A Comparative Survey of Industrialization Policies in Fifteen Semi-Industrial Countries

By

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I. Introduction

This survey is an interpretative review of the industrialization policies that have been pursued since 1950 in selected developing countries. As virtually everywhere in the Third World industrialization continues to be regarded as the most dynamic means of accelerating the process of economic development, such a review is worthwhile for the lessons it can provide for many other developing countries at lower stages of industrialization.

The review is based upon findings of individual studies which have been carried out in recent years at the Kiel Institute of World Economics for fifteen countries, which today are at an intermediate stage of industrial development. In the early 1970s, these countries, taken as a whole, accounted for 57 percent of developing countries' gross national product (at current market prices), for 54 percent of their population and for 75 percent of both their manufacturing value added and their manufactured exports. The countries (and the authors of their studies) are: Brazil (W. G. Tyler), Colombia (J. P. Wogart), Egypt (M. Girgis), Hong Kong (J. Riedel), India (R. Banerji), Israel (R. W. T. Pomfret), Malaysia (L. Hoffmann), Mexico (L. Müller-Ohlsen and B. Stecher), Pakistan (G. B. S. Mujahid), Singapore (D. Lotz), South Korea (B. Stecher), Spain (J. B.

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Donges), Taiwan (J. Riedel), Turkey (L. Müller-Ohlsen), and Yugoslavia (C. R. Chittle).

The sample provides reasonable diversity in regard to the industrialization and trade policies adopted, as well as in geographical and cultural terms. In addition, it reveals, as is shown in Table 1, distinct intercountry differences in economic variables which are important for the purpose at hand. Noteworthy are the differences in domestic market size and thus in the scope for and limits of obtaining economies of scale in the manufacturing industry. If gross national product is taken to measure market size, the sample consists of four large countries (India, Brazil, Spain, and Mexico), four medium-sized countries (Yugoslavia, Turkey, South Korea, and Colombia) and seven more or less small countries (Israel, Egypt, Taiwan, Malaysia, Pakistan, Hong Kong, and Singapore). Had we used, as is not uncommon, population figures to assess the size of the domestic market, we would have obtained a different ranking: Pakistan would have then appeared as large country, and both Spain and Egypt as medium-sized. These differences between the two rankings are brought out by the difference in per capita income among the countries: in 1973 it ranged from over US $ 3,000 in Israel to less than US $ 100 in Pakistan.

Closely related to the size of the domestic market is the "openness" of the national economy to international trade. Here the intercountry differences are also remarkable. In terms of the shares of both manufactured exports in gross value output and manufactured imports in domestic consumption, the degree of openness is highest in Hong Kong, Taiwan, and Singapore, and lowest in Brazil, India, and Pakistan.

Finally, there is diversity in the stage of industrial development achieved by the sample countries. Whereas all fifteen economies can be regarded as having already left the early phase of industrialization (in which capital, skill and infrastructural requirements are rather low), four countries (India, Malaysia, Pakistan, and Colombia) have not yet reached the 20 percent share of manufacturing value added in GDP, three countries (Spain, Taiwan, and Yugoslavia) are approaching 30 percent and Hong Kong has even surpassed it. The differences in the degree of industrialization are reflected, to a certain extent, in the intercountry variation of both the labour productivity (as measured by the per capita value added in the manufacturing sector) and the labour absorption capacity of the manufacturing industry (as measured by the corresponding employment share in the total labour force): on the basis of the figures given in Table 1, the coefficients of rank correlation between the two variables are 0.774 and 0.659, respectively, being statistically significant at the 0.01 level.

Table 1 — *Selected Indicators on Market Size and Production Orientation of the Sample Countries, 1973*[a]

	Unit	Brazil	Colombia	Egypt	Hong Kong	India	Israel	South Korea	Malaysia	Mexico	Pakistan	Singapore	Spain	Taiwan	Turkey	Yugoslavia
Population	millions	101.1	23.8	35.6	4.2	575.0	3.2	32.9	11.8	56.0	68.9	2.2	34.7	15.4	37.4	21.0
Gross national product	billions US $	63.2	10.0	9.3	4.9	69.0	9.7	12.4	6.4	48.4	6.3	4.0	61.6	9.1	20.4	20.7
GNP per capita	US $	625.0	419,5	260.6	1 175.0	120.0	3 053.0	375.8	545.0	864.2	91.5	1 847.4	1 773.2	586.6	536.5	989.8
Manufacturing value added per capita	US $	124.3	77.3	50.7	300.2	11.8	563.5	84.3	72.6	223.8	12.7	970.6	447.7	136.3	106.6	261.6
Gross domestic investment as proportion of GNP	percent	20.2	20.1	12.3	25.7	16.5	31.8	26.2	18.6	21.3	14.0	26.4	23.7	25.3	18.6	24.1
Manufacturing employment as proportion of total labour force	percent	11.0[b]	15.4[c]	13.5[b]	46.1[c]	9.5[b]	24.1	13.9[b]	8.8[b]	16.7[b]	12.0[b]	19.7[b]	13.5	18.7	8.4	17.7[d]
Agriculture and mining as proportion of GDP	percent	17.7[e]	31.1	31.2	2.6[c]	48.8[d]	5.8[e]	29.2	35.7	11.5	36.4	2.7	13.5	16.4	27.3	18.4
Manufacturing as proportion of GDP	percent	24.6[e]	19.4	21.6[f]	32.1[c]	13.4[d]	23.6[e, f]	24.3	15.4	25.4	15.5	26.2[f]	26.7	29.8	23.6[f]	30.1[f]
Construction, electricity and transportation as proportion of GDP	percent	9.9[e]	12.9	10.0	11.5[c]	11.4[d]	22.1[e]	12.6	10.8	9.8	12.1	8.9	14.6	12.6	13.3	21.6
Trade and other services as proportion of GDP	percent	47.8[e]	36.6	37.2	53.8[c]	26.4[d]	48.5[e]	33.9	38.1	53.3	36.0	62.2	45.2	41.2	35.8	29.9
Manufactured exports[g] as proportion of total exports	percent	20.9	33.5	34.8	76.7	48.4	45.2	86.2	42.0	46.0	56.0	92.0	79.4	95.2	31.0	77.6
Manufactured exports[g] as proportion of manufacturing output	percent	4.6[c]	6.2[c]	11.9[b]	66.8[c]	5.7[c]	13.3[c]	24.8[c]	13.4[c]	4.0[c]	4.0[b]	30.9	13.0	52.6	4.1[c]	19.8[c]
Manufactured imports[g] as proportion of available domestic manufactured supply	percent	10.9[c]	16.7[c]	23.8[b]	77.7[c]	7.8[c]	32.2[c]	26.6[c]	36.1[c]	10.8[c]	7.0	48.0	17.1	46.5	21.5[c]	26.5[c]

[a] All values at current prices. — [b] 1970. — [c] 1972. — [d] 1971. — [e] Shares are related to net domestic product. — [f] Including mining. — [g] Including processed food, beverages and tobacco manufactures; excluding unwrought metals.

Source: Calculated from IBRD, *World Tables, 1973*, Washington, D. C. — ILO, *Yearbook of Labour Statistics*, 1974, Geneva. — UN, *The Growth of World Industry*, Ed. 1973, Vol. 1, New York. — UN, *Commodity Trade Statistics*, 1972; 1973; New York. — National production and trade statistics as quoted in the country studies.

In sum, the country sample appears convenient for the purpose at hand. It is understood that each country study will speak for itself[1]. Hence, the following survey can be confined, as far as possible, to summarizing the lessons for economic policy making which emerge from the findings of the individual studies. The paper is divided into four sections. First, it sorts out the choice of industrialization strategy made by the sample countries. Second, the ingredients and implications of the import substitution policies pursued are analyzed. Third, the attempts to shift toward more outward-looking policies are discussed. The final section offers some concluding remarks on the lessons which emerged from past policy making experience and on their relevance for the future in a changed international trade environment.

II. The Industrialization Policies in a Broad Perspective

The basic factual information about the configuration of the policies pursued in the various sample countries is given in Table 2. This table includes only major policies adopted, and indicates when they became effective and when they were discontinued. It is, of course, possible that we have overlooked in one case or another policies that more specialized country experts, particularly, indigenous ones, would consider major. In our context, however, this risk seems worth taking. By deliberately concealing the myriad of specific measures which the industrialization policy in fact encompassed, Table 2 provides a succinct view of the instruments the governments considered pivotal to the industrialization objective, and describes the overall economic philosophy of what constituted efficacious actions.

Although the picture is fairly mixed and varies over time on several critical points, there is a great deal of similarity in the principles underlying policy making. When the countries under study began to pursue large-scale industrialization vigorously (the European and Latin American ones in the 1930s, the Asian ones at the end of the 1940s and in the 1950s), they generally placed emphasis on import substitution and kept their sights on bringing into existence domestic industries to take over from imports the ready-made markets. Only Yugoslavia, by means of its country planning system and bilateral barter trade agreements, embarked on a process of import substitution accompanied to some extent by manufactured exporting[2].

[1] Each country study has been, or is being, published separately in the form of books and/or articles in professional journals. A complete list of works is available upon request.

[2] See C. R. Chittle, *Industrialization and Manufactured Export Expansion in a Worker-Managed Economy: The Yugoslav Experience*, July 1976, pp. 39 sqq., manuscript.

Table 2 — *A Profile of Major Post-War Industrialization and Trade Policies in the Kiel Sample Countries*

Sector	Type of policies	Countries concerned
Production	(i) Industrial licensing system under which the establishment, expansion, and both sectoral and geographical alteration of industrial activities require governmental approval	Brazil, Egypt (since 1957), India, Mexico, Pakistan, Spain (relaxed since 1963), Taiwan (gradually lifted after 1954)
	(ii) Selective promotion (generally by tax incentives) of industries designated as "essential," "desirable," or "pioneering"	all countries but Hong Kong
	(iii) Creation of industrial estates	India, Korea (since 1966), Malaysia, Singapore, Spain (since 1964), Taiwan (since 1965), Turkey (since 1963)
	(iv) Price controls (at times) on selected industrial goods required as inputs by "priority sectors"	Brazil (since 1965), Colombia, India, Malaysia, Mexico, Pakistan, Spain, Turkey, Yugoslavia
	(v) National plans for economic development over three and more years (indicative for the private sector, compulsory for the public sector)	Brazil (since 1964), Colombia, Egypt (since 1957), India, Israel (since 1958), Korea, Malaysia (since 1955), Mexico, Pakistan, Spain (since 1964), Turkey (since 1963), Yugoslavia
	(vi) Direct government investment in industry (public enterprises)	all countries but Hong Kong, Israel, Korea and Singapore
Factor market	(i) Minimum wage legislation (including high social charges and severance pay regulations)	Brazil, Colombia, Egypt, India, Malaysia, Mexico, Pakistan (since 1969), Spain (since 1963)
	(ii) Interest rates ceilings and/or credit rationing (not determined by business cycle considerations)	Brazil (relaxed since 1964), Egypt (since 1957), Korea (relaxed since 1965), Mexico
	(iii) Tax benefits for business income derived from investment such as tax holidays lasting several years, reduction of income or profit tax, tax exemptions or ceilings, loss-carry-forward provisions, allowances for accelerated depreciation (not determined by business cycle considerations)	all countries but Hong Kong and Yugoslavia, to varying degrees
	(iv) Exemption from, or reduction of, customs tariffs on capital goods which are not domestically produced	Brazil (since 1957), Egypt, Korea, Malaysia, Mexico, Taiwan, Turkey
Foreign investment	(i) Prohibition of private foreign investment	Yugoslavia (until 1967)
	(ii) Investment proposals made subject to government approval	Colombia, Egypt, India, Korea, Malaysia (since 1973), Mexico, Spain (until 1959), Turkey, Yugoslavia (since 1967)
	(iii) Requirement of domestic majority ownership and constraints on profit remittances abroad and capital repatriation	Colombia, Egypt (gradually liberalized after 1967), India (selective), Mexico, Spain (until 1959), Yugoslavia (since 1967)
	(iv) Exclusion of foreign investment from certain ("key" and/or "inessential" and/or "saturated") industries	Brazil, Colombia, Egypt, India, Mexico, Pakistan, Spain, Turkey, Yugoslavia (since 1967)
	(v) National treatment with virtually no foreign exchange restrictions and domestic ownership requirements	Brazil, India, Israel, Korea, Pakistan, Singapore, Spain (since 1959), Turkey
	(vi) Direct subsidies and tax incentives	Korea, Malaysia, Mexico, Taiwan
Imports	(i) Import licensing combined with quotas and/or, at times, with prohibitions of certain imports (considered either as luxuries or as locally available)	all countries but Hong Kong and Singapore, to varying degrees. Gradual liberalization in Brazil (after 1957), Colombia (after 1967), Israel (after 1962), Korea (after 1960), Spain (after 1959) and Taiwan (after 1958)

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Sector	Type of policies	Countries concerned
Imports	(ii) Tariffs (generally ad valorem) and other price measures (such as indirect taxes, surcharges or prior-deposit requirements), generally with escalating rates from lower to higher levels of fabrication	all countries but Hong Kong, to varying degrees
	(iii) Multiple exchange rates	Brazil (1953—57), Colombia, Egypt (1957—62), Israel (1952—55), Korea (until 1964), Spain (until 1959), Taiwan (until 1963), Turkey (until 1960), Yugoslavia (until 1961)
Exports	(i) Licensing for exports (totally or partly) with or without minimum export price requirements	Brazil (until 1964), Colombia (since 1973), Egypt (since 1959), India, Malaysia (until 1969), Pakistan, Spain (until 1959), Taiwan (until 1958), Turkey (gradually liberalized after 1958), Yugoslavia
	(ii) Taxes and/or customs duties on export	Egypt, India, Malaysia, Mexico, Pakistan, Spain (until 1959), Taiwan (until 1954)
	(iii) Fixing of export targets	Korea (since 1962), India (since 1970)
	(iv) Remissions and compensation of tariffs on imported products used in finished exports and exemptions from indirect taxes on domestic production	all countries, mostly starting in the early sixties
	(v) Export vouchers for import replenishment with premiums on their resale, priority allocation of foreign exchange to exporters for the importation of necessary input, or foreign exchange retention quotas	Colombia, Egypt (temporarily since 1960), India, Korea (until 1960), Mexico, Pakistan, Taiwan (until 1963), Turkey (since 1968), Yugoslavia (since 1966)
	(vi) Income tax concessions for earnings from export (including special depreciation allowances)	Brazil (until 1971), Colombia (since 1967), India (since 1960), Israel (since 1965), Korea (since 1961), Malaysia, Mexico (since 1958), Pakistan (since 1963), Singapore, Taiwan (since 1960), Turkey (since 1969)
	(vii) Export credits (at preferential conditions) and credit insurance	all countries but Hong Kong and Singapore, to varying degrees and starting in the sixties
	(viii) Exchange-rate policy of gradual devaluation ("sliding peg")	Brazil (since 1968), Colombia (since 1967), Israel (since 1975), Korea (since 1965)
	(ix) Establishment of export processing zones	Colombia (since 1970), Hong Kong, India (since 1972), Korea (since 1970), Malaysia (since 1972), Mexico (since 1962), Singapore, Taiwan (since 1966)
	(x) Participation in international free-trade areas	Brazil (since 1961), Colombia (since 1961 and 1969), Hong Kong, India, Israel (since 1975), Malaysia, Mexico (since 1961), Pakistan, Singapore, Turkey (since 1964)
	(xi) Government assistance to marketing abroad	all countries, to varying degrees and generally beginning in the sixties

Source: J. B. Donges and J. Riedel, *The Expansion of Manufactured Exports in Developing Countries: An Empirical Assessment of Supply and Demand Issues*, Institut für Weltwirtschaft, Kiel Working Papers, No. 49, Kiel, July 1976.

Nevertheless there are three exceptions to this common policy-making experience. One is Hong Kong, where the domestic market is so narrow that the only way to orient the manufacturing industry, for it to be

profitable, was towards the world market. The colony has been found to be a pure case of industrialization through the exploitation of comparative advantage within a framework of a laissez-faire economy[1]. The second exception is provided by Singapore, which found itself in a similar situation to Hong Kong after its separation from Malaysia in 1965: industrialization was then immediately shifted towards export expansion and government intervention, or red tape was kept to a minimum[2]. The third exception is Malaysia, where government industrialization policy was determined by the application of the "market principle" and the encouragement of domestic and foreign competition[3].

One should have also expected Israel to follow an export-oriented industrialization policy from the start on the grounds of its small size. But contrary to conventional wisdom, this country did not make economically rational decisions when industrialization started. Import substitution was encouraged, from 1950 to 1962, similarly to the way as it was done by other developing countries, and a powerful reason for doing so was that Israel's geographical situation made a policy aimed at economic self-sufficiency particularly attractive[4].

The fact that most countries in the sample started industrialization by substituting domestic production for imports is not, in principle, contradictory to expectations based on textbook theorems. Under laissez-faire conditions it is natural in a growing economy for domestic production to meet part of the existing and increasing domestic demands, thereby substituting domestically produced goods for imports. This "natural" import substitution is a result of competitive advantages accruing to domestic entrepreneurs both from their better knowledge of the domestic market conditions and their proximity to domestic consumers. However, as the growth rate of production is restricted to the rate of increase of domestic demand, which may be relatively slow, a policy of import substitution is aimed at vigorously strengthening the process of industrial growth. So that this policy does not lead to a misallocation of resources and, sooner or later, to a retardation of industrial development as such, it is absolutely necessary that it should not be guided merely by demand-side considerations and that the criteria of efficient manufacturing specialization should be

[1] See James Riedel, *The Industrialization of Hong Kong*, Kieler Studien, 124, Tübingen, 1974, passim.

[2] See Dieter Lotz, "Singapur: Ein Beispiel für exportorientiertes Industriewachstum", *Die Weltwirtschaft*, Tübingen, 1973, H. 1, pp. 162sqq.

[3] See Lutz Hoffmann, *Manufacturing Growth and Structural Interdependence in a Small Developing Country: The Case of West Malaysia*, July 1976, pp. 36sqq., manuscript.

[4] See Richard W. T. Pomfret, *Trade Policies and Industrialization in a Small Country: The Case of Israel*, Kieler Studien, 141, Tübingen, 1976, pp. 7sq.

reasonably satisfied. It is in this respect that most of the sample countries failed in specific periods of their economic development, generally in the decades between the Great Depression and the mid-sixties. Only South Korea and Taiwan deserve better marks. They deliberately concentrated their import-substituting efforts very early on light and relatively labour intensive industries, which did not involve significant economies of scale and could therefore be run reasonably efficiently at the low output volumes demanded by the domestic market[1].

III. The Import-Substitution Policies: Ingredients and Implications

Although there are various ways of providing stimulus to industrialization, protectionist policies were, in general, the most important tool until the early sixties, whether in the form of import licensing, tariffs, multiple import exchange rates, or a combination of the three (Table 2). It was typical in all countries studied for the protection of local producers against import competition to be introduced as a short-run emergency measure to meet a balance of payments crisis (which implied that the governments considered it necessary to keep the exchange rate fixed). However, it was then deliberately allowed to become a longer-term policy prescription for rapid industrialization. Three general features are worth mentioning:

(a) First, although the level of protection differed considerably among the sample countries, in most of them it was certainly higher than that Western industrial countries have ever had. For instance, nominal tariffs on manufactured goods averaged 99 percent in Brazil (1966), 56 percent in Egypt (1966/67), and 78 percent in Israel (1967)[2]. Only Malaysia has kept average protection at the relatively low level of about 15 percent, although since 1968 protection has been increased up to an average of 32 percent (1974)[3]. Moreover, nominal tariffs

[1] See Bernd Stecher, *Erfolgsbedingungen der Importsubstitution und der Exportdiversifizierung im Industrialisierungsprozeß — Die Erfahrungen in Chile, Mexiko und Südkorea*, Kieler Studien, 136, Tübingen, 1976, pp. 49sqq. — James Riedel, "Importsubstitution, Exportförderung und wirtschaftliche Effizienz in der verarbeitenden Industrie Taiwans", *Die Weltwirtschaft*, 1973, H. 1, pp. 141sqq.

[2] See William G. Tyler, *Manufactured Export Expansion and Industrialization in Brazil*, Kieler Studien, 134, Tübingen, 1976, p. 239. — Maurice Girgis, *Industrialization and Trade Patterns in Egypt*, September 1975, p. 223, manuscript. — Pomfret, *Trade Policies and Industrialization in a Small Country*, *op. cit.*, p. 34.

[3] See Hoffmann, *op. cit.*, pp. 73sqq. — In explaining why Malaysia increasingly sheltered its economy against foreign competition, Hoffmann ascribes the main reason to the influence of foreign experts, notably from the World Bank, on the government during the late sixties (*ibid.*, pp. 69sqq.).

rose with the stage of fabrication. Hence, the effective rates of protection turned out to be considerably higher than the nominal rates. This was especially true for Brazil (181 percent) and Israel (144 percent), let alone extreme cases such as India and Spain, where for years import quotas virtually ruled out imports when the governments recognized the availability of local substitutes[1]. The only exception from this pattern has been found in Taiwan, where in 1966 the average effective protection was high (144 percent), but lower than average nominal protection (180 percent)[2].

(b) Second, the protective system itself was rather complex and generally fell short of an obvious link to the structure of actual or potential comparative advantage: not only did the effective protection rates tend to be highest for consumer goods, lower for intermediate products and lowest for capital goods; their degree of dispersion was also high, and greater than that of the nominal rates of protection. In each of the import-substituting sample countries, the effective rates of protection ranged from negative to highly positive[3] and thus allowed some industries to use more domestic resources than others to save one unit of foreign exchange (and also more than would have been required to earn one unit of foreign exchange through exports).

(c) Third, for all countries studied, there is casual empirical evidence, based on interviews with local producers, that protective measures encouraged import smuggling, either of a technical (through underinvoicing) or actual nature. But this does not appear to have taken place on a sufficiently large scale to substantially reduce protection.

The reliance on import restrictions can be defended, essentially, by referring to external economies in industrial production (infant-industry argument), and to duality and Pareto disequilibrium in the economy's wage structure. An additional argument, applicable to a country which is large enough to influence its own terms of trade, rests on the famous case of "immiserizing growth." As the economic implications

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[1] See Ranadev Banerji, *Exports of Manufactures from India — An Appraisal of the Emerging Pattern*, Kieler Studien, 130, Tübingen, 1975, pp. 88sq. — J. B. Donges, "From an Autarchic towards a Cautiously Outward-Looking Industrialization Policy: The Case of Spain", *Weltwirtschaftliches Archiv*, Vol. 107, 1971 II, p. 39.

[2] Riedel, "Importsubstitution, Exportförderung und wirtschaftliche Effizienz in der verarbeitenden Industrie Taiwans", *op. cit.*, p. 154.

[3] The country studies record numerous instances of effective protective rates exceeding 100 percent. The highest rate found was for the Brazilian perfumery industry: 8,480 percent in 1966.

of protectionism have been adequately analyzed in the literature[1], they need not be treated here. Suffice it to say that irrespective of whether these arguments for protection were justified in the cases under consideration[2], a policy which rests upon them suffers from one basic flaw: it can, if at all possible, correct marginal divergencies between private and social costs existing in production, factor allocation, and trade only with respect to the domestic market, imposing at the same time an unwarrantable penalty on the users (whether producers or consumers) of the protected goods, and creating a bias against exporting. A direct subsidy (to production or for the use of labour) would represent a superior remedy in any case of a divergency between social and private costs, provided it can be financed in a reasonably neutral way. Rather than involving negative side effects, a subsidy would affect production for the domestic and for the world market in the same way, and because of its ensuing budgetary expenses, it would have a much better chance of avoiding inconsistencies in policy.

Of the various inconsistencies which recur throughout various country studies (outstanding exceptions being South Korea and Taiwan), four are particularly revealing. First, governments generally alternated between promoting industrialization in the field of consumer goods, in the hope of creating strong backward linkages, and developing a domestic capital-goods industry just because it was "modern," the latter industries being generally offered less effective protection than others. Second, the overvaluation of the domestic currency due to protection was defended on the grounds that this would stimulate investment (through imports of capital equipment); but as the countries under consideration were hardly able to influence world market prices, an exchange rate closer to the equilibrium level would have led, through more exports, to an increased inflow of foreign exchange without reducing the amount of investment. Third, there was a tendency to severely restrict on foreign exchange grounds imports of goods considered "inessential" without preventing the allocation of scarce resources for producing the same goods domestically at the expense

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[1] See Ian Little, Tibor Scitovsky and Maurice Scott, *Industry and Trade in Some Developing Countries — A Comparative Study*, London, New York, Toronto, 1970. — Bela Balassa and Associates, *The Structure of Protection in Developing Countries*, Baltimore, London, 1971. — W. M. Corden, *The Theory of Protection*, Oxford, 1971. — *Idem*, *Trade Policy and Economic Welfare*, Oxford, 1974. — Jagdish N. Bhagwati, *Foreign Trade Regimes and Economic Development — Anatomy and Consequences of Exchange Control Regimes*, in print. — Anne O. Krueger, *Foreign Trade Regimes and Economic Development — Liberalization Attempts and Consequences*, in print.

[2] Our country studies do not deal with this question empirically, because of difficulties in finding a reasonably accurate measurement.

of more essential products. Fourth, the administration of the system of protection attempted, on the one hand, to stimulate investment in industries designated as "desirable" or "essential," and, on the other hand, to provide all domestic industries with just the advantage over foreign suppliers they needed ("tailor-made" protection).

We should note, in conclusion, that the protectionist import-substituting policies tended to favour more or less systematically those industries which were relatively less essential and/or comparatively less efficient, and which can represent a significant cost to the economy in terms of improvements in productivity foregone. It is true that labour productivity increased in all import-substituting sample countries, in some of them even substantially. Examples are Colombia (6.6 percent per annum during 1950—1960), Israel (5.8 percent), Korea (5.9 percent), Spain (5.4 percent), Taiwan (5.2 percent), and Yugoslavia (4.7 percent). However, in order to reflect true advances in efficiency these increases would have had to raise value added relative to all inputs, and especially to capital, which was the scarcest factor of production. By looking at the complementary use of capital in increasing value added, one finds for the period 1950—1960 high incremental capital-output ratios for Colombia (4.9), Israel (3.3), Spain (3.2), and Yugoslavia (4.6). This was about twice as much as in Korea (1.9) and Taiwan (1.7). Hence, the increases in productivity in these two countries have also resulted from making efficient use of capital, while those of the other four countries have been achieved to a certain extent just by substituting capital for labour and/or shifting the output mix towards heavy, capital-intensive manufacturing industries. Similar observations were made for Brazil and Mexico, where annual rates of productivity growth of 3.5 and 3 percent went along with ICORs near and above 3, respectively. Egypt passed through the worst of both worlds during the fifties — a slow increase in labour productivity (1.7 percent per annum) along with a relatively inefficient use of capital (ICOR = 3.3)[1]. In spite of the well-known conceptual problems involved in the interpretation of both intercountry differences in incremental capital-output ratios and increases in labour productivity, it is not inherently unreasonable to regard many of the discrepancies observed to be real and to trace their cause to the way in which protection policies were shaped.

Other major policies pursued until the sixties to promote industrialization seem to have done little to offset the basic flaws in protection. The impression one gets from the country studies is that in some instances

[1] The figures have been calculated from UN, *The Growth of World Industry*, various editions, and from information provided by the country studies.

they even tended to increase the cost of accelerated industrialization to the economy in terms of misallocation and waste of resources, an effect which frequently remained unknown until after the event. Consider first the policies of industrial licensing pursued in seven sample countries (Table 2). Their rationale was the belief that the market mechanism would be unable (i) to allocate resources in accordance with public welfare and the objectives to create sufficient employment for a growing labour force, (ii) to prevent market structures from becoming monopolized or atomized, (iii) to promote regionally balanced industrial development, and (iv) to foster economic growth in general. If this were the case, selective intervention would indeed constitute a rational economic policy. And this policy would still continue to be rational if the recognition of indivisibilities, with attendant economies of scale, led the government to actively support enterprises which deliberately embark upon investment in excess capacity in the hope that, after some time, demand will catch up with this installed capacity[1].

The country studies, however, reveal that government officials were not more knowledgeable than the market with regard to the social net benefits which particular manufacturing activities could provide. Spain is an illustrative case in point[2]: although government agencies, responsible for the licensing of industrial investment, worked out the economic criteria on which their decisions were to be based, they have not been able in practice to apply them systematically and soundly. On the contrary, the industrial licensing operated essentially on an ad hoc basis. Applications for investment were in virtually no case carefully examined in terms of their suitability for achieving given social (as distinct from private) objectives. Applicants for a license generally could not assess their chances of getting formal approval for investment with reasonable accuracy. In some cases, the principle applied was that of "first come, first served"; in others, the licensing depended on the bargaining power of the would-be investor or the closeness of his connections with the administration. Hence, licensing regimes, although they might have induced earlier and more diversified development of the manufacturing sector, clearly failed (to varying degrees among the countries under consideration) to achieve the stated objectives and to prevent investment in activities thought to be less desirable.

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[1] This was the argument frequently advanced in defense of building integrated steel industries.

[2] See Juergen B. Donges, *La industrialización en España — Políticas, logros, perspectivas*, Barcelona, 1976, pp. 31 sqq.

In particular, the licensing systems had little effect on avoiding regional duality and industrial fragmentation; and they even introduced a built-in bias against export trade in the policy parameter. As far as regional duality is concerned, the outstanding example is Brazil: Tyler[1] shows that industrial growth has occurred in the country's Center-South (most notably in the state of São Paulo) at the expense of the populous Northeast. The Northeast's share of total Brazilian income fell from 16.7 percent in 1939 to 14.8 percent in 1960; and the rapid industrialization in the Center-South caused the share of population living in urban areas to increase from 31.2 percent in 1940 to 45.6 percent in 1960 of the rapidly expanding total population, thereby presenting overwhelming organizational and financial burdens for the government which was compelled to provide minimal infrastructural capacities. The tendency towards excessive industrial fragmentation is best exemplified by the case of Spain[2]. By the end of the fifties, 85 percent of manufacturing firms employed less than 5 workers. Even in industries characterized by a large economies of scale-potential (such as chemicals and equipment) the firms' structure was biased towards small units. The worst case was the steel industry, which consisted of over 100 firms (of which two were fully integrated), producing only 1.6 million tons of steel ingot and with almost no product specialization among them. Finally, the built-in bias against export trade is illustrated by the case of India. As Banerji[3] stresses, India's first two five-year development plans (1950—1955 and 1955—1960) were elaborated on the basis of a closed economy model of growth. Although this policy was rationalized on the grounds that India's exports could not be increased because of unfavourable world demand conditions, there was no empirical evidence substantiating this belief.

Let us now turn to the system of fiscal and credit incentives granted to investors in all sample countries with the exception of Hong Kong (Table 2). The most common devices were income tax exemptions, accelerated depreciation allowances and preferential credits in terms of interest rates, maturity periods, and borrower's contribution[4]. In theory, such incentives would be appropriate to compensate for the existence of cost disabilities, which may result in developing countries from a lack of physical infrastructure (water and electricity networks,

[1] See Tyler, *op. cit.*, pp. 21sqq.

[2] See Donges, "From an Autarchic towards a Cautiously Outward-Looking Industrialization Policy", *op. cit.*, pp. 45sqq., 61.

[3] See Banerji, *op. cit.*, pp. 77sqq.

[4] Singapore is the only country in the sample which confined its incentives to tax reliefs. See Dieter Lotz, *Singapur: Ein Beispiel exportorientierter Industrialisierung*, September 1976, pp. 28sqq., manuscript.

telephones, transport facilities) at international price and quality standards and/or from imperfections in the capital market which cause a shortage of financial resources (particularly for new firms and small industries) at the social interest rate. Otherwise underinvestment and thereby a loss of potential output would be the consequence. In practice, however, government entities place great emphasis on these incentives without any thorough evaluation of either their need to encourage profit-oriented investors or their benefits relative to their costs. This is even true of countries such as Malaysia and Singapore, which are usually considered as having pursued relatively enlightened policies[1]. In Malaysia, the budget revenue foregone amounted to a subsidy of at least one fifth of the total capital stock of the companies concerned; in Singapore the order of magnitude was fairly similar. And both countries provide conclusive evidence of relatively high redundancy of the tax incentive systems: 80 percent of the firms in Malaysia and 90 percent of the firms in Singapore consider the income tax exemption to be of no or only little importance. As in all countries under review the qualifying criteria for obtaining the tax incentive, rather than being selective, were so broadly defined that virtually any new company became eligible, the system was a relatively expensive way of promoting industrial growth. The costs would have been even higher than they actually were, had all eligible firms been granted the incentive. Long procedural delays discouraged many firms, particularly small- and medium-scale ones, from applying for tax relief. However, this "avoidance" of higher costs might have been outweighed by losses in productivity to the extent that the reluctance to apply for tax incentives discouraged entrepreneurs from renewing outmoded machinery — as seems to have occurred in Mexico[2].

The fact that the analysis of the sample countries has not provided any noteworthy evidence that the tax incentives generated economically sound investment which otherwise would not have taken place is particularly true for foreign direct investment. It was generally given the same incentives as domestic investment, although it is an almost proven fact that the power of such incentives to attract foreign investors is marginal compared with other factors, such as political and economic stability, the development potential of the country in question and the general attitudes of business and government towards the inflow of

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[1] See Hoffmann, *op. cit.*, pp. 39 sqq. — Lotz, *Singapur*, September 1976, *op. cit.*, pp. 28 sqq.

[2] See Lotte Müller-Ohlsen, *Import Substitution und Exportdiversifizierung im Industrialisierungsprozeß Mexikos — Strategien, Ergebnisse, Perspektiven*, Kieler Studien, 129, Tübingen, 1974, pp. 39 sqq.

private capital from abroad[1]. It is obvious that, for example, taxes saved by a foreign firm increase its potential to remit earnings home. To the extent that the money saved in this way is remitted, a revenue loss to the host country is caused. If profits are not remitted there is a similar effect, the difference then being that the tax concessions imply a revenue transfer to the budget of the investing country (rather than to the investing firm). Had there been bilateral tax sparing agreements in the fifties of the type now widely applied, it would not have made a great deal of difference, because such agreements use to avoid only double taxation. Where tax incentives involved revenue losses for the host country, they gave rise to opportunity costs in that they could have been spent — probably with greater social benefits — on the improvement of infrastructure. The magnitude of these losses is not known for any of the countries in the sample, but casual evidence suggests that it was not negligible.

It should be added in this context, that policies towards foreign investment also tended to be contradictory in their results. Except for Yugoslavia, which did not permit any inflow of foreign private capital until the end of the sixties[2], and for Brazil, which opened wide its doors to foreign manufacturing firms[3], most other import-substituting countries alternated during the fifties between encouraging foreign investment by trade protection and internal incentives, and discouraging it by restrictions on ownership, capital repatriation, and entry into specific sectors, or just by excessive and costly red tape. This discouraging effect certainly dominated in post-1956 Egypt, after the nationalization of private industry had been promulgated, and in pre-1959 Spain, when the official attitude towards foreign direct investment was still explicitly hostile[4]. Less contradictory, albeit hardly beneficial to the country, was the permissive attitude frequently taken by the governments towards the requests of foreign investors for export-restrictions clauses to be included in the capital and technology transfer contracts. Brazil, India, and Mexico are examples of countries in which foreign investors might have inhibited a major export drive of their parent companies until

[1] See Grant L. Reuber *et al.*, *Private Foreign Investment in Development*, Forew. Montague Yudelman, Oxford, 1973. — Hoffmann reports on a survey of US investment in Southeast Asia, which shows that foreign companies ranked tax incentives only tenth among the factors determining the decision to invest. See Hoffmann, *op. cit.*, p. 55.

[2] See C. R. Chittle, "Direct Foreign Investment in a Socialist Labor-Managed Economy — The Yugoslav Experience", *Weltwirtschaftliches Archiv*, Vol. 111, 1975, pp. 770sqq.

[3] See Tyler, *op. cit.*, pp. 47sqq.

[4] See Girgis, *op. cit.*, pp. 41sqq. — Donges, "From an Autarchic towards a Cautiously Outward-Looking Industrialization Policy", *op. cit.*, p. 44. Needless to say, under these circumstances the amount of private capital inflow became negligible in both countries.

well into the sixties, just because they forbade, totally or partially, sales to third markets. Even Malaysia had difficulties not to emulate these examples, although the degree of restrictive practices was lower[1]. If foreign investors felt it necessary to do this, they obviously assumed that exporting would be feasible. Thus, such restrictions accentuated the retardation of manufactured export growth from these countries, which was already implied in the system of protection[2].

The combined effects of these policies on the pattern of import substitution were striking. The degree of industrialization, measured as the share of manufacturing in total real value added, increased in all countries during the period 1950—1960, most impressively in Brazil (from 14.8 to 21.6 percent), Pakistan (from 4 to 12.1 percent), South Korea (from 4.7 to 12.1 percent) and Spain (from 15.4 to 27 percent)[3]. In all countries, the most substantial import substitution was achieved in consumer goods industries, so that the ratios of imports to total domestic supply became remarkably low: Brazil, for example, exhibited in 1964 a ratio of imports to total domestic supply of consumer goods of less than 2 percent as compared to 8 percent for producer goods and 6 percent for the total manufacturing industry[4]. The corresponding import shares were 5, 20, and 13 percent in India (1961); 3, 23, and 12 percent in Mexico (1960); and 6, 22, and 14 percent in Spain (1958). In turn, South Korea had import proportions of 13, 42 and 24 percent by the end of the fifties[5]. These figures are also indicative of the extent to which the sample countries achieved self-sufficiency and a structure of imports reasonably complementary to their domestic production, thereby limiting further opportunities for import-substituting industrialization.

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[1] Hoffmann found that the export restrictions were important in three branches: tobacco manufactures (100 percent of the licensing agreements), petroleum refineries (50 percent), and the chemical industry (43 percent). See Hoffmann, *op. cit.*

[2] A study undertaken complementary to this project provides overwhelming empirical evidence in support of the contention that most foreign direct investment in developing countries, including the sample ones, was inward-looking by nature. The private capital flows from industrial into developing countries were to a large extent "tariff-jumping," i. e. they became a substitute for commodity flows now deliberately constrained by the protective policies pursued in developing countries. See *Übertragung von Technologien an Entwicklungsländer*, Von Jamuna P. Agarwal, Juergen B. Donges, Ernst-Jürgen Horn, Axel D. Neu, Kieler Studien, 132, Tübingen, 1975, pp. 30sqq., 214sqq.

[3] Calculated from information provided by the authors of the country studies.

[4] See Tyler, *op. cit.*, p. 68.

[5] See Banerji, *op. cit.*, p. 92. — Stecher, *op. cit.*, p. 173. — Donges, "La industrialización en España", *op. cit.*, p. 151.

Irrespective of whether or not protection and special internal inducements have accelerated industrial growth more than otherwise would have been the case[1], there is little doubt that labour absorption in industry has generally been disappointing. Although growth and employment objectives were thought to be compatible with each other, employment in manufacturing grew less rapidly than urban labour supply, and the share of manufacturing employment in total employment did not even increase in Brazil and Egypt between 1950 and 1960. The failure of import-substituting industrialization to absorb more labour has to be attributed to many factors, at least one of which seems to be common to most countries under review. With the exception of Yugoslavia, where the system of workers' self-management has by its very nature involved a capital intensive bias[2], in the countries under study the cost of labour was artificially raised by minimum wages, social security charges, restrictive job-tenure legislation, and severance pay regulations. The cost of using capital — the factor in relatively short supply — was artificially reduced below its scarcity value by a combination of preferential treatment of imported capital equipment and special incentives referred to above, which were usually linked to the amount of investment (whether domestic or foreign). The absence of effective policies to cope with high and persistent inflation and inflationary expectations — by which especially Brazil was plagued — exacerbated the problem in that it frequently caused real interest rates to become negative, especially if nominal interest rates were kept restricted (to prevent "usury," as officials maintained). With relative factor prices distorted, investors apparently did not feel any economic pressure to absorb more labour, which they did not find cheap at all[3], but relatively more expensive than its more intensive use would have really been for the society as a whole. Thus, industrial technology and output mix moved in a capital intensive direction, the potential of

[1] Only the Spain study dealt with this question, showing that the import substitution policies slowed down growth during the fifties because they caused somewhat paradoxically at first glance, severe constraints on the capacity to import. The growth rates of both the total economy and the manufacturing sector during the pre-1959 period were well below those of Spain's European neighbours and of numerous other industrializing developing countries. See Donges, "La industrialización en España", *op. cit.*, Ch. IV.

[2] For a theoretical elaboration of this point, see Chittle, ***Industrialization and Manufactured Export Expansion***, *op. cit.*, Ch. I.

[3] Tyler (*op. cit.*, p. 26) reports on estimates showing that the numerous fringe benefits to Brazilian labour have increased the firm's cost of unskilled labour by up to 42 percent in relation to the minimum wage.

creating industrial employment remained underutilized[1], and substantial unemployment and underemployment arose[2].

IV. The Shift to Outward-Oriented Policies

Since the late fifties it has been increasingly realized that import-substitution policies, evaluated in terms of their own goals and irrespective of the degree of suboptimality inherent in the world economy's structures, were not a success[3]. To begin with, they led to half-way industrialization in that they promoted manufacturing development in relation only to the home demand and they promoted growth of manufacturing employment with respect only to a small proportion of total surplus labour. In addition, they caused a general rise in the cost level, a distortion of cost structures, low levels of capacity utilization, inefficiencies in business, and a waste of scarce resources, as well as new balance of payments constraints on development reflecting the increased dependence upon imports of raw materials and intermediate products. And finally, they promoted the manufacturing sector which gradually lost its dynamic impact on economic growth because the lack of external competitiveness (at the

[1] Brazil is one case in point. An elimination of the labour market distortions could have increased employment by an estimated 11 percent of total manufacturing employment. See Tyler, *op. cit.*, pp. 25sq. — Another example is Malaysia, where manufacturing employment could have grown at an estimated annual rate 2 percentage points above the actual rate, thereby reducing the country's unemployment rate by more than 2 points. See Hoffmann, *op. cit.*, p. 50.

[2] The factor price distortion argument rests upon the presumption of substitutability between capital and labour. The estimates for various sample countries lend support to this presumption. For a summarizing overview, supplemented by estimates based on international cross-section analyses, see *Übertragung von Technologien an Entwicklungsländer*, *op. cit.*, pp. 52sqq.

[3] Various studies on economic development and policies, undertaken within a different analytical framework in recent years, have produced empirical evidence pointing in the same direction. See, for instance, Joel Bergsman, *Brazil: Industrialization and Trade Policies*, London, New York, Toronto, 1970. — Bent Hansen and Karim Nashashibi, *Foreign Trade Regimes and Economic Development: Egypt*, A Special Conference Series on Foreign Trade Regimes and Economic Development, National Bureau of Economic Research, Vol. 4, New York, London, 1975. — Jagdish N. Bhagwati and Padma Desai, *India, Planning for Industrialization, Industrialization and Trade Policies since 1951*, London, New York, Bombay, 1970. — Charles R. Frank, Jr., Kwang Suk Kim, and Larry E. Westphal, *Foreign Trade Regimes and Economic Development: South Korea*, A Special Conference Series on Foreign Trade Regimes and Economic Development, National Bureau of Economic Research, Vol. 7, New York, London, 1975. — Stephen R. Lewis, *Pakistan: Industrialization and Trade Policies*, London, New York, Karachi, 1970. — Anne O. Krueger, *Foreign Trade Regimes and Economic Development: Turkey*, A Special Conference Series on Foreign Trade Regimes and Economic Development, National Bureau of Economic Research, Vol. 1, New York, London, 1974.

given exchange rate and with existing protective devices) prevented production automatically spilling over into exports once a high degree of self-sufficiency was attained.

The answer to suboptimal policies is policy reform. In view of the countries' insufficient capabilities to coordinate the various policy measures aiming at encouraging further industrialization, and taking into consideration the lacking knowledge about external economies generated by any particular industry, the objective of policy reform is best served if, first, all industries receive the same incentive treatment (in terms of value added), and if, second, competition is allowed to do the rest. As competition can be greatly stimulated by opening up the economy to the international trading system, the reform implies a shift from inward towards outward orientation. In theory this does not, however, mean that import substituting activities ought to be completely rejected, nor that exports should be promoted at any price. It means, on the contrary, that a country which has left its early phase of industrialization can no longer afford to neglect either approach if the growth and employment contribution of the manufacturing sector is to be maximized. If the minimum economic scale of production is larger than the domestic market and the domestic market is subject to imperfect competition, properly designed import substitution policies can have the effect of promoting exports even in the short run, and vice versa[1]. Analogously, government intervention will be further required on infant industry grounds and to reward external economies. But the exigencies both of making (and then keeping) the manufacturing sector internationally competitive and of avoiding international retaliation obviously restrict the scope for the governments to intervene. By the same token, the bias against other domestic sectors, particularly agriculture and raw materials production, which can be regarded as the economic (and sometimes political) price of industrial development, is reduced.

All countries in the sample responded, though with differing intensity, to the challenge of moving to a better policy framework and of integrating their industrialization process into the world economy[2]. The smaller countries took the lead, probably because they were the first ones to feel the necessity to escape from the narrowness of the domestic market. Pakistan and Spain changed their strategy by the end of the fifties,

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[1] For a theoretical proof of this contention and an empirical application to the case of Israel, see R. Pomfret, "Some Interrelationships between Import Substitution and Export Promotion in a Small Economy", *Weltwirtschaftliches Archiv*, Vol. 111, 1975, pp. 714sqq.

[2] See J. B. Donges, "Die Entwicklungsländer als Anbieter industrieller Erzeugnisse", *Die Weltwirtschaft*, 1971, H. 1, pp. 51sqq. — Donges and Riedel, *op. cit.*, pp. 9sqq.

Taiwan, South Korea, and Israel in the early sixties. Of more recent origin is the policy shift in Brazil, Colombia, Egypt, India, Yugoslavia, and Mexico; it occurred in the second half of the last decade and was, at least in India, only partial. Malaysia, in spite of increasing the degree of protection, continued to adhere to a basically export-oriented industrialization strategy. Turkey, on the other hand, can be regarded as the country in which policy reform gathered the least momentum. Policy measures with respect to Turkey's industrialization continued to stress import-substituting throughout the sixties; since the Cyprus war in 1974 the tendency towards inward-looking attitudes has become even stronger, in complete contrast to the objectives to which the Turkish government committed itself in the Treaty of Association with the EEC (signed in 1963 and revised in 1973)[1].

The first major step towards the new industrialization strategy consisted of a large formal exchange rate devaluation in all countries but Israel, Mexico, Pakistan, and Taiwan. Given the negative side effects of import substitution policies in terms of persistent inflationary pressure, a critical drain of exchange reserves, increasing amounts of external debt and a slackening of industrial development, the devaluation step was well justified on economic grounds. Yugoslavia also had to devalue its currency. This is worth mentioning because a state controlled economy should not need an exchange rate policy, provided the control is complete and efficient, which was apparently not the case in that socialist country. In the countries which were still operating multiple exchange rate systems at that time — South Korea, Spain, Taiwan, Turkey, and Yugoslavia (Table 2) — the exchange rates were, de jure, unified, which certainly contributed to a more rational functioning and a better transparency of the foreign exchange market, and which led to a disappearance of the black markets.

Three of the countries under consideration have made, as shown in Table 2, provisions against a new overvaluation of their currencies due to domestic prices rising more rapidly than world market prices: South Korea initiated a floating exchange rate policy in 1965, while Colombia and Brazil followed with systems of discretionary, sliding parity adjustment. The advantage of this policy is threefold: First, devaluation decisions become politically much easier to take. Second, the well-known devaluation-speculation cycle accompanying orthodox major exchange rate adjustments is eliminated. And third, the price competitiveness of domestic industries (whether import substituting or export firms) is not

[1] See Lotte Müller-Ohlsen, "Möglichkeiten und Grenzen des Industriegüterexports der Türkei", *Die Weltwirtschaft*, 1975, H. 1, pp. 114sqq.

artificially changed through the delays which a major devaluation would entail[1]. Particularly Brazil and Colombia considered the sliding parity policy as an instrument to actively promote (non-traditional) manufactured exports. In practice, however, only Colombia succeeded in keeping the real exchange rate even constant[2]. Brazil, on the other hand, witnessed both striking fluctuations and a tendency towards revaluation, apparently a reflection of inadequate information of governmental entities as to how domestic and foreign inflation was actually proceeding[3].

Concomitant to the exchange rate measures, some countries — Brazil (1964—1967), Spain (1959), and Turkey (1958) — introduced comprehensive monetary and fiscal stabilization devices, which in fact were austerity programmes and which were particularly successful in Spain (following a "shock" approach) and in Brazil (following a "gradualist" approach) in terms of balance of payments improvement as well as of deceleration of inflation[4]. Brazil, in addition, made the pioneering step towards the implementation of monetary correction to automatically adjust real assets and credit instruments to the country's inflation, which was expected to remain a "fact of life." Two countries — South Korea and Taiwan — made the most serious effort to reduce distortions in capital markets by improving their monetary systems, which meant a substantial upward adjustment of ceilings on saving deposit interest rates and on bank lending rates. All countries eased the industrial licensing regimes, all intensified their mutual competition for attracting foreign direct investment, and all pressed with considerable success for abolishing restrictive export clauses in licensing contracts with foreign firms. Thus, it is safe to say that these policy actions provided the groundwork for changing the foreign trade policy in accordance with the requirements of the outward-oriented approach to industrialization.

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[1] Empirical evidence in support of this contention is given in Juergen B. Donges, *Brazil's Trotting Peg — A New Approach to Greater Exchange Rate Flexibility in Less Developed Countries*, Rev. and Transl. by the Author with the Aid of Eric Schiff, With a Forew. by Gottfried Haberler, American Enterprise Institute for Public Policy Research, Special Analysis, No. 7, Washington, D. C., 1971, pp. 15sqq. — Tyler, *op. cit.*, pp. 195sqq.

[2] See Jan P. Wogart, "Erfahrungen mit der exportorientierten Industrialisierungsstrategie in Kolumbien", *Die Weltwirtschaft*, 1975, H. 1, pp. 71sqq.

[3] See Tyler, *op. cit.*, pp. 201sqq.

[4] For details see Donges, "La industrialización en España", *op. cit.*, pp. 45sqq. — Tyler, *op. cit.*, pp. 32sqq. — Both authors point out that the existence of strong governments in the two countries, which did not have to compromise either with a political opposition or with trade unions, contributed much to the success in that the burden of stabilization could be put largely on the working classes.

Given the nature of the protective systems which had been built up within the import substitution policy framework, exchange rate devaluation, alone or in combination with monetary and fiscal reforms, was not enough to really improve the structure of the manufacturing industry. On the contrary, one could have expected that after a time the country in question would have found itself again locked into the distorted industrial structure inherited from the past, because (domestic and foreign) investors would exploit economic rents created by the protective system. Therefore, trade policy became the key to the outward-orientation in industrialization strategy. From the standpoint of political feasibility there were, essentially, two options:

— an across-the-board elimination of protective barriers, or
— no further increases in protection, followed, after a time, by a gradual relaxation, combined with the introduction of export subsidies to match protection.

No country under study chose the first option. Budget revenue requirements and, if the economy were opened up abruptly, the fear of extremely high adjustment costs in terms of driving out hundreds of domestic firms and dismissing thousands of workers led the governments to decide in favour of the second option. Its implementation generally entailed an easing of quantitative import restrictions and, as can be derived from Table 2, to a considerable extent a replacement of quotas by tariffs. This is in principle conducive to more efficiency in the allocation of resources, because tariff protection operates through market incentives (import quotas can do this only if licenses are auctioned by the government). It was tempting, however, for practical reasons, to establish the new tariffs in a way that would make up the difference between domestic and international prices. Had this been perfectly implemented — it probably was not — the distorted cost and price structures of the inward-looking period would have been maintained and a successful reallocation of resources inhibited. The same holds if the tariffs are scheduled on the basis of an assumed exchange rate devaluation which then falls short of the actual devaluation. Spain's liberalization step in 1959 is a case in point. The lack of coordination between tariff policy and exchange rate policy resulted in rates of nominal protection which were higher than those reflected in the tariffs[1].

[1] The new tariff system was devised on the assumption that the official exchange rate would be devalued from 42 to 50 pesetas per US dollar. Since the exchange rate was then fixed at 60 pesetas, the nominal rate of protection for Spain's manufacturing industry resulted to be on average 4.5 percentage points higher than it was planned. See Donges, "From an Autarchic towards a Cautiously Outward-Looking Industrialization Policy", *op. cit.*, p. 51.

The liberalization of import trade and the attendant rescheduling of import tariffs led in most cases to better tariff structures in terms of both the overall level of effective protection (which declined) and the intersectoral dispersion of effective rates (which was reduced). The most radical changes, compared with the pre-liberalization period, took place in Spain and Brazil, where the average levels of effective protection were gradually reduced to 31 percent (1968) and 47 percent (1973), respectively[1]. The least headway was made, apart from in Turkey, in Egypt and India. Without taking into consideration the specific political events in the Middle East and the Indian Subcontinent, which must have adversely influenced the scope for positive actions in the economic field, it is reasonable to ascribe the differences in accomplishments between these two extremes to the different degrees of influence of groups deeply suspicious of the virtues of increased import competition. As one could expect, such groups retained strong influence in Yugoslavia too. In consequence, liberalization there has not only been slowed and limited, but has also been subject to oscillations, first larger and then smaller[2]. Israel also faced retarding influences during various years after the policy shift. Pomfret points out that implementation of the liberalization policy was slow until 1967, exposing only one half of the cumulative manufacturing output to import competition and keeping major activities (such as food processing and motor vehicle components industries) under the shelter of an import quota system. It was only after 1967 that the strong influence of protection-minded interest groups was broken and progress in liberalizing imports and reducing and equalizing tariffs became fairly rapid[3].

Theoretically, a decline in overall protection and a reduction in its variability diminish the misallocation of resources only as far as the domestic market is concerned. Manufacturing production for export is still discriminated against, simply because the protective system (however rationally designed it may be) causes prices of material inputs (whether imported or locally produced) to rise in comparison to a free-trade situation, while exports can generally only be sold at given world market prices. This means that the earnings-to-cost ratio continues to

[1] See Donges, "La industrialización en España", *op. cit.*, p. 65. — Tyler, *op. cit.*, p. 244.

[2] See Chittle, *Industrialization and Manufactured Export Expansion*, *op. cit.*, pp. 44sqq. Chittle notes that, on balance, import tariffs on industrial imports were reduced until 1971 (to an average of nominally 13 percent and effectively 25 percent). But restrictions in the form of licenses and quotas were retained for the major part of manufactured imports.

[3] For details see Pomfret, *Trade Policies and Industrialization in a Small Country*, *op. cit.*, pp. 26sqq.

be more favourable to import-substituting activities than to export (other things being equal). Therefore, an improvement of resource allocation between both types of manufacturing activities requires provisions to neutralize cost disadvantages to export industries arising from tariff protection. In practice, all countries in the sample have resorted to devices for this purpose (Table 2).

As to the objective to offset the direct cost disadvantages of protection, the method most commonly adopted, with varying degrees of administrative simplicity and efficiency, was the remission of customs duties on imported materials and components used in the manufacture of exports. There was thus a premium on the substitutability of domestically produced inputs by imported inputs. In Brazil, India, Malaysia, Mexico, Pakistan and Yugoslavia those duties were basically refunded under a drawback scheme. India, however, did not accord the drawback for imported inputs for the production of so-called traditional manufactured exports (like jute); Brazil excluded the import of capital goods from the drawback provisions[1]. In the other countries of the sample, the emphasis was more on an outright exemption from duties, generally granted on a temporary basis, often operated in conjunction (or overlapping) with drawback regulations, and in the case of South Korea and Taiwan supplemented by bonded warehouse systems. The duty-free import device has the advantage over drawback systems in that it is much easier to administer and does not expose exports to uncertainty about whether they will be reimbursed and, if so, after what period of time. Bonded warehouse systems, on the other hand, are superior to the other two schemes in that they do not lend themselves so easily to abuse as the other two do, particularly the drawback scheme, which requires a precise definition of the import content in any particular export product if it is to be applied correctly. The practical difficulty in doing this has, for example, prevented Spain from putting the drawback system into operation after having it formally implemented in 1965[2]. The experience of Brazil with its drawback is illustrative as well: as firms consider the application procedure for this facility excessively slow and tedious, drawback usage has remained much below its potential[3].

As far as the indirect cost disadvantages of the protective system are concerned, the compensating devices applied in most sample countries

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[1] See Banerji, *op. cit.*, p. 231. — Tyler, *op. cit.*, pp. 214sq.

[2] See Donges, "La industrialización en España", *op. cit.*, p. 76.

[3] See Tyler, *op. cit.*, pp. 215sqq. Tyler concludes that "given the Brazilian producer's natural wariness of the bureaucracy, he is likely to consider the drawback as simply 'not worth it at all'" (pp. 216sq.).

consisted basically of exempting earnings from exports, partly or totally, from income tax. The exceptions were Egypt, Spain, and Yugoslavia, which, however, at least provided for credits on preferential terms (as did the other countries). The income tax exemption allowed a firm to reduce export prices without affecting unit profits. Interesting variants are recorded for Pakistan, Colombia, and Mexico. In 1972, Pakistan made the income tax exemption flexible in the sense that the amount of tax cut was increased with expanding exports and was reduced with decreasing exports[1]. Colombia, after realizing that income tax exemptions were naturally only helping export firms which were already profitable, replaced the tax cut in 1967 by so-called tax certificates amounting to a 15 percent rebate of total sales abroad, which could be made effective either in the form of tax payment within a previously determined period or by selling them on the stock exchange market. Mexico adopted this device, with a 10 percent rebate, in 1971. Although such a provision might be more effective than income tax cuts for encouraging new export activities, it also can incite fictitious exporting and provoke retaliation from trade partners — as exemplified by the case of Colombia[2]. As an alternative to income tax exemptions related to exports, exporters could have been allowed to produce all material inputs from abroad and at world market prices, but this was generally considered to be detrimental to the development of the national manufacturing of intermediate products. As these products were more expensive, as well as poorer in quality, exporters would not have used them at all, thus preventing their market from expanding as required to benefit from economies of scale.

Similar considerations hold for countries which, though being conscious of the need to discriminate against exports, find it, for political or economic reasons, necessary to keep quantitative (rather than tariff) import restrictions on material inputs — in the sample notably India, Pakistan, and Yugoslavia. If export industries cannot obtain all the material inputs at world market prices that they want to, their sales will be reduced. If there are domestic substitutes, and if export industries are forced to use them, the result is likely to be the same since those inputs are not generally competitive with foreign inputs. To the extent that an import control scheme is in operation, it makes sense to allow export industries to by-pass the scheme directly or indirectly. Yugoslavia, for

[1] For details see Ghazy B. S. Mujahid, "Industrialisierung und Expansion der Fertigwarenausfuhr in Pakistan, Unter besonderer Berücksichtigung der wirtschaftlichen Verflechtung mit Bangladesch", *Die Weltwirtschaft*, 1975, H. 1, p. 97.

[2] See Jan P. Wogart, *Industrialization and the Foreign Exchange Constraint in Colombia: Policies, Patterns, Perspectives*, December 1975, pp. 45 sq., manuscript. — Müller-Ohlsen, "Import Substitution und Exportdiversifizierung im Industrialisierungsprozeß Mexikos", *op. cit.*, p. 65.

example, chose the direct solution by implementing, in 1966, a foreign exchange retention scheme which entitles enterprises to use, partly or totally, the earnings from exports for imports of inputs (instead of having to surrender them to the Central Bank)[1]. India and Pakistan have relied more on an indirect solution by providing export industries with so-called import replenishment licenses, whose attractiveness is said to be that their use is not bound by specific sources of import and that they can be transferred, even at a premium, to other firms or state trading corporations[2]. It is obvious that all these schemes represent a partial currency devaluation. While an outright devaluation would have provided a uniform incentive on all manufactured exports, the currency retention and import entitlement schemes offered the possibility of a discriminatory pattern of incentives. Granted, this can be an advantage, but it can also reduce the social profitability of the emerging export structure if the signals are set wrongly.

The fact that Singapore, as has been shown, also granted generous income tax concessions, although there was no protection-caused cost disadvantage, points to one variant of conceivable policies aimed at vigorously promoting exports, rather than just keeping them from being discriminated against. Such export incentives can be economically justified on infant-industry grounds, particularly with reference to non-pecuniary external economies created by the industry. Otherwise they would simply subsidize foreign importers. In Singapore, the income tax incentive for exporters was operated with a view to fostering on-the-job training of domestic workers and of encouraging the development of medium and high skill industries[3]. However, there is, unlike for the other countries, no conclusive evidence that these tax concessions have reinforced Singapore's export drive. Under given circumstances, emerging industries had no alternative but to export.

While it is hardly possible to find out accurately whether income tax (and other fiscal and credit) concessions granted by other countries in the sample were more than just compensatory[4], the case of Singapore

[1] Chittle stresses that the foreign exchange retention quota, with basic rates (7, 12, and 20 percent) increasing with the export-to-output ratio, was the major export promotion tool of all. See Chittle, *Industrialization and Manufactured Export Expansion*, *op. cit.*, pp. 46sqq.

[2] For details see Banerji, *op. cit.*, pp. 237sqq. — Mujahid, *op. cit.*, pp. 83sq.

[3] See Lotz, "Singapur: Ein Beispiel für exportorientiertes Industriewachstum", *op. cit.*, pp. 169sq.

[4] It is reasonable to argue on the basis of evidence presented in two country studies, that the export incentive schemes contained a pure subsidy element. Mujahid (*op. cit.*, p. 84) found for Pakistan fiscal export incentives ranging from 75 percent of value added (leather

suggests that in order to effectively assist nascent export activities, some kind of free-trade-cum-industrialized-country simulation is most appropriate. This entails, on the one hand, an outright exemption from import duties on raw materials, components and spare parts, and on all types of machinery and equipment; on the other hand, it provides for infrastructure facilities in keeping with both industrial needs and international standards. Hong Kong and Singapore are the classical examples for this concept. An adequate device for achieving this is the creation of free export processing zones, the (four) most impressive ones among the sample countries having been set up in Taiwan. Important free export zones have also been established in Colombia, Malaysia, Mexico and South Korea. The economic rationale of establishing such zones lies in courting foreign direct investment for export production, preferably on labour-intensive lines. Riedel's examination of the case of Taiwan provides persuasive evidence in support of two contentions. One is that export processing zones are in fact highly efficacious in attracting export-oriented foreign direct investment on a large scale[1]. The other is that by doing so, the zones bring the country's production structure to adjust itself rather well to existing factor endowments[2]. Thus, in spite of the costs involved in the establishment of free export processing zones, there is a strong assumption of a net benefit for the economy as a whole, basically because of the influx of technology, the stimulation of ancillary

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manufactures) to over 140 percent (cotton textiles) during the period 1966—1968. — Tyler's calculations for Brazil reveal that in 1973 fiscal and credit incentives enabled manufacturers to reduce, with given unit profits, export prices by on average 40 percent below domestic selling prices, the pure subsidy element ranging from 9 percent (for basic chemicals and pharmaceutical products) to over 20 percent (for rubber, transport equipment, paper, textiles, beverages, clothing and shoes). See Tyler, *op. cit.*, pp. 219sqq.

[1] During the period 1960—1965 foreign direct investment in Taiwan averaged US $ 19.1 millions per year (approvals). From 1966, when the first free export processing zone was established, until 1973, the average amount rose to US $ 120.4 millions, with a steady increase from US $ 29.3 millions to US $ 248.9 millions. For a detailed analysis see James Riedel, "The Nature and Determinants of Export-Oriented Direct Foreign Investment in a Developing Country: A Case Study of Taiwan", *Weltwirtschaftliches Archiv*, Vol. 111, 1975, pp. 505sqq.

[2] This means that a labour-abundant, capital-scarce developing country will produce and export to a large extent labour-intensive manufactures, and use the earned foreign exchange to import capital-intensive intermediate products (apart from raw materials, if required). The pursuit of this strategy not only saved the Taiwan economy resources in terms of capital, but it also entailed additional employment creation, as compared to the alternative, so frequently observed in the other sample countries, of vertically diversifying the industrial production structure, thereby producing manufactured inputs mainly domestically. See *idem*, "Factor Proportions, Linkages and the Open Developing Economy", *The Review of Economics and Statistics*, Vol. 57, Cambridge, Mass., 1975, pp. 487sqq.

industries operating outside the border limits of the free zone and the generation of additional employment.

Taking the industrial policy shift as a whole, the country studies reveal its remarkably high effectiveness. Compared with past standards, all sample countries have experienced a rapid rate of growth of real GDP since the early sixties, particularly — with rates exceeding 7 percent per annum — Brazil, Israel, Spain, South Korea, and Taiwan (in addition to Hong Kong and Singapore). Moreover, they have restored or accelerated their manufacturing growth, South Korea and Taiwan heading the growth league (with rates of real value added of about 15 percent per annum). Although in a few countries — most notably Israel, South Korea, and Taiwan — the manufacturing industry absorbed an important proportion of the total labour force increase (in the order of 50—60 percent), the provision of new productive jobs in the industry remained a major problem, which only Spain, Turkey, and Yugoslavia could overcome by means of massive worker emigration into Central European countries. At the same time, import substitution has ceased to be an appreciable source of overall industrial growth, and in countries such as Brazil, Pakistan, South Korea, and Spain, competing imports tended to rise more rapidly than domestic manufacturing production.

The most striking effect of the policy shift has, however, been the sharp and unprecedented upsurge of manufactured exports in almost all sample countries[1]. For example, South Korea increased its manufactured exports at a rate of over 60 percent per annum during the period 1960 to 1973. The corresponding rates were 42 percent for Taiwan, 23 percent for Spain, 18 percent for Israel, and 16 percent for Pakistan. Brazil, Colombia, and Mexico, which undertook the policy shift later, also achieved high rates of manufactured export expansion: 33, 26, and 22 percent per annum during the period 1965—1973, respectively. By contrast, in the non-sample developing countries as a whole, the average annual rate of increase in manufactured exports was about 13 percent in 1960 to 1973[2]. The share of manufactured goods in total exports rose in all sample countries, thereby lessening these countries' dependence on unstable primary commodity markets; and the share of exports in manufacturing production also rose[3]. It should be added, that in the same period the contribution of manufactured export expansion to industrial growth was

[1] A detailed analysis is given by Donges and Riedel, *op. cit.*, pp. 10sqq.

[2] Rates of growth are expressed in current prices and refer to SITC 5—8 excluding unwrought metals. Figures in constant prices and including manufactures of SITC 0—4 do, however, reveal similar trends.

[3] The ratios achieved are given in Table 1.

in all sample countries remarkably higher after the policy shift than before. The outstanding cases were South Korea, Pakistan, Israel, and Taiwan, showing incremental ratios of absolute increase in manufactured exports to absolute increase in manufacturing value added of over 50 percent in 1960—1973[1].

Recognizing the industrial policy shift as having been highly effective does not, however, mean that the new strategy has been optimal or without costs. Like all economic policies, industrialization strategies were also politically determined and could therefore be shaped without regard to vigorous economic criteria. What has been found to be particularly noteworthy in the country studies is that manufactured export expansion has been carried too far in quite a number of products in terms of their marginal domestic resource cost. India is a case in point. As Banerji[2] points out, the government was more obsessed with maximizing exports as such, than conscious of efficiency in exports. In general, export promotion measures tended to disregard the country's presumed international comparative advantage. The consequence was that in 1970/71 India's direct plus indirect domestic resource cost of an additional US dollar in manufactured export earnings on average exceeded the gain by 86 percent. Moreover, products bearing an above average domestic resource cost (examples are plastic products, miscellaneous chemicals, machinery, and transport equipment) have increased their share in total manufactured exports over time. High domestic resource costs of earning foreign exchange are also reported for Brazil, Colombia, Egypt, Israel, and Spain, although the last two witnessed a reduction in resource misallocation following the implementation of a more outward-looking industrialization policy[3].

Where the export pattern was at variance with opportunity costs, the countries would, from a welfare point of view, have been better-off had export industries with high domestic resource costs not been encouraged, and had resources been employed instead in activities with low domestic resource costs, provided that a different output and export mix had not involved sharply increasing costs and diminishing returns. From a practical viewpoint it becomes clear that wrong policies, with overlapping measures and even excesses as far as incentives are concerned, need not be confined to the import substituting phase of industrial-

[1] Calculated from national production and trade statistics referred to in the country studies.

[2] See Banerji, *op. cit.*, pp. 222sqq.

[3] For details see Tyler, *op. cit.*, pp. 223sqq. — Wogart, *Industrialization and the Foreign Exchange Constraint in Colombia*, *op. cit.*, pp. 119sq. — Girgis, *op. cit.*, pp. 252sqq. — Pomfret, *Trade Policies and Industrialization in a Small Country*, *op. cit.*, pp. 123sqq. — Donges, "La industrialización en España", *op. cit.*, pp. 222sqq.

ization. The only difference, but a critically important one, is that with sub-optimal government intervention, the country's industrialization process will not come up against a balance of payments constraint under an outward-oriented strategy, whereas this is almost inevitable under an inward-looking approach. One may question the social desirability of subsidizing manufactured exports across-the-board. And one may advise governments to improve the incentive system in order to avoid obvious misallocations of resources. There is, however, no reason for abolishing the incentives, unless manufactured exports can be expected to take place without them. Interviews with manufacturing firms conducted in most sample countries[1] lend support to the presumption that a considerable proportion of recent rapid export growth would not have occurred had there been no fiscal and credit incentives.

V. Concluding Remarks

This paper has examined the industrialization policies followed by fifteen semi-industrial countries, with the strategies applied by the "model countries" Hong Kong and Singapore serving as the standard of reference. It has shown that import substitution policies generally played a prominent role even beyond the early phases of industrialization, while the change-over to more outward-looking policies did not occur until the economy — unnecessarily — came up against limits of growth. When the policy switch took place (with an intensity differing among the sample countries), it became apparent that it is possible to orient a developing country's production structure more outwardly even after a long period of excessively inward-looking industrialization, without placing too heavy strains on the economy. This is the outstanding lesson emerging from the country studies.

The policy transition from import substitution to manufactured export expansion does not necessarily imply the removal of all, or even most, government interventions inherited from the inward-looking phase. As a matter of fact, virtually none of the countries studied even provide the same rewards for exports as for home market production, although there is evidence that disincentives for export production have been reduced. This implies that the countries have fallen short of duplicating the Hong Kong or Singapore model. It must, however, be admitted that Hong Kong and Singapore are almost unique in terms of energetic entrepreneurship, workers' industriousness, lack of primary resources, infrastructure availabilities, and administrative competence. Among

[1] Only India, South Korea, and Yugoslavia were by-passed for technical reasons.

the other countries in the sample, only South Korea and Taiwan could manage to emulate this model to a significant extent, basically because their social, cultural, and political environments were more suited to that purpose than those in the other countries. However incomplete the shift towards an outward-looking strategy in various sample countries may still be, they all have set the signals of the industrialization strategy in a direction in which benefits from international specialization tend to be maximized.

One may argue, however, that whatever superiority of an outward-looking industrialization strategy the past experience of selected developing countries might suggest, the present international economic environment does not necessarily render this strategy most conducive to rapid economic growth. This argument emerges from a number of major events (such as the oil price explosion, the acceleration of world inflation, the shortage of food, the unprecedented commodity boom), which have deeply affected the world economy since the early seventies and which have created an uncertainty for many years ahead, quite in contrast to the conditions of rapid and steady world economic growth observed during the sixties. Now, if it could be predicted with a high degree of probability that the adjustment burden caused everywhere by the events of the early seventies will lead the world economy into a major recession or even a depression, an outward-looking industrialization strategy would cease to be of any real advantage at all. World trade would decline and so would the world demand for manufactured exports from developing countries. However, if such a prediction cannot be made, one can indeed adhere to the policy of export-oriented industrialization providing a larger impetus to growth than import substitution does. Evidence available today clearly defies pessimistic views about the impact of both higher oil prices (in real terms) and changes in the monetary system on the growth potential of the industrial countries. And it seems quite possible for world trade to resume expansion at rates close to those achieved before these events occurred.

Moreover, the following specific experience in the aftermath of the oil price crisis and other major events ought to reinforce the validity of our conclusion: although all developing countries were suddenly confronted with the need to overcome increasing balance of payments pressures and to preserve the momentum of their development process, the capability of effectively meeting this need differed widely among the countries. In general, it was greater in countries which had been pursuing more outward-looking policies than in countries relying mainly upon import substitution as their means of industrialization. The fundamental reason for this is twofold: the more outward-looking economies, by their very

nature, disposed of a business community capable of quickly discovering selling opportunities in world markets and then of offensively exploiting them. On the other hand, these economies used to enjoy considerable creditworthiness, they thus had relatively easy access to international capital markets and so they were able to reduce growth-restricting financial stringencies. Moreover, outward-looking countries tended to have an import-to-GDP ratio high enough to allow some import curtailment without severely curbing long-term economic growth. This noteworthy experience, together with pervasive signs of an economic upturn in the industrial countries, should enhance the prospects for manufactured exports from developing countries and prevent their governments (and their economists) from slipping back into an attitude of export-pessimism analogous to the one prevailing in the fifties.

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Zusammenfassung: Eine vergleichende Analyse der Industrialisierungspolitik in fünfzehn halbindustrialisierten Entwicklungsländern. — Die Analyse beruht auf Ergebnissen von Länderstudien, die am Institut für Weltwirtschaft mit dem Ziel durchgeführt worden sind, die Stellung der Entwicklungsländer in der internationalen industriellen Arbeitsteilung empirisch auszuloten. Bei den untersuchten Ländern handelt es sich um: Ägypten, Brasilien, Hongkong, Indien, Israel, Jugoslawien, Kolumbien, Korea (Süd), Malaysia, Mexiko, Pakistan, Singapur, Spanien, Taiwan und die Türkei. Nur in drei Ländern — Hongkong, Malaysia und Singapur — ist die Industrialisierung von Anfang an exportorientiert betrieben worden. In den anderen zwölf Ländern wurde über Jahrzehnte hinweg und bis in die sechziger Jahre hinein die Industrialisierung mit einer Politik der im Vergleich zum laissez-faire forcierten Importsubstitution zu bewerkstelligen versucht. Mit der Ausnahme von Südkorea und Taiwan beruhte diese Politik nicht auf einer an Effizienzkriterien orientierten langfristigen Entwicklungskonzeption. Sie bestand vielmehr aus einem Wildwuchs an Maßnahmen, die den Industrialisierungsprozeß nur teilweise und nur temporär beschleunigten, den Export diskriminierten und zur Lösung des Beschäftigungsproblems wenig beitrugen. Um aus der entwicklungspolitischen Sackgasse, in die die Importsubstitutionspolitik geführt hatte, wieder herauszukommen, wurde der Weg in die Exportorientierung beschritten. Der Wandel in der Produktionsausrichtung geschah allerdings nicht automatisch oder in einem spontanen Prozeß, sondern schrittweise und mit Hilfe staatlicher Exportförderungsmaßnahmen in Verbindung mit einer handelspolitischen Intensivierung des Wettbewerbs von außen und einer Stimulierung von ausländischen Direktinvestitionen, die exportorientiert getätigt wurden. Dabei hat sich gezeigt, daß auch eine Exportförderungspolitik in dem Sinne suboptimal angelegt sein kann, daß das Exportieren höhere Alternativkosten verursacht, als es Devisen einbringt. Dennoch stützen die Erfahrungen der fünfzehn Länder die Vermutung, daß anhaltende Fortschritte im Industrialisierungsprozeß erst durch internationale Verflechtung der Volkswirtschaften möglich werden.

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Résumé: Une analyse comparative de la politique d'industrialisation dans quinze pays en voie de développement demi-industrialisés. — L'analyse base sur les résultats des études des pays faites à l'Institut de l'Economie Mondiale pour sonder la position des pays en voie de développement concernant la division internationale de travail industriel. Concernant les pays analysés il s'agit de l'Egypte, du Brésil, du Hongkong, de l'Inde, d'Israël, de la Yougoslavie, de la Colombie, de la Corée de Sud, du Malaysia, du Mexique, du Pakistan, du Singapore, de l'Espagne, du Taiwan et de la Turquie. Dans trois pays seulement — Hongkong, Malaysia, et Singapore — on a poursuivi une stratégie d'industrialisation vers l'exportation dès le début. Dans les autres douze pays on a essayé pendant des décades jusqu'aux années soixante d'industrialiser avec une avancée politique de substitution d'importation comparée avec le laissez-faire. A l'exclusion de la Corée de Sud et du Taiwan cette politique ne basait pas sur une conception de développement orientée aux critères d'efficience à long terme. Au contraire elle consistait dans une croissance sauvage des mesures avançant le procès d'industrialisation seulement d'une manière partielle et temporaires, discriminant l'exportation et resolvant peu le problème d'emploi. Puis on a poursuivi une politique orientée à l'exportation pour échapper à l'impasse de la politique de développement dans laquelle la politique de substitution d'importation avait mené. Cependant le change de l'orientation de production n'arrivait pas automatiquement ou par un procès spontané, mais pas à pas à l'aide des mesures de promotion d'exportation administratives en liaison avec une intensification politico-économique de la concurrence externe et une stimulation des directs investissements étrangers orientés à l'exportation. A ce propos on pouvait voir, qu'une politique de promotion d'exportation aussi peutêtre suboptimale au sens que l'exportation cause des coûts alternatifs plus hauts qu'elle rapporte des dévises. Cependant les experiences des quinze pays soutiennent la supposition que les progrès persistants dans le procès d'industrialisation sont seulement rendus possible par l'enchevêtrement international des économies.

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Resumen: Un análisis comparativo de las políticas de industrialización en quince países semi-industrializados. — El análisis se basa en los resultados de estudios por países que han sido realizados en el Instituto de Economía Mundial de Kiel con el objetivo de sondear empíricamente la posición de los países en desarrollo en el sistema de división internacional de trabajo dentro del sector industrial. Los países estudiados son los siguientes: Brasil, Colombia, Corea del Sur, Egipto, España, Hong-Kong, India, Israel, Malasia, Méjico, Pakistán, Singapur, Taiwan, Turquía y Yugoslavia. El proceso de industrialización se inició hacia fuera solamente en tres países: Hong-Kong, Malasia y Singapur. En los demás, la política de industrialización estuvo encaminada durante décadas y hasta entrados los años sesenta hacia la sustitución de importaciones, forzada ésta si se compara con una situación de laissez faire. Con la excepción de Corea del Sur y Taiwan, dicha política no estuvo inspirada en una concepción de desarrollo a largo plazo según criterios de eficiencia. Consistió más bien en una multitud de medidas incoordinadas, las cuales sólo en parte y temporalmente consiguieron acelerar el proceso de industrialización, mientras que discriminaron las actividades exportadoras y apenas contribuyeron a mitigar el problema de provisión de puestos de trabajo. Para encontrar una salida del callejón en que se había abarrancado la política de sustitución de importaciones la orientación del aparato productivo giró más hacia la exportación. Este giro no surgió automáticamente o en un proceso

espontáneo, sino tuvo lugar gradualmente y con la ayuda de medidas estatales de fomento de la exportación en combinación con un aumento de la competiciónes de importaciones y una estimulación de inversiones directas extranjeras que fueran intensivas en exportación. Es de resaltar que también una politíca de fomento a la exportación puede resultar subóptima en el sentido de que la exportación implique costos de oportunidad en exceso del ingreso de divisas que origina. Sin embargo, la experiencia de los quince países estudiados apoya la presunción de que un progreso continuado en la industrialización no es factible sino mediante la integración internacional de la economía nacional.