious effects on growth. Two additional considerations are usually put forward in support of import substitution—infant industry protection and the vagaries and uncertainties associated with reliance upon the international economy.

#### **THE AGRICULTURE-INDUSTRY LINK**

As every development planner knows, a large agricultural sector is a drag on the growth rate. Increases in agricultural productivity are hard to achieve,

yet urban growth is likely to be closely linked to the fortunes of agriculture in a variety of ways in economies where focus is upon import substitution. If agricultural output lags or declines, the resulting increase in food prices generally raises urban wages, thereby tending to limit industrial expansion. Savings and tax revenues are often difficult to obtain from the rural sector, so slow rural growth constrains urban growth but rapid agricultural growth does not necessarily provide resources for more urban growth.<sup>7</sup> For that reason it is often argued that the "success stories" of Hong Kong and Singapore have no relevance for other developing countries precisely because those economies have no rural sector.

It is obvious that the agricultural sector's productivity must increase for satisfactory economic growth, and there is no way of avoiding the problem regardless of policy bias. Nonetheless, one of the features of an export-oriented growth strategy is that the link between the fortunes of the urban and the rural sectors is not quite so tight as it is under import substitution, especially in the short run.

In the South Korean case, for example, the agricultural growth rate was satisfactory and increased sharply in the 1960s. But there were bad harvest years; in fact, Frank, Kim, and Westphal attribute the failure of the 1961 devaluation to a poor harvest and attendant price increase. Prior to the export-push strategy, bad harvests resulted in increased domestic inflation, rapidly rising food prices, and retardation in industrial growth. Since 1964, however, the growth of South Korea's industrial sector has been less directly dependent upon the short-term fortunes of the agricultural sector because food imports can supplement domestic output in poor years. In Brazil the situation has been rather different because Brazil appears to have a comparative advantage in some agricultural commodities. There, opening up the economy implied that Brazil was more likely to exercise her comparative advantage in agriculture as soybean and corn output increased, while domestic demand for wheat products could be satisfied increasingly from imports.

In theory it can be argued that the amount of foreign exchange available for compensating for shortfalls in agricultural output should be identical under export push or import substitution if it is assumed that resources devoted to earning and saving foreign exchange have the same return at the margin. In practice there seem to be a number of reasons why this does not happen.<sup>8</sup> First, in addition to their holdings of foreign exchange reserves, the export-oriented countries have had ready access to the private international financial market as well as to official lenders; they could quickly and easily borrow, whereas countries oriented toward import substitution by and large had already used the lines of credit available to them on terms at which they were willing to borrow. Second, and closely related to the first, the import-substitution countries appear generally to have been unduly optimistic about future foreign exchange earnings in relation to import demands; thus, their

foreign exchange reserves were almost always very close to minimum levels, while export-oriented countries seem to have accumulated reserves at more rapid rates than expected. Third, even when the import-substitution countries did resort to purchasing food imports from abroad, the scarcity of available foreign exchange for other essential imports implied a very high opportunity cost for its utilization for food imports; as a result the quantity of food imported was relatively smaller than it would have been had foreign exchange earnings been more plentiful.

Most of the economies that relied upon an import-substitution strategy experienced reduced industrial growth due to poor agricultural harvests at one time or another. For example, Bhagwati and Srinivasan document the link between agriculture and industry in India and note the disastrous effects of the drought, not only on per capita income—which was inevitable—but also on industrial production. This might have been avoided under an alternative set of government investment policies.<sup>9</sup>

#### ECONOMIES OF SCALE

To the extent that scale economies exist and are functions of output levels in individual industries, it is clear that an export-push strategy, relying upon selective expansion of industries, will dominate an import-substitution strategy where each industry's growth is limited, a la Nurkse, to the growth of domestic demand for its product. This conclusion follows whether scale economies prevail indefinitely or whether instead there is a certain minimum economic size for firms in an industry.

The argument is clearly of greater importance the smaller the country. However, low per capita incomes make the internal market for most nontraditional commodities very small in all but the very largest countries. Even in India the internal market is not large: in 1972/73, the value of *all* manufacturing output was \$7.1 billion at current prices at the official exchange rate;<sup>10</sup> total exports were \$2.3 billion, and primary commodities accounted for about 85 percent,<sup>11</sup> leaving \$345 million of manufactured exports. South Korean manufacturing output was \$2.3 billion in 1972—again valued at the official rate; exports of manufactured commodities were \$1.6 billion, so that approximately half of all manufactured output was exported.<sup>12</sup>

While these numbers do not indicate fully the selectivity of the production pattern in South Korea relative to India, it is apparent that Indian manufacturing production was destined primarily for the internal market and covered a much wider range of commodities than the South Korean output. For countries smaller than India the domestic market for manufacturing commodities is, in the early stages of development, very small.

This is not to suggest that under an export-oriented strategy new industries should not start by catering to the home market. Indeed, when pro-

duction begins, most export-oriented industries will serve the domestic market first simply because the differentials between f.o.b. and c.i.f. prices will naturally make domestic sales more attractive. In some instances, sales may be primarily for exports even at an early stage, but in many cases the home market is sizable.<sup>13</sup> The important consideration is probably that, under an export promotion strategy, new firms (even those in the import substitution stage) are basing their plans on both the domestic and export markets. A plant of economic size can be constructed because entrepreneurs anticipate future participation in the world market.

In contrast, under import substitution, plans are based entirely or almost entirely on the profitability of the sheltered domestic market and the monopoly power that accrues to those starting new production activities. Monopoly power, exercised by increasing the domestic price of the commodity above its international level, reduces still further the already small size of the domestic market. Worse yet, even in industries that might realize some positive return by building capacity for the export market, there are generally safer and more attractive investments in new product lines in protected import-substitution industries.

It is impossible to estimate the importance of the increased ability to take advantage of scale economies and to adjust to indivisibilities in making export promotion the more rewarding strategy. What can be said is that an export-push strategy is likely to enable such economies to be realized, whereas an import-substitution strategy provides definite limits to the expansion of output capacities in existing production lines.

#### COMPETITION

One means of encouraging export industries has been to extend sheltered positions in the domestic market to successful exporters. Nonetheless, they must compete satisfactorily in the international market. Meeting international competition requires not only cost consciousness, but also quality control, meeting customers' style preferences, changing product lines with new technological developments, meeting delivery dates on time, and other requisites of a modern industrial society. Import substitution firms typically face, at most, two or three competitors, and there are often barriers to any competition among them. Allocation of licenses to expand or to import needed intermediate goods often effectively determines the market share of each firm, even when there is more than one producer. The competitive spurs that are present under export promotion are replaced with a protected environment in which substandard quality and high costs do not prevent profitability.

The effects of this difference in the competitive environment can be evaluated in terms of their implications for individual firms and of their impact on industry composition over time. Competitive pressures will certainly

be less under import substitution than under export promotion. If managers allocate their time optimally among their various functions, more managerial time and effort will be devoted to plant efficiency and to cost and quality control under an export-push strategy than under import substitution. That fact alone should result in higher productivity in firms with an export orientation. In addition, under import substitution the very forces that tend to result in pro rata allocations of licenses to import intermediate inputs or to increase capacity also tend to provide an environment wherein entrepreneurs can—if they so choose—be lazy, and the mechanism to drive out incompetent managers is weak or nonexistent. Entrepreneurs may take advantage of their monopoly position by enjoying the “quiet life,” and in so doing they may not strive as much for productivity increases, cost reductions, and quality improvements as they would if they faced more competitive pressures.

Industry composition under import substitution is likely to change less rapidly in favor of the firms with high productivity growth and low costs. With a regime biased toward exports, the firms that survive and expand will be those that succeeded in competing in international markets. These firms can increase their penetration of international markets, get access to credit because of their performance, and find it profitable to expand. Those unsuccessful in exporting are not eligible for as many export incentives and must either mend their ways or grow slowly, if at all. Under import substitution, for high-cost and low-cost firms alike, growth in most activities is limited by the growth of domestic demand. The tendency toward equal treatment of all firms, inherent in most licensing mechanisms, enables high-cost firms to expand more than they otherwise would, and retards the growth of low-cost firms.

Over time, therefore, it is likely that industry composition will shift more rapidly toward low-cost activities under export promotion and that, within industries, this shift toward low-cost firms will be more pronounced. In addition, all firms will have devoted more resources to cost-reduction and productivity growth. The net result is likely to be a mix of firms and industries more heavily weighted toward low-cost activities.<sup>14</sup> As with other contrasts between export promotion and import substitution, there is nothing absolute about this tendency. It is simply one more factor which, at the margin, is likely to increase the rate of growth of output under export push relative to that likely to be achieved under import substitution.

#### NO FOREIGN EXCHANGE SHORTAGE

By definition an export-oriented growth strategy relies on foreign-exchange earning activities to be the “leading growth” sectors. When the growth of export industries slows, other sectors also experience a slowdown, and the decline in the growth of foreign exchange earnings is likely to be paralleled by a decline in the rate of growth of demand for foreign exchange.

Even if demand does not adjust immediately, past export growth is likely to have resulted in a moderately comfortable reserve position, so that small deviations from expected balance-of-payments positions can be financed from reserves. In addition the country is likely to be credit-worthy and able to borrow funds on acceptable terms in order to smooth whatever adjustments may be required. The balance-of-payments position of an export-oriented country is also protected because of the fact that the country must, of necessity, maintain a realistic exchange rate. Consequently, even when aggregate demand management is unduly expansionary, domestic prices—and not the foreign trade sector—bear most of the burden of adjustment because the exchange rate must generally be altered rather quickly following domestic inflation.

All these factors tend to lead to a relatively comfortable balance-of-payments positions wherein shortfalls in foreign exchange earnings can be met because the country is able to buy time to adjust. In contrast, import-substitution economies with overvalued exchange rates are plagued by foreign exchange shortages.<sup>15</sup> When shortfalls in earnings occur, policies to adapt to the change result in a reduction in the rate of economic growth.

There is no doubt that foreign exchange shortage can slow down the rate of growth below that which would otherwise be attainable. At a microeconomic level, partly finished projects stand idle awaiting imports, while production processes are disrupted with consequent increases in costs. These factors reduce the growth of real output on the supply side. At a macroeconomic level, planned investment (with its high import content) may be reduced due to existing or anticipated shortages of foreign exchange. Also, restrictive macroeconomic policies may be applied to cut back on planned investment levels in response to unanticipated balance-of-payments difficulties, with consequent deleterious effects on growth rates.

The most vivid illustration of this point comes from Colombia. That country's shift toward an export-oriented growth strategy in 1967 has already been described. Díaz concluded that the increased rate of growth that followed resulted more from the steadier foreign exchange situation than from anything else.<sup>16</sup> In his judgment the ability of the Colombian authorities to manage their domestic macroeconomic policies without regard to short-term balance-of-payments dictates was perhaps the biggest reason for increased growth.

As with each of the other considerations, an export-push strategy is not certain to result in fewer balance-of-payments problems, but there is a presumption in that direction. Conversely, import substitution is not necessarily bound to result in foreign exchange shortage, but it is likely to.

#### INFANT INDUSTRY CONSIDERATIONS

A number of arguments have been put forward in favor of import substitution. Among them are that: (1) a higher level of savings may result;

(2) technological know-how will increase more rapidly; and (3) innovative capacity will develop only via import substitution. Bhagwati has examined these and related arguments in his companion volume and finds no support for them.

There remains, however, the argument that it takes time to set up new industries and that protection of some sort is needed during this period of "infancy." The theoretical arguments on the subject are well known<sup>17</sup> and cast considerable doubt upon the desirability of a policy of overall protection compared with other policies designed to encourage new industries.

That conclusion applies with as much force to encouragement of new export industries as to encouragement of import-substituting production. There is no logical connection between the infant-industry argument and an import-substitution growth strategy. Instead, to the extent there are valid infant-industry considerations, they apply equally to the establishment of new industries for export as they would for import-substitution. The experience of South Korea, where 22 percent of exports in 1960 and 80 percent by 1970 originated in manufacturing, illustrates that the new industries can be developed for export as well as for the domestic market.

Time is, of course, required for starting up a new industry and for developing the capacity to compete abroad; initial output levels are small, and the domestic market is supplied first. Nonetheless a set of incentives which signal to new industries that they will have to develop exports may better equip those industries for international competition than can an import-substitution strategy. Under export push, an infant industry can, from its very inception, be oriented toward the markets it will eventually serve. The greater the validity of some infant-industry considerations, the more important it becomes to develop new industries that can enter the export market. After all, if there are high costs associated with establishing a new industry, recovery of that investment will be more rapid (and the return probably higher) with expansion of the industry beyond domestic boundaries.

It is unclear how important such considerations are. What is important is the recognition that infant-industry considerations, if there are any, do not logically or necessarily imply the desirability of a bias toward import substitution.

### **Vagaries of the International Market**

The other argument for import substitution that deserves some attention is that the international market is too uncertain to rely upon for a major impetus to economic growth. If there is greater uncertainty in international markets than in domestic ones, that certainly implies that *some* diversification of exports is desirable, but that seems to occur with a successful export-oriented strategy.

It is difficult to extend analysis beyond that observation. The evidence would appear to be that import-substitution economies have been at least as dependent, if not more so, upon the international market as the export-push countries have been. One symptom of this is the frequency with which "foreign exchange shortage" has constituted an important impediment to growth under import substitution. If dependence means that the foreign trade sector is a large share of GNP, then export-push economies are more "dependent." If, however, dependence instead implies the vulnerability of the domestic economy to international economic events, it would appear that the import-substitution countries have been more dependent.<sup>18</sup> A principal reason is that imports have already been largely reduced to commodities not domestically produced.

Some light is shed on the issue by comparing experiences following the commodity price adjustments—especially the increased price of oil—in 1973/74. Those events occurred after the cutoff dates of the NBER country studies. Nonetheless, it has been painfully evident that the economies most incapable of adjusting to altered relative scarcities were those in South Asia and parts of Africa and Latin America whose reliance upon import substitution and an inner-oriented development strategy was greatest.<sup>19</sup> While recession in the industrialized countries has certainly adversely affected growth prospects of countries such as South Korea, the ability of that country's economy to adapt seems to have been far greater than that of the South Asian countries. Ironically, the countries more affected by the vagaries of the international market were those whose policies were intended to make them more self-sufficient, while the countries better able to cope were those presumably more dependent upon the world economy.

### **The Nature of Economic Policy**

The factors discussed above all lead to a presumption that, on average, a given degree of bias toward export promotion will result in more satisfactory economic growth than will the same departure from equal incentives in the direction of import substitution. Economic theory suggests that, at least for static efficiency, ideal economic policy would equate marginal incentives for import substitution and for export promotion; it is not immediately evident how dynamic considerations would change the prescription. Why, then, would bias toward exports be advocated when theory suggests equal treatment of all sectors?

The answer appears to lie in the nature of the economic policies that seem to accompany the alternative strategies. No government of a developing country is going to take a passive stance toward economic development, and probably none should do so. Under those circumstances it is important to consider the determinants of the policies undertaken, the environment within which

decisions are made, and the policy instruments used in pursuit of economic growth.

The decision to develop through export promotion or through import substitution affects the choice of policies and policy instruments and their evolution. The experience reviewed in the country studies suggests that those choices, in turn, affect expectations, the extent of variance associated with any degree of bias, and a host of other variables in systematic ways.

Consideration of these issues can best be undertaken in two parts. First, there is the nature of the instruments used in support of each strategy. Second, there is the degree to which policy mistakes are self-perpetuating. An export-push strategy seems to be less likely to result in increasing the bias of the regime toward exports, while import substitution seems to have built-in tendencies toward ever-greater bias.<sup>20</sup>

#### THE SUPERIORITY OF PRICE OVER QUANTITATIVE INTERVENTIONS

An export-promotion strategy generally tends to be accompanied by primary reliance upon pricing incentives rather than quantitative controls. The use of price measures limits the degree of variance of the regime and makes the cost of policy interventions more apparent compared to the effects of QRs. There is, moreover, reason to believe that policies which provide incentives to individuals are considerably more effective than those which attempt to prevent them from undertaking profitable activities.

There are a number of reasons why a QR regime is largely incompatible with an export-push growth strategy. First and foremost an export-push strategy is by nature concerned with the international market, over which policy makers obviously do not, and cannot, have control; not even the most regulation-oriented civil servant or politician believes that he can regulate foreigners' decisions. In contrast, an import-substitution strategy implies that economic activity of both buyers and sellers will be oriented toward the domestic market. Whether, in fact, this market is more controllable or not, there is certainly no obvious barrier to imposing regulations on transactions, to requiring firms to buy from domestic firms (for example, by domestic content requirements), and to imposing any other quantitative regulations upon them. Apparent control over economic activity thus seems fairly complete.

Aside from an obvious inability to control foreigners, the difficulty of controlling firms selling on the international market is considerably greater than that of regulating domestic import-substitution firms. There is, first of all, considerably less information, and exporters' statements are thus much more difficult to verify than are statements of import-substitution firms within a regulated environment. For example, a successful export-promotion strategy is certainly going to have to allow exporters to purchase foreign-made in-

termediate inputs if the quality of inputs available domestically is inferior. Yet the determination of inferiority must really rest on the statement of the exporter, and the penalty for failing to allow these imports may be the failure to export.

As a corollary to those considerations, regulations cannot make exporting profitable, but they can make import substitution profitable. Many countries, including export-oriented ones such as South Korea, and import-substitution ones such as India, have extended import licenses for high-premium items to exporters. Such privileges, however, cannot by themselves create a bias toward exports, because they require import restrictions of even greater magnitude to generate the premium on the import licenses. This can be most readily seen by assuming that all import licenses are given to exporters and that receipt of such licenses constitutes the only export "incentive."<sup>21</sup> In such a case the regime would have no bias with balanced trade because the average premium on imports—that is, the average amount of protection through QRs—would exactly equal the implicit value of the incentive per unit of exports. Usually, therefore, allotting the implicit value of domestic controls to exporters can offset part of the bias toward import substitution, and it might even constitute an incentive for a small fraction of exports, but it would never in itself bias the regime toward exports.<sup>22</sup>

Pricing interventions necessarily operate by altering the profitability of activities and by providing incentives for individuals to alter their behavior. In contrast, controls can either create incentives or attempt to thwart behavior that would otherwise be profitable. Regardless of which they do, it is often difficult to ascertain their effects or to judge the response to them. It is for that reason that the authorities are likely to have a better notion as to the effects of their policies under pricing interventions than under QRs.

It is impossible, given the present state of knowledge, to test whether, and to what extent, market incentives are more effective than quantitative controls. Reading of the country studies suggests, however, that policy was more effective in the South Korean and Brazilian cases than in other countries. Compare, for example, the long discussion in the India study on the political ramifications of devaluation in 1966 with the account of the 1964 South Korean devaluation. The Bhagwati-Srinivasan report of the reaction to the Indian devaluation strongly suggests an environment in which earlier decisions had been ineffective and disputes over devaluation made rational policy discussion impossible. The Indian import-substitution strategy seems to have led to deep-seated suspicion of any alteration of the exchange rate. It may be that the use of QRs to prevent otherwise profitable behavior creates a climate of suspicion between government officials and entrepreneurs, so that economic decisions become political ones in countries relying on QRs to implement import-substitution policies. In contrast there was virtually no discussion

of the motives for the 1964 devaluation decision in South Korea, and Frank, Kim, and Westphal did not report any evidence of political divisions over the issue. At that time, political discussion was not suppressed, and it seems clear that opposition to devaluation could have been voiced. In effect the commitment to an export-promotion strategy appears to have implied an acceptance of the necessity for a realistic exchange rate.

#### CONSTRAINTS ON POLICY

Under an export-promotion strategy, policies of necessity rely on market instruments, and control over exporters is less than complete. Thus there are important policy constraints that are absent under import substitution. Other factors that follow from the nature of the difference in the two strategies are also likely to work toward policy moderation. In particular, under export promotion there are grounds for expecting that: (1) there will be more balanced political pressures from competing economic interests; (2) the greater visibility of costs of alternative policies will likely reduce the variance in incentives and perhaps also diminish the size (or at least duration) of policy mistakes that are inevitable under any government; and (3) there will be less likelihood of a crisis atmosphere in which decisions are forced.

Under export promotion, political forces within the government, as well as outside, are likely to be better balanced between those wishing to protect the domestic market and those seeking to promote external sales. Exporters are less likely to be dependent on government favors under an export-promotion strategy simply because their sales are to individuals outside the control of the government. Their greater independence may itself enable them to have more voice in decisions. Moreover, exporters constitute a proportionately larger group than in import-substitution countries, and they have a greater interest at stake in policies for exports. Of course, groups interested in protecting the domestic market are always present, so all that can be said is that there may be a larger offset of other interests under export promotion.

Aside from the fact that exporting interests from the community at large are better represented, an export-promotion strategy requires that groups within the government be concerned about export interests. It has already been stressed that government commitment is really a prerequisite for success of the strategy. That commitment within the government, plus other pressures, is likely to constrain policy in a number of ways. For example, the exchange rate cannot be permitted to become too overvalued unless there are increases in the size of export subsidies. Those represent a drain on the finance ministry, and one that is visible to all groups.<sup>23</sup> Thus, within the government the finance ministry may represent at least one voice for a realistic exchange rate policy. This viewpoint may be seconded by groups anxious to increase government expenditures on one activity or another and hopeful of using the funds freed

from export subsidies. The more overvalued the exchange rate and the larger the export subsidies, the greater is likely to be the pressure for devaluation.

In comparison, under import substitution, the more overvalued the exchange rate becomes, the fewer commodities it pays to export and the less profitable any particular export becomes. While there are still likely to be some pressures for a realistic exchange rate, they are likely to be fewer and weaker under import substitution than under export promotion. It is for this reason that foreign indebtedness so often is the proximate reason for changing the exchange rate when countries are following an import-substitution strategy, while internal factors usually trigger devaluation under export promotion.

As with the other considerations there is nothing inevitable about the contrast. An export-oriented regime could be accompanied by gradual overvaluation of the exchange rate, with a consequent decrease in the rate of growth of exports and an ultimate abandonment of the strategy. Likewise, an import-substitution government could maintain a realistic exchange rate and use tariffs for protecting domestic firms. Too little is understood about the interaction between economic and political phenomena in policy determination to go further than to indicate that there is some asymmetry in the likelihood of pressures for equalizing the incentives for exports and for import substitutes under the two strategies.

The final factor that may affect policymaking is the likelihood that foreign trade decisions will be made in a crisis atmosphere. Foreign exchange shortage is a recurring phenomenon under import substitution and QRs. Such an environment is likely to produce occasional crises as debt service obligations become due, as the ability to carry out planned investments is threatened, or as free foreign exchange reserves disappear. Many of the devaluation decisions studied in this project were undertaken in an atmosphere of crisis or else under foreign pressures, which were effective only because the extremity of the situation had become apparent.

Either circumstance—crisis or foreign pressure—probably reduces the likelihood of rational decisionmaking. Actions often must be taken without prior consultation and discussion with interested parties, and the environment militates toward short-term rather than long-term solutions. There may be a greater tendency for mistakes to be committed under import substitution than under export promotion simply because the likelihood of a crisis is smaller under the latter type of regime. Recall, for example, the contrast between the ability of the export-oriented developing countries to respond to the increased petroleum prices of 1973 and the inability of the import-substitution-oriented countries to react without severe dislocation.

#### EVOLUTION OF REGIME OVER TIME

Many of the arguments considered above provide possible explanations for the apparently more satisfactory performance of the export-oriented

economies. Yet many of these policy considerations also suggest another possibility: there are some features of import substitution that are likely to induce intensification of the bias, but an export-promotion strategy places pressures on policymakers that will serve to limit the extent of bias.

Under an export-oriented system the cost of mistakes becomes visible, pressures emerge to limit the size of export subsidies and to alter the exchange rate, and the scope for mistakes is less simply because fewer facets of economic activity are directly controlled. Moreover, there is some reason for believing that, once successfully started, further increases in exports may become easier. Initially locating foreign buyers, penetrating foreign markets, and meeting labeling, quality, and other foreign specifications may be the hardest part of exporting. In contrast, under import substitution there is some presumption that the going will get more difficult as the process continues. As is well documented for Latin America, once the "easy" initial stage of import substitution is past, import substitution becomes increasingly difficult. Each new industry seems to have higher costs and require more technological sophistication; the economic size of plant seems to get larger, while the domestic market for the industry's output gets smaller. It is therefore likely that, under an import-substitution strategy, the amount of bias needed to sustain growth over time will increase, if indeed growth can be sustained at all. Under an export-promotion strategy there does not appear to be any similar pressure to increase the bias in favor of exports over time.

These considerations do not provide an overwhelming case. Bias toward import substitution appears to have diminished in Brazil from the mid-1950s onward, and the same may have happened—albeit to a lesser degree—in the Philippines. Nonetheless, in none of the export-push countries do export subsidies appear to have resulted in more than about 25 percent greater return on exports than on import-substitution activities compared to international price ratios. By contrast, as Table 6-2 shows, a domestic price ratio of import substitution to exports almost twice the world price ratio appears in Brazil (prior to the shift toward exporting), Chile and Turkey (and would undoubtedly appear for other countries—including India—if the data were available). This tends to support the conclusion that an import-substitution strategy may require a greater degree of bias, maintained through greater use of QRs and more variance in incentives, than does an export-oriented strategy.

### III. CONCLUSIONS

In Chapter 4, four phenomena that can accompany devaluation were identified: rationalization, liberalization, bias alteration, and variance reduction. The crucial question was: What is the role of each of these phenomena in determining the effects of devaluation on the trade and payments regime and on economic growth?

One outcome of the NBER project is that fairly definitive answers are possible on certain aspects of this question. Despite the fact that devaluation under QRs can, in principle, be of an entirely different nature than devaluation under convertibility, the experience of the ten countries demonstrates that the same macroeconomic considerations that determine whether deficits will be reduced after the devaluation of a convertible currency are also important when QRs are present. This is in part because countries have sometimes devalued in order to prevent even greater excess demand for foreign exchange, but it is also because inappropriate demand management policies can result in a return of real exchange rates to their predevaluation levels.

Under some circumstances, none of the four phenomena that might accompany devaluation under QRs will in fact do so. For this reason, it seems a fair conclusion that one of the policy mistakes of the two decades covered by the country studies was using devaluation to a new, fixed exchange rate as an instrument designed to attain both domestic price stabilization and a liberalized trade regime. The adoption of a sliding-peg exchange rate policy would have freed the fortunes of the trade sector from their dependence upon successful price stabilization.

A second important lesson that emerges clearly is that under QR regimes, with their variety of controls, the parity alteration is not necessarily equal to the magnitude of devaluation. Policymakers contemplating devaluation would be well advised to examine the impact of their actions on EER changes; judgments as to the magnitude of the devaluation should not be based on the formal parity change.

One of the assertions often made about devaluation has been that it is a precursor of domestic recession. While recession following devaluation was neither as universal nor as severe as is sometimes alleged, where it did occur it was the outcome either of efforts to contain domestic inflation or of an attempt to hold import demand in check. When recession accompanied efforts to stabilize the domestic price level, it was the price level objective, and not devaluation, that motivated government policies. When, however, recession was induced as a means of containing import demand and liberalizing the regime, it was probably largely unnecessary; foreign lending to support attempts to liberalize and reduce bias is clearly a Pareto-superior choice—if there are good prospects that the new regime will be maintained. The costs involved in reducing levels of domestic income as a means of containing imports in the transition period are largely an unnecessary waste.<sup>24</sup>

As is often the case, the simplest conclusions may also be the most important, and that is probably so with regard to the use of EERs, the role of macroeconomic factors, and the desirability of foreign borrowing to support the initial liberalization of imports. Those considerations set the stage to examine the role of the four phenomena accompanying a net real devaluation. First, and probably most important, almost all devaluations from an initial position of QRs result in a liberalization of the regime that is not offset by

heightened tariffs. The consequence is that premiums on import licenses are absorbed, and the premium-inclusive EER for exports increases proportionately (and usually absolutely) more than the premium-inclusive EER for imports. Liberalization is therefore a powerful bias-reducing action in an import-substitution, QR-ridden economy.

Reduction in import-substitution bias, as reflected in the export EER, seems to draw a considerably greater response in terms of export earnings than has been widely believed, and there can be little doubt that bias is the key variable of the four. None of the country studies noted a lack of export responsiveness to the relative increase in export EERs. The widely held view that exports did not respond to altered real rates in many developing countries is simply without a factual basis and is contradicted by a considerable body of evidence.

While devaluation and the measures accompanying it can reduce bias of a trade and payments regime, they do not reverse it. A sharp distinction must be made between the response of exports and other variables to raising the real export EER within the context of a regime biased toward import substitution and the response that can be forthcoming when a policy commitment is made toward promoting exports. The rate of growth of export earnings that results from a realistic export exchange rate under an import-substitution strategy is certainly greater than that which takes place when the rate is increasingly overvalued in a Phase II regime. A more satisfactory rate of growth of export earnings facilitates economic growth in a variety of ways, many of them resulting simply from the absence of the adverse conditions that accompany declining foreign exchange earnings and reduced import levels.

The reduction in the extent of import-substitution bias that accompanies devaluation can lead to an improvement in export performance, and it did so for a variety of countries. While it is possible that variance reduction and rationalization played a part in the consequent growth, it was not possible to identify the separate contributions of these variables. What was clear was that liberalization played a major role through bias reduction, and that it was the latter which was really the key variable in determining export behavior. In turn, export performance was the major mechanism by which the consequences of the devaluation package were transmitted to economic growth.

If devaluation raises the real export EER, bias toward import substitution is reduced, at least temporarily. Even if the new real exchange rate is maintained, that cannot by itself result in a shift in strategy toward export promotion. That requires not only a substantial and sustained liberalization but also a variety of measures that provide potential exporters with the same sort of incentives that otherwise exist only for firms catering to the domestic market. Maintaining the real exchange rate is necessary for export promotion, but it is not sufficient. The truly remarkable growth performances occurred in Brazil and South Korea when they switched strategies from import substitution to ex-

port promotion. It would appear that the dictates of an export-promotion strategy bring about a variety of conditions which make more rapid growth possible and, at the same time, constrain policy in such a way as to reduce variance in incentives and increase rationality of the regime.

Why the export-promotion strategy should appear to be so much more effective is not entirely understood. A number of hypotheses can be advanced, all of which undoubtedly make some contribution, but the results of the NBER project do not entirely resolve the issue. It was also difficult to determine the relative importance of economic factors—such as economies of scale, competition, and the great differential in growth rates among firms—compared to the consequences of smaller variance in incentives and constraints on policy. What does appear certain is that a QR regime must be biased toward import substitution and cannot be compatible with an export-promotion strategy.

## NOTES

1. Unless otherwise indicated, data cited for South Korea are from tables in Frank, Kim, and Westphal, while those for Brazil are from Fishlow's summary.

2. For the years 1957-1959, official grant aid averaged 87 percent of South Korean imports. Even in 1960, commodity exports were \$33 million (of which 88 percent were classified as primary commodities), imports were \$305 million, and the net goods and services balance was minus \$262 million. That compares with official grant aid of \$256 million in that year.

3. See Table 6-2 for South Korean data. It will be recalled that Brazil's bias toward exports did not begin until 1968. See Table 9-8 for details.

4. Fishlow summary, pp. 2, 35, 72.

5. Frank, Kim, and Westphal, p. 243.

6. Even if the accessibility of the Japanese market had been a significant factor in the rapid growth of South Korean exports, that consideration would be pertinent only in considering the repeatability of the export-promotion strategy and not in evaluating the contribution of export promotion to South Korea's economic growth.

7. For an exposition of the "marketed surplus" and other models of the link between the urban and rural sectors, see Vernon W. Ruttan, *Growth Stage Theories, Dual Economy Models and Agricultural Development Policy*, Department of Agricultural Economics, University of Guelph, Publication No. AE 196812 (Guelph, Ontario, June 1968).

8. It may well be that the basic explanation lies in the greater foreign exchange earning from exports than saving from import substitution per unit of resources used, but there are a few data that bear on that hypothesis.

9. The Indian government cut back real spending on investment for fear that food prices would increase even faster if investment outlays were maintained. The demand for industrial goods fell both because of reduced real incomes resulting from the poor harvest and because of reduced government investment. The alternative of increasing food imports to hold food prices and increasing investment was not feasible because the import content of the investment goods plus the import of additional food could not have been financed on reasonable terms.

10. Data from Central Statistical Organization, *National Accounts Statistics 1960-61—1972-73* (New Delhi, 1975), Table 3.

11. See Table 2-4.

12. Data from Frank, Kim, and Westphal, Table 6-2 for exports, and Table 2-3, converted at the official exchange rate, for production.

13. The experience of the South Korean electronics industry illustrates this point. Production started in the mid-1960s. In 1965, output was \$10.6 million, and \$1.8 million was exported. By 1973, output was \$475 million and \$322 million was exported. The industry's growth was therefore accompanied by increased domestic sales, but with an increasing fraction of output destined for the international market. See Sang Chul Suh, "Development of New Industry through Exports: The Electronics Industry in Korea," in Wontack Hong and Anne O. Krueger, *Trade and Development in Korea*, Korea Development Institute (Seoul, 1975).

14. It has been argued that productivity growth is not necessarily desirable as long as there is unemployment. The argument loses force if additional employment does not imply additional output. An even more important counterargument is that firms that can expand their export market rapidly can expand enough to increase employment despite productivity growth. The experience of South Korea suggests that increases in productivity did not result from labor-saving activities until about 1967, when the rural labor supply began to diminish and the real wage started increasing.

15. Of course, a country can maintain a realistic exchange rate and yet be biased toward import substitution. That was the Philippine situation. Even so, pressures to maintain a realistic exchange rate are not as great, and the growth consequences of the adjustment, when it does come, can still be adverse.

16. Díaz, pp. 237-38.

17. See Robert F. Baldwin, "The Case Against Infant-Industry Tariff Protection," *Journal of Political Economy* 77 (May/June 1969):295-305.

18. To the extent that private entrepreneurs prefer to sell in the domestic market because of international uncertainty, that can constitute rational behavior. At question here is whether additional incentives should be extended to develop productive capacity for the more certain market.

19. See C. Michalopoulos, *Financing Needs of Developing Countries*, International Finance Section, Essay on International Finance Number 10 (Princeton: Princeton University Press, 1975).

20. The reader will note that the same economic and political factors that affect policies and instruments under each strategy may also determine the initial selection of a strategy. That raises questions about whether export promotion and import substitution are goals or strategies.

21. The discussion assumes that import licenses are issued for goods competing with domestic production. If the implicit protection accorded to goods whose importation is prohibited is at least as great as the premium on import licenses, the bias will be toward import substitution.

22. The government of India attempted to encourage exports by requiring firms to commit themselves to certain export levels in return for receipt of investment licenses or other favors. The firms in many cases did comply, but it was the highly profitable sheltered domestic market that provided an incentive to undertake a small amount of exporting; bias was still strongly toward import substitution.

23. Of course, the subsidy could be financed by across-the-board import duties so that the export and import EER would both increase. If, however, import rights are conferred to exporters, that usually provides only a partial offset to the bias toward import substitution (unless the imported commodities do not compete with domestic production).

24. This argument points to the potentially high returns to foreign aid when made available to support liberalization.