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Volume Author/Editor: Jagdish N. Bhagwati

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Chapter Author: Jagdish N. Bhagwati

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PART IV

Conclusions

Foreign Trade Regimes: Overall Conclusions

What prescriptive conclusions may then be drawn regarding the optimal foreign trade strategy to be followed by developing countries? The issue of the appropriate foreign trade strategy was posed as early as the 1950s by some of the leading international economists of the day, with Ragnar Nurkse arguing for what would be described today as the import-substituting strategy on the grounds of elasticity pessimism and Gottfried Haberler, Jacob Viner, and others arrayed on the other side in favor of what might be described currently as the export-promoting strategy.¹

Interestingly, Alex Cairncross, in reviewing the relative arguments of Nurkse and Haberler had ended on a somewhat neutral note between these two strategies, appealing for a verdict from empirical evidence in the following terms:

At the end of it all, the reader may still feel that neither Nurkse nor Haberler has settled the primary issue: how far a shortage of foreign exchange (contrasted with capital, skilled labour, land, etc.) is a limiting factor in economic development. The majority of the under-developed countries are monocultures, dependent for their earnings of foreign exchange on a single commodity (or at most two or three). These earnings are highly inelastic except when exports of the principal commodity form a small fraction of the world's consumption. At the same time, nearly all the plant and machinery that they require has to be imported, so that the scale of industrial investment is limited by the foreign exchange available to pay for it. In those circumstances, what should be the policy of a country seeking to accelerate its development? We know what most countries have done; it would be interesting if we could be told, by an economist of the standing of Nurkse or Haberler, what the results have been and what they should have done.²

As it happens, the results of the present Project, as also the earlier analysis in the well-known OECD Project directed by I.M.D. Little, Tibor Scitovsky, and Maurice Scott,³ do contain an answer to Cairncross's celebrated query. It seems to come down in favor of the export-promoting trade strategy—in the manner and for reasons, and with nuances and reservations, to be discussed in the rest of this concluding chapter.

I. EXPORT-PROMOTING VS. IMPORT-SUBSTITUTING STRATEGY AND RELATIONSHIP TO PHASE ANALYSIS

The import-substituting (IS) and export-promoting (EP) trade strategies need to be defined carefully. This is particularly important as the phrase "import substitution" is often used "somewhat loosely" (as indeed in Chapter 5 in this volume) as a decline in the ratio of imports in total supply of individual activities. This definition then is a purely statistical artifact without any theoretical meaning or underpinning.⁴

The meanings that we will impart here to the two rival trade strategies are best illustrated by reference to an idealized theoretical model as follows. Thus consider the traditional model of international trade theory where primary factors produce two traded goods, X and Y ; and with the customary restrictions on production functions, we generate a production possibility curve such as AB in Figure 8-1. If CD is the given international price ratio, a free trade policy that equates domestic to foreign prices of the commodities will bring production to P^* in a perfectly competitive situation. (Note that, under these assumptions, the free trade policy is also socially optimal, an implication to which we will return later.)⁵ It is evident then that a trade regime that equates EER_x with EER_m in this model happens to be one that also implies the choice of such a free trade policy and will lead to production at P^* . Consider, however, the presence of a foreign trade regime that leads to $EER_x < EER_m$. This will imply a shift in equilibrium production to a ("distorted") point such as P where the relative production of the importable commodity Y has moved *up* from what it was at P^* .

We therefore may *define* a policy of import substitution (IS) as one where the effect of the foreign trade regime is to make $EER_x/EER_m < 1$, implicitly comparing it with the free-trade position that makes $EER_x/EER_m = 1$ and eschewing any welfare connotations from the definition. Asymmetrically, however, we will define the export promoting (EP) policy as one where, by contrast with the IS policy, EER_x/EER_m is restored to unity. This eliminates the bias against the exportables and in favor of the importables that the IS policy (with $EER_x/EER_m < 1$) implies, rather than reversing it in the other direction

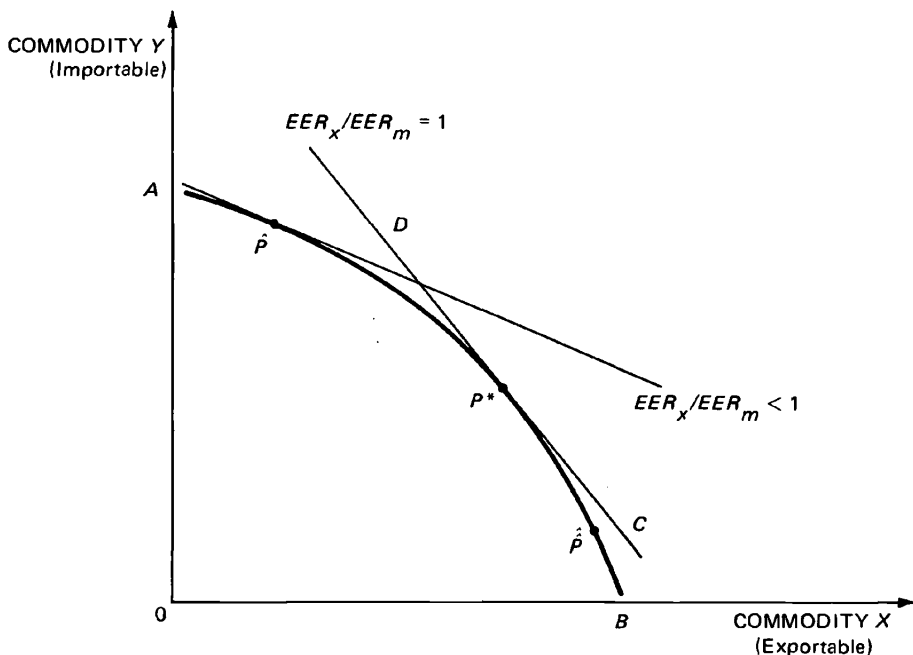


Figure 8-1. Definition of Import-Substituting and Export-Promoting Strategies.

such that $EER_x/EER_m > 1$, which would lead, for example, to production in Figure 8-1 at a point such as \hat{P} to the right of P^* .

The reason for this asymmetrical choice of definition of the EP strategy is that the countries that are popularly regarded as “export promoting” because of their successful export performance happen to offset, rather than turn on its head, the export bias implied by $EER_x < EER_m$. This is possibly one of the important reasons, as we shall presently see, for their successful *economic* performance.⁶

The link of these definitions with the Phases utilized in the Project studies is relatively straightforward since Phase II, which represents the restrictive foreign trade regime, is essentially one characterized by $EER_x/EER_m < 1$ and therefore by the IS strategy whereas the liberalized trade regimes of Phases IV and V evidently bring this ratio significantly closer to unity and hence are characterized by the EP strategy.

These “neutral” definitions leave open the question whether the *degree* of

import substitution that is implied by the IS strategy is optimal or not. They also do not address the related question as to whether the *pattern* of interindustrial import substitution under the Phase II regimes, as observed in the Project studies, is also suboptimal and, if so, whether the *pattern* of interindustrial export composition under the Phase IV and V regimes, as actually studied in the Project, is economically more mindful of costs and benefits and hence superior under the EP than under the IS strategy. The answers to both these questions, among others, are pertinent to the explanation of the superior economic performance that, as already noted in the preceding chapter, attends on the EP strategy in Phases IV and V.

II. REASONS FOR SUPERIORITY OF EXPORT-PROMOTING STRATEGY: SOME HYPOTHESES

Drawing in a stylized fashion on the evidence in the Project studies on the many issues already alluded to in this volume, we may now note that the evidence suggests that, while one source of the economic superiority of the EP strategy is the possible "neutrality" of the incentives that define the pattern of industrial and export composition under this strategy as against the "chaotic" non-neutrality of the incentives that arise in the IS strategy, almost certainly the more important source of superiority comes from the mere fact of the improved economic performance that follows from the removal of the bias against exports under the EP strategy.

A. Pattern of Import Substitution vs. Pattern of Export Composition

We have already noted in depth in Chapter 5 the chaotic pattern of import substitution that emerges under the IS strategy implied by Phase II. In large part, it should be noted, this is a consequence of the fact that the foreign trade regime leads to indiscriminate import-substituting incentives as a result of overvalued exchange rates. In principle, import-substituting incentives could be far less chaotic and more neutral across different industries if tariffs were utilized instead on an across-the-board basis, for example.

It would appear that, by contrast, the calculations of EER_x for different industries in South Korea during Phase IV suggest a less chaotic pattern of interindustrial incentives.⁷ Whether this contrast is regarded as sufficiently large depends, to a considerable degree, on the significance that is attached to the calculations of $EERs$, which are the *ad valorem* equivalents of a number of incentives that contain the usual share of "indirect" incentives such as the link-

up of domestic profitability to export sales. It also depends, to some degree, on the significance that is attached to the presence of export *targeting*, which, if it acts as a "stick" as it definitely did in South Korea in the mid-1960s,⁸ would seem to be a counterpart of the physical targeting that attends on import substitution in Phase II economies.

As it happens, there is also some statistical argumentation to suggest that the export promotional policies in a Phase IV country such as South Korea may have led to some wasteful export promotion, rather similar to the wasteful import substitution noted for Phase II countries. Thus, Wontack Hong has produced estimates recently of social losses from certain exports from South Korea.⁹

But when all this is noted, it still seems reasonable to conclude that the EP strategy under Phases IV and V does appear, in practice, to be characterized by a less chaotic and more neutral pattern of interindustrial incentives than does the IS strategy under Phase II. Whether this contrast is truly large and, in turn, makes for a substantial impact on the returns to overall investment is difficult to judge, however.¹⁰ That it should go *some* way toward explaining the superior growth performance of the EP strategy countries, on the other hand, should not be open to serious dispute.

B. The Degree of Import Substitution and Effects of Superior Export Performance

The more important source of superior economic performance of the EP economies would seem to lie, however, not in the efficiency of the export-composition pattern vis-à-vis that of the import-substitution pattern, but rather in the indisputable fact of the vastly improved export performance. The interesting and important question is: why? A number of links between superior export and improved economic performance can be suggested and their importance assessed.

First, it should be noted, in conformity with the observation above regarding the relatively greater neutrality of export incentives across different exportables under the EP strategy, that the EP trade regime does not equally tend to carry the export subsidization, on the average, to such lengths as actually to make the ratio EER_x/EER_m substantially *greater* than unity, that is, the EP strategy amounts by and large to, and is therefore in fact defined here to be characterized by, having the ratio EER_x/EER_m fairly close to unity.¹¹

It would thus appear plausible to conclude that the EP strategy tends generally to be less given to overall excesses than the IS strategy and that, in practice, this may be the source of its asymmetrical economic advantage. If so, we must ask again why this asymmetry exists in practice. The reasons would

seem partly to consist in the fact that the successful shift to export-promoting strategy (or Phase IV) generally takes place within the overall context of continuing exchange controls but that the QR-caused bias against exports is offset by giving the import premiums to exporters through schemes such as supply of imported materials at international prices, and so on,¹² and by using exchange rate adjustment more freely and thereby directly reducing import premiums and hence the bias against exports. The result is *generally* (not always) to eliminate or reduce the bias against exports rather than to create excessive bias *for* exports. Because of budgetary considerations, cash subsidies that could conceivably create massive bias for exports are usually not substantial (though not unknown). On the other hand, the import-substituting strategy, especially via the mechanisms of import premiums from QRs, could and did typically cause the EER_m to get way out of line with EER_x (which was then determined almost exclusively by the exchange rate). The costs of such a *substantial* fall in EER_x/EER_m below unit are generally not understood and, in any case, do not fall directly on the budget.

Second, equally important might be the sheer fact that a more comfortable balance of payments position, resulting from improved export incentives and earnings, generally eases up the excesses of the IS strategy. This should be obvious from the well-known demonstration that, under a foreign exchange bottleneck (in the sense of Chenery), additional foreign exchange is more productive than under a savings bottleneck. But it is also apparent from the fact that a comfortable external payments situation eases up excess capacity (generated largely by the QR regime in the first place), may reduce the need to hold excess inventories, and leads often to elimination of critical bottlenecks, and so on.¹³ It is perhaps remarkable that these kinds of problems, attendant on economies in Phase II, are rarely to be found in Phase IV and V economies that have successfully transited to the EP strategy on a continuing basis.

Third, in regard to the general easing of the balance of payments (and hence of the losses that attend restrictive payments policies) under the EP strategy, it is also worth noting that this effect has been reinforced in the Project countries by the substantial inflow of foreign capital that seems to attend such a strategy.¹⁴ While different political factors help to explain the substantial inflows of foreign funds in South Korea, Brazil, and Israel, these are undoubtedly to be supplemented by economic factors in the case of the former two countries. For South Korea, in particular, the proportion of gross investment coming from foreign saving has run at well over a third on the average and, as a proportion of GNP, foreign saving has run at an average of as much as around 10 percent during 1960-1971.¹⁵

This inflow is *not* exogenous to the EP strategy, as is sometimes assumed, but can be seriously argued to be a result in large part of the EP strategy itself. Thus, while the bulk of the Korean and Brazilian influx of foreign funds is

through public *borrowing* rather than through inflow of direct investment, this borrowing would not have been possible were it not for an export performance that was perceived to be truly remarkable and as a sign of the ability of the country to avoid the "transfer problem" difficulties that could otherwise be expected to follow from sizeable external borrowing. It is of course well known that private bankers (and the IBRD, Asian Development Bank, etc., which are included under "private" in at least some statistics) look at debt-service/export ratios, so that loans are rather directly linked, in some fashion, to export performance. Hence, it may even be legitimate to regard Brazil's "export-led" growth as merging, *via* this link between export performance and foreign borrowings, into what Fishlow calls the "debt-led" model of economic growth.

Besides, it can be argued that the large-scale inflow of *direct investment*, which has also been more sizeable in South Korea (as a percent of GNP) than in the other countries in the Project, reflects the EP strategy.¹⁶ In fact, it may be argued that, under the EP strategy, both the magnitude of the private (direct) investment inflow *and* its efficacy in promoting economic growth will be greater over the long haul than under the IS strategy. This contrast may be explained as follows. Regarding *magnitude*, an EP strategy, with its lack of discrimination against foreign markets, is likely to attract foreign firms essentially on the nineteenth-century pattern of "factor endowment" advantages. Whereas in the nineteenth century, this meant natural resources, today it means exploiting Heckscher-Ohlin style low wages. On the other hand, by creating "artificial" inducement to invest *via* tariffs and/or QRs, so that one gets "tariff-jumping" investments oriented to the domestic market alone, the IS strategy provides an artificially limited incentive to invest in the country. The lack of complete time-series data on direct investment magnitudes in the countries in the Project and elsewhere prevents a statistical examination of this hypothesis. But it seems reasonable enough, with due adjustments being made for differences among countries on account particularly of their economic size, political attitudes to foreign investment, and political stability more generally.

As regards the *efficiency* of foreign direct investment under the EP strategy, it can again be argued that "tariff-jumping" investments, induced by the IS strategy, are more likely to imply social losses or (at minimum) reduced gains than investments attracted by Heckscher-Ohlinesque factors. Thus, following a long line of theoretical writings by Uzawa, Hamada, Minabe, and Bhagwati, and independently thereof, Brecher and Díaz-Alejandro have recently argued succinctly that tariff-induced investment in a 2×2 trade-theoretic model of a small open economy that imports capital-intensive goods will, for small changes, *worsen* the welfare loss that the tariff itself implies.¹⁷ In this model, it can be shown that successive imports of foreign capital will lead to welfare changes as illustrated in Figure 8-2. Thus the tariff leads to

decline in social utility from F to T ; successive inflows of capital thereafter reduce welfare until autarky is reached at A ; then welfare starts improving as the domestic price ratio moves toward the international price ratio; with M_1 , the two price ratios are equal, as in Mundell,¹⁸ and further inflows will leave welfare at this, free-trade-equivalent, level until complete specialization is

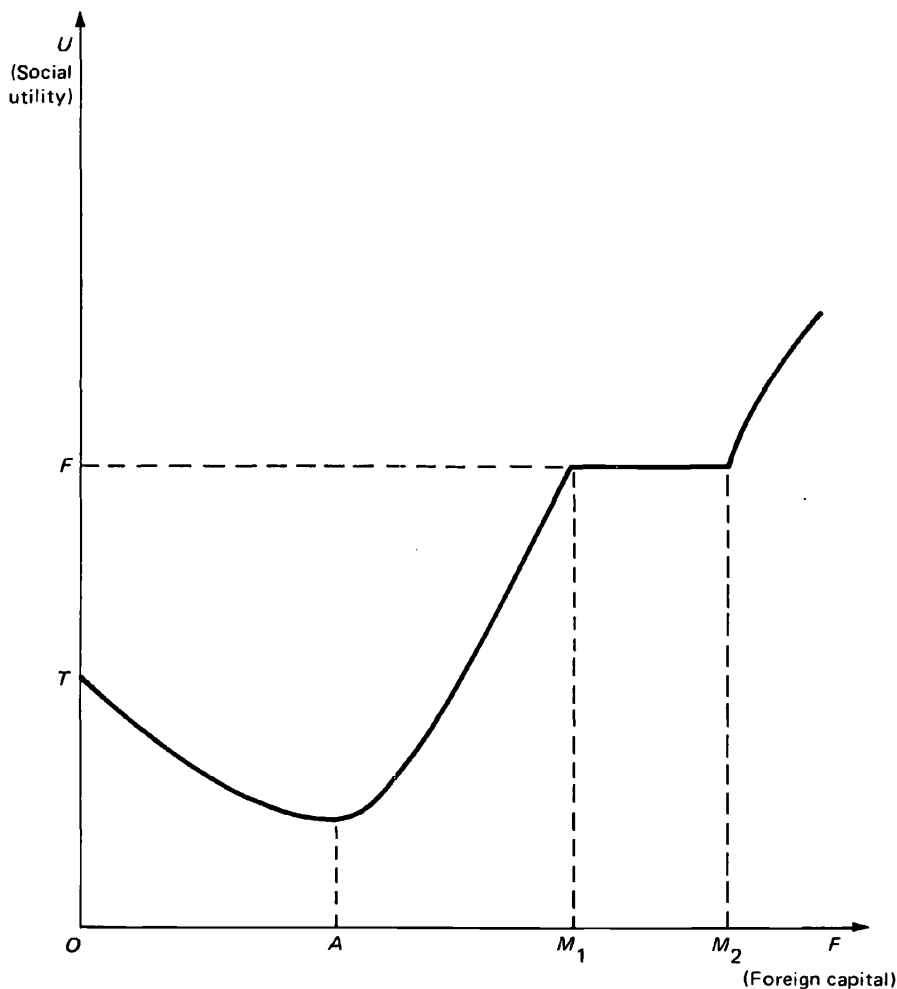


Figure 8-2. Welfare Effect of Successive Inflows of Capital in Presence of Tariff Distortion.

reached and then the MacDougall-type¹⁹ gains will follow from diminishing returns to inflowing capital. As long, therefore, as the IS strategy leads to inflows within the range OA (short of autarky), which seems reasonable, the inflow of foreign capital will be immiserizing rather than welfare improving.

Finally, there is some statistical argumentation in the Project studies to indicate that the IS strategy may be sometimes growth reducing because the import-substituting industries happen (empirically) to be capital intensive relative to the exportable industries. Systematic evidence on this possibility is found in Chile by Behrman²⁰ and for Turkey, in particular, by Krueger who presents a detailed statistical exercise of the incremental income that would then have followed from a reallocation of investments within the manufacturing sector so as to reflect a "moderate import-substitution" strategy and alternatively a "balanced export promotion and import substitution" strategy. She concludes that the latter alternative would have resulted in a "considerably higher rate of growth of manufacturing output."²¹

It may also be noted here that a more complex programming exercise by Bhagwati and Srinivasan, using the well-known Eckaus-Parikh optimizing planning model for India, also shows that an improved export performance would have resulted in a greater value of the objective function. However, the critical role in this outcome seems to be played, not by the relative capital-output requirements of the exportables and the importables but rather by the fact that the planning model builds into itself the foreign exchange constraint possibility and the "better-export-performance" alternative enables the planner to get around this with greater benefit as evaluated by the specified objective function.²²

While the factors just noted are probably the ones that are critical in defining the asymmetrical outcomes under the IS and the EP strategies, some additional factors may be cited that might contribute to the asymmetry but for which no systematic evidence is yet available.

Thus, one could argue that the export-promoting strategy may lead to a *generally* reduced reliance on direct or physical, as distinct from price, measures.²³ Direct controls have been argued with plausibility, in the Project studies as also in the earlier OECD work, to be very costly in practice. It is possible that the general incidence of such direct controls may be significantly less under export promotion because price, distribution, and other controls may make little sense to bureaucrats when firms' outputs are mainly addressed to overseas, rather than domestic, markets. A different, and perhaps more perceptive, formulation of this kind of contrast was well put by an economist familiar with both the Indian (Phase II) and the South Korean (Phase IV) trade regimes. The Indian regime consists mainly of "don'ts" whereas the Korean regime consists mainly of "do's." Whether these contrasts are, in a basic political sense, endemic to the two strategies being contrasted is not clear; but the Project studies do suggest that they exist currently.

In the still more grey area, one may argue that the EP strategy must produce, through international competition, greater efficiency than the IS strategy with its sheltered markets. While this argument is plausible *a priori*, there is as yet no real evidence at all on the subject. The issue besides is complex as the domestic competition may be sufficient to provide the incentive to efficiency under import substitution whereas exports may be to imperfectly competitive foreign markets or may simply be subsidized to the point necessary to offset any possible inefficiency-raised cost disadvantage. As already noted in Chapter 7, there is little convincing evidence on these questions yet.

Then, there is the factor of economies of scale, long recognized in international trade theory and policy discussions relating to customs unions, free trade areas, and similar cases where the size of the market is critical to the analysis of economic efficiency. In relation to the EP strategy, it seems plausible to argue that the creation of incentives (or rather, the elimination of the disincentives) to enter the foreign markets augments the size of the market and hence will lead to greater exploitation of economies of scale. Again, however, the issue is more complex insofar as the growth of firm size may be constrained by other policies and objectives (as in India) so that export promotion may take place from firms with constrained sizes by diversion from domestic production and/or by growth of new licensed firms of small size. Again, therefore, the statistical evidence and analysis of this possible cause of asymmetrical advantage of the EP strategy is not yet available in anything like the degree that would be reasonably compelling; but it does remain a plausible hypothesis.

Finally, it should be noted that, as stated in Chapters 6 and 7, there is little evidence that the EP countries are technically more progressive or that they have higher savings ratios because of a larger export sector. The superior economic performance of the EP strategy therefore cannot be additionally explained, at least on current evidence, by these "dynamic" considerations.

III. CONCLUDING OBSERVATIONS

Thus, on the basis of substantially more detailed and systematic analysis of growth effects than before and on the Phasewise classification of the country experiences, the present Project studies have managed to provide fairly persuasive support to the proponents of the EP strategy, as defined here. The results also point carefully in the direction of a number of unsettled hypotheses that might assist in explaining this superiority of the EP strategy and therefore suggest further areas for systematic investigation.

At the same time, as is evident from the companion synthesis volume of Professor Krueger, the Project throws considerable light on the question as to how the transition to the EP strategy might be successfully made, starting from the restrictive foreign trade regimes associated with the IS strategy. Thus the Project manages to go a substantial way in the direction of filling a lacuna in the previous studies of the trade and payments policies of developing countries.

While however, the Project underlines the developmental advantages that have accrued to the countries utilizing the EP strategy and also illuminates the manner in which restrictive foreign trade regimes may be successfully reshaped toward this end, a corollary to such a prescription for more than just a handful of developing countries is that the world trading system be reasonably open and accommodating to the trade needs of such a strategy. In fact, the problems that Japan has run into in regard to her international economic policy-making illustrate this point to advantage. It is thus not merely that Japan has often had an undervalued yen but also that, even if she was not building up exaggerated reserves and was instead spending all her export earnings, she would create waves because her growth rate, and the associated trade expansion, are just too great for the more sluggish rest of the world to accommodate without serious disruptions of *sectoral* markets that lead to unceasing calls for VERs (voluntary export restrictions) and other trade restrictions against Japanese exports.

Ragnar Nurkse, writing in the 1950s, was quite aware of this problem for the EP strategy. The OECD Project authors took the precaution also of stressing this when recommending against the IS strategy.²⁴ In fact, one cannot suppress the thought that the success stories of South Korea, Taiwan, Brazil, Singapore, and Hong Kong would not have been quite so impressive if they had not been built partly on the failures of the countries sticking overly long to the IS strategy and their consequent export (and associated economic) lag.

Nonetheless, as the Project results have made clear, even if the growth of protectionism in the international economic system prevents the world markets from accommodating the exports that would ensue if all or many developing countries followed the EP strategy, and therefore they would have to be import substituting in response to this external situation, it does not follow that the Phase II type policies of chaotic import substitution *pattern* have also to be accepted. The latter are, in principle, avoidable by the pursuit of Phase IV and V type liberalized trade regimes, while utilizing relatively neutral across-the-board tariffs so as to achieve *both* the required degree of import substitution *and* a rational pattern of it as well. A policy of exchange rate overvaluation, resulting in Phase II, is empirically a typically more expensive way to undertake the import substitution that may be required by an unfavorable external environment.

NOTES

1. Cf. Jacob Viner, *International Trade and Economic Development* (Oxford: Clarendon Press, 1953); Ragnar Nurkse, *Patterns of Trade and Development*, Wicksell Lectures (Stockholm: Almqvist and Wicksell, 1959); and Gottfried Haberler, *International Trade and Economic Development* (Cairo: National Bank of Egypt, 1959). Raul Prebisch has also been identified generally with the import-substituting position.

2. Alex Cairncross, *Factors in Economic Development* (London: 1970), p. 208.

3. Cf. I. Little, T. Scitovsky, and M. Scott, *Industry and Trade in Some Developing Countries: A Comparative Study* (London: Oxford University Press, 1970).

4. For a systematic analysis of the measures of import substitution, as used in the statistical literature by economists such as Hollis Chenery, and for a clear statement of the need to define the concept analytically, rather than as a departure from initial import to supply ratio, see Padma Desai, "Alternative Measures of Import Substitution," *Oxford Economic Papers* 21 (November 1969): 312-324.

5. The conditions under which such optimality of free trade may break down have been analyzed in depth in the literature on trade and distortions. For a synthesis of these results, see J. Bhagwati, *The Theory and Practice of Commercial Policy*, 1968, op.cit.; H.G. Johnson, "Optimal Trade Intervention in the Presence of Domestic Distortions," in R.E. Caves, H.G. Johnson, and P.B. Kenen, eds., *Trade, Growth, and the Balance of Payments* (Amsterdam: North Holland Co., 1965); and J. Bhagwati, "The Generalized Theory of Distortions and Welfare," in J. Bhagwati, R.W. Jones, R. Mundell, and J. Vanek, eds., *Trade, Balance of Payments, and Growth* (Amsterdam: North Holland Co., 1970). A recent, book-length review of these results is also available in W.M. Corden, *Trade Policy and Economic Welfare* (London: Oxford University Press, 1974).

6. Note that all definitions are essentially arbitrary and must be chosen so as to reflect analytical convenience.

7. *South Korea*, op.cit., Chapter 6, p. 84.

8. *Ibid.*, pp. 46-47.

9. Wontack Hong, "Distortions and Static, Negative Marginal Gains from Trade," *Journal of International Economics* (May 1976). The Hong study utilizes input-output techniques rather than the technique of valuing inputs and outputs at international prices, which is more appropriate to the problem at hand and which was used to demonstrate the "extreme" example of wasteful export promotion represented by value subtraction at international prices for exported items in earlier studies of India and Pakistan. For a theoretical examination of the value subtraction phenomenon, see J. Bhagwati, T.N. Srinivasan, and H. Wan, Jr., "Value Subtracted, Negative Shadow Prices of Factors in Project Evaluation, and Immiserizing Growth: Three Paradoxes in the Presence of Trade Distortions," *Economic Journal* 88 (March 1978): 121-125.

10. Skepticism about the size of the impact may stem from the somewhat tenuous nature of the effective incentive calculations (as noted); it may also follow from a Harberger-type notional calculation suggesting that the allocative losses tend to be excessively small fractions of national income anyway. The latter argument, however, is conditional on a rather static view of reallocation of given resources: once growing resources are taken into account, as they should be for our present purposes, the estimated losses may be much larger. See the extended discussion of this point in J. Bhagwati, *The Theory and Practice of Commercial Policy*, 1968, op.cit., pp. 51-52.

11. For evidence on this, see *South Korea*, op.cit., Table 5-10 which uses PPPEERs rather than EERs and also see Krueger, *Liberalization Attempts*, op.cit., Table X-2, where the EERs for Israel and South Korea are given for 1955-1971 and 1961-1970, respectively. Needless to say, there are exceptions on several specific commodities where export subsidization does get carried beyond

to EER_x/EER_m being greater than unity in varying degrees: this being part of the chaotic policy incentives commented on earlier; and in the South Korean case the average EER_x/EER_m ratio has also often tended to be higher than unity, while remaining fairly close to it.

12. A great deal of evidence on such schemes is to be found in the Project studies; also see Chapter 2 above.

13. See the discussion in Chapter 5 on these points.

14. The general easing of the balance of payments in Brazil was also aided, as Fishlow has reminded the author, by the fact that, from the mid-1960s, the Brazilian terms of trade changed quite favorably. Thus, while exports in nominal terms were increasing at rates of more than 30 percent, the volume increase was a much more modest (though impressive) 10 percent approximately.

15. Cf. *South Korea*, op.cit., pp. 106-107 for details.

16. Ian Little has pointed out to the author that, in the case of Taiwan, which is not included in the Project but is a successful example of the EP strategy, foreign direct investment has not been important. In Taiwan, according to his estimates, private foreign investment was negligible in the 1950s, and from 1960-1966 it still only averaged about US \$4 mn. per annum. From 1967 through 1975 it has averaged US \$47 mn. (including overseas Chinese investment which may be about 30 percent of the total). This represented 6½ percent of average fixed capital formation in manufacturing. Judging by approvals, 43 percent of the cumulative total had gone into electrical machinery and electronics, followed by chemicals, non-electrical machinery and instruments, and the rest nowhere. It is also notable that the multi-national company making goods for export to itself or its own sales organization was important only in electronics (and this is also true of South Korea). Another fact which helps to put foreign investment in perspective is that, in 1976, 21 out of the 321 largest industrial corporations were foreign.

17. Cf. R. Brecher and Carlos Díaz-Alejandro, "Tariffs, Foreign Capital and Immiserizing Growth," *Journal of International Economics* 7 (November 1977): 317-322.

18. R.A. Mundell, "International Trade and Factor Mobility," *American Economic Review* 49 (June 1967): 321-325.

19. G.D.A. MacDougall, "The Benefits and Costs of Private Investment from Abroad: A Theoretical Approach" *Economic Record* 36 (1960): 13-35.

20. *Chile*, op.cit., pp. 275-280 and p. 286: "Finally, the foreign-sector regime also might alter the aggregate capital-output ratio through changes in the allocation of investment by destination among production sectors with different capital intensities. . . above, in fact, evidence is reported of more restrictive regimes leading to greater investment in more capital-intensive subsectors."

21. *Turkey*, op.cit., p. 261 and pp. 255-263. Krueger is careful to take into account possible objections regarding the marketability of the resulting increases in exportable production. She also explores the import content and employment implications of the alternative allocational strategies.

22. *India*, op.cit., Chapter 14. The authors emphasize the illustrative nature of their exercise but conclude that: "On balance, we still consider the present exercise to be instructive in its illustration of the growth potentiality of additional exports (in the manner precisely set out at the outset of this chapter), simply because any unhappy features of the model will affect both the simulation and the reference runs; and there seems to us to be no clear presumption that the *difference* between the two runs, attributable to the change in the export vector, will be significantly affected. We should also note, to avoid unnecessary confusion, that the Eckaus-Parikh model is a *planning* model and *not* an econometric (behavioral-predictive) model so that the reader should not be surprised by discrepancies between the model's simulation runs and actual developments in the Indian economy" (p. 198).

23. The points in this paragraph and the next two were made, with slight differences in emphasis, in J. Bhagwati and A. Krueger, "Exchange Control, Liberalization and Economic Development," *American Economic Review, Papers and Proceedings* 63 (May 1973): 419-427.

24. Cf. Nurkse, op.cit., and Little, Scitovsky, and Scott, op.cit., Chapter 8.