CHAPTER 4

THE NEWLY INDUSTRIALIZED COUNTRIES : SOUTH KOREA AND BRAZIL

I

The Newly Industrialized Countries

There are very few countries in the world who by their sheer economic performance and development experience, make their presence felt and have profound influence on the concepts of development theory. The market-oriented East Asian economies Hong Kong, Republic of Korea (also referred to as South Korea or simply 'Korea), Taiwan and Singapore-are such countries. With their remarkable economic performance, combined with the relatively dismal record of other economies, which stuck more closely to the inward-looking policies prescribed universally in the 1950's and 1960's, they ushered in a new thinking in modern growth and development economics. The experience of these `Gang of Four', as they are `respectably' labelled and commonly called Newly Industrialised Countries (NICs), was initially interpreted as positive proof that competitive markets operating on classical principles would generate high levels of economic efficiency and rapid self sustained growth, even in developing countries. There is no doubt that the NICs are examples of spectacular development. Not only that, they have performed exceedingly well for long periods of time. No doubt these economies differ in many important respects. Nonetheless, they all share several common features, most vital being high and rising levels of education and above all an outward-orientation. Moreover, these economies are regarded as successes as much for the efficient ways in which they have transformed their economic structure as for the rapid rate of growth that was maintained during the process.

A glance at the superlative growth record of the East Asian NICs along with that of the near NICs' can be had from Table 4.1.

What transformed such initially slow economies into models of stupendous economic `miracles' has remained a question that has put forth many theories. This chapter is an attempt to shed light on certain related aspects explaining the NICs external bearings particularly related to the choice of a development strategy, role of trade policies, foreign capital and direct investment and contribution of external indebtedenss. The chapter begins with a brief review of the NICs as a whole and then moves on to a detailed study of the economic performance of Korea and Brazil in particular.

4.1 International Trade as the Engine of Growth :

International Trade has been the pulse of the East Asian NICs' growth performance. It is generally expected that the trade-income ratio would be inversely related to the size of the economy, though there is no fixed relationship that exists between size and importance of trade. In this respect it is quite remarkable that exports have continued to rise in relation to income in these economies. The trade policies used by them in order to speed up growth rates of income and industrialization became increasingly export-oriented. These export-oriented East Asian NICs have achieved great success particularly in income-growth equity and flexibility of adjustment in response to external shocks among other successes. They made the transition to export-led growth based on labour-intensive manufactured goods such as textiles, clothing, processed food and electronics, by the late 1960's and in the 70's and 80's had very high trade-

Table 4.1
Average annual GDP and GNP per capita growth: 1950-83 (Percentage)

	GDP growth		Per capita GNP growth		Per capita GNP (US$ 1983)
	1950-65	1963-83	1950-65	1965-83	
Singapore	5.5	10.3	5.5	3.4	6620
Hong Kong	10.1	8.7	5.5	6.2	6000
Taiwan	5.7	8.9	4.9b	6.7	2677
Korea,Republic of	5.7	8.6	3.3	6.7	2010
Low-income developing countries	4.0	5.3	2.0	2.7	260
Middle-income devloping countries	5.0	5.8	2.4	3.4	1310
Industrial countries	4.6	3.4	3.4	2.5	11060

Source : Hughes, Helen (1988).

Table 4.2
Exports and imports of goods and services of Asian developing countries,United States and Japan as percent of GNP(1970-71 & 1982-83)

	Exports		Imports	
Country/Group	1970-71	1982-83	1970-71	1982-83
NICs				
Hong Kong	68.9	76.1	80.5	84.1
Singapore	79.9	138.3	127.8	182.7
Republic of Korea	15.0	42.0	25.3	45.8
Taiwan	32.6	48.9	31.3	40.5
South Asia				
India	4.3	6.8	4.8	10.4
Nepal				
Pakistan	7.6	9.8	10.4	20.3
Sri Lanka	20.9	30.4	22.9	48.4
United States	5.3	8.1	5.6	9.4
Japan	11.8	16.3	10.0	14.9

Source : Same as Table 4.1

income ratios (See Table 4.2).

During the 1950's, two of the NICs, Taiwan and the Republic of Korea adopted and implemented policies planned to protect the domestic market through the use of multiple exchange rates and import controls. However, soon enough they realized that import substitution was a self-limiting process given their narrow domestic market. Once the domestic markets for consumer goods are exhausted, industrial growth will slacken and adjust to the expansion of domestic demand unless the expansion can be extended over to foreign markets. As a result, once the first phase of import substitution in 1950s reached completion, these economies ushered in a major policy change which provided relatively equal opportunities for expansion of all economic activities. Abolition of exchange controls and reduction of tariffs were the beginning as both the countries moved on towards export-oriented growth.

During most of the 1960s and 1970s, the prominent features of government intervention in industrial development in the NICs was the encouragement of sectors that exported a substantial share of production. Hong Kong followed a relatively free-market approach whereas Singapore had a brief period of import substitution in the first of the 1960s, after which it followed Hong Kong in adopting a free market approach.The transition to trade liberalization for Korea and Taiwan was more gradual. In other words, except for the city state of HongKong, where industrialization began in the frame work of an open economy, in the protected domestic markets of South Korea, Singapore and Taiwan, export-promotion policies were generally introduced after

some degree of import substitution.In fact, the experience of HongKong indicates that export may expand rapidly without a previous import-substitution phase. Rather, with the increased sophistication of its industrial structure brought about by the expansion of exports, `natural' import-substitution has taken place in HongKong in several industries under free trade conditions in the sense that no authoritative measures needed to be imposed by the government to implement the policy. The economy, facilitated by generous export revenues, was able to generate investments in creating such industries that produced domestically the goods that were previously imported thereby substituting them.

The adoption of a neutral policy stance between production for domestic and for export markets led to increases in HongKong's per capita income at an average annual rate of 6.6% between 1960 and 1973 far in excess of the per capita growth rates attained in countries that followed inward-oriented policies which grew at relatively slow rates of 2 to 3 percent.

Even during its import-substitution phase, in Singapore, the level of protection was lower than in other developing economies that followed such policies. In contrast to most other developing countries, protection was considered temporary since it was mainly aimed at establising domestic industries serving the home market. As such this phase of import-substitution lasted as short as roughly between 1965 and 1967 after which it came to an end.

Taiwan's import-substitution phase ran through much of the 1950s, wherein the primary emphasis was given to the protected domestic market characterized by a multiple exchange rate system

and strict import controls. However, once it was recognised that only an outward-looking or export-oriented industrialization policy could sustain a high rate of economic growth in such a small island economy, a series of policy reforms was undertaken during 1950-61. The highly overvalued currency was devalued and the complicated exchange rate structure was simplified and finally unified in June 1961.

Thus, by about 1960, South Korea and Taiwan had completed the initial `easy' stage of import substitution so that imports of non-durable consumer goods and their main direct inputs were replaced by domestic production. At this time, both chose to adopt outward-oriented policies based on their desire to accelerate economic growth in a situation where continued import substitution in the framework of domestic markets would have proved increasingly costly. The similar incentives provided to exports and import substitution were such that exporters enjoyed a free-trade regime in both the countries under which they were free to choose between domestic and imported inputs.

In mid - 1970s the NICs again readjusted their industrialization strategy. The slow growth of world trade and increasing protectionsim combined with the decreasing competitiveness due to rising wages in these countries forced the governments to adopt policies aimed at diversifying industrial exports. These policies were based on the assumption that the negative effects of the new protectionism in developed countries and a loss of competitiveness due to increasing domestic wages could best be avoided by shifting the emphasis of industrial

production towards heavy and technology-intensive industrial activities.

In sum, after the first stage of import substitution, the NICs were quick to establish a free trade regime for exports made necessary with the adoption of the outward-oriented policies.Non-traditional exports were favoured with additional incentives. Overall on the average import-substitution and exports were provided similer comparable incentives. Same also was the case for primary and manufacturing activities. Over time, considerable stability in incentives was assured.

The early and timely switch-over of policies in the NICs explains the fact that they achieved faster export growth than any other developing economy. Table 4.3 bears out the comparable figures.The incentives greatly influenced export performance in the NICs in terms of rate of growth of exports and changes in export output ratio's during the 1960-66 period which were the most rapid in these countries simply by virtue of adopting outward-oriented strategies in the early 1960s.

These policies also explain why in 1960-66, the NICs had the highest incremental export-output ratios in manufacturing. These ratios further increased, as their export-promotion efforts increased, from 20.1 to 42.6% in Singapore, 19.2 to 49.9% in Taiwan, and from 13.9 to 40.5% in Korea, However, the increasing share of manufactured exports did not adversely affect exports of primary commodities. This fact can be again observed in Table 4.4.

The 1970s experienced rapid expansion of trade in the three economies which turned into the most dynamic exporters during the time amongst all developing countries including other NICs and

Table 4.3

NICs , SICs and India : Exports, Imports, Manufactured Output, and GNP (Percent)

	Argentina	Brazil	India	Korea	Mexico	Singapor
Share of Manufactured Exports in Manufactured Output						
1960	0.8	0.4	9.7	0.9	2.6	11.2
1966	0.9	1.3	9.4	13.9	2.9	20.1
1973	3.6	4.4	8.6	40.5	4.4	42.6
Incremental Ratio of Manufactured Exports to Manufactured Output						
1960-66	4.0	3.8	8.9	24.8	3.2	28.4
1966-73	6.5	5.6	7.7	45.7	5.5	47.5
Share of Manufactured Imports in Total Use of Manufactured Goods						
1960	14.6	10.8	19.3	24.4	19.6	56.2
1966	6.3	7.5	16.5	26.5	16.2	53.2
1973	5.4	13.0	9.5	35.9	15.2	64.3
Incremental Ratio of Manufactured Imports to Use of Manufactured Goods						
1960-66	-3.9	-3.0	10.4	31.9	11.7	49.2
1966-73	4.4	15.7	-0.4	40.4	14.4	67.0
Ratio of Total Exports to GNP						
1960	8.9	6.1	4.2	1.5	6.4	9.9
1966	7.3	7.1	4.2	6.5	5.4	26.6
1973	8.1	9.8	4.3	26.1	4.3	44.6
Incremental Ratio of Total Exports to GNP						
1960-66	5.3	12.3	4.1	13.0	4.3	52.0
1966-73	9.0	11.5	4.3	34.8	3.3	52.0
Ratio of Total Imports to GNP						
1960	10.3	7.1	7.5	16.0	9.0	65.4
1966	5.2	6.1	7.4	18.7	7.2	62.5
1973	5.5	11.1	4.5	34.3	8.6	91.5
Incremental Ratio of Imports to GNP						
1960-66	-1.3	0.9	7.3	22.2	5.1	57.9
1966-73	6.0	14.2	-0.3	41.3	9.7	103.6

Source . Balassa. B. and Associates (1982)

Table 4.4
NICs , SICs and India : Growth of Value of Exports and Imports
(average annual percentage growth rate)

	Argentina	Brazil	India	Korea	Mexico	Singapore	Taiwan
All Primary Products							
1953-60	0.2	-3.1	3.7	-5.4	3.8	n.a.	-1.2
1960-66	6.3	4.7	4.5	24.0	6.9	29.5	17.3
1966-73	7.8	17.0	6.5	26.0	4.3	19.5	17.0
Manufactured Goods							
1953-60	-11.7	9.9	1.3	14.0	5.6	n.a.	29.5
1960-66	14.6	27.5	6.7	80.0	12.7	24.5	36.5
1966-73	33.5	38.5	7.7	50.0	20.0	42.0	47.0
Total Exports.							
1953-60	-0.6	-2.8	2.6	-3.2	3.9	n.a.	2 2
1960-66	6.7	5.4	5.5	40.0	7.8	28.5	23.5
1966-73	10.8	19.9	7.0	44.0	8.1	28.5	35.5
Total Imports							
1953-60	6.7	1.5	9.8	0.0	5.6	n.a.	6.2
1960-66	-1.8	0.4	5.4	13.0	6.9	8.0	13.1
1966-73	10.3	24.5	-0.3	29.0	14.5	25.5	29.5
Purchasing Power of Exports							
1960-66	4.0	4.0	0.2	38.0	6.5	26.5	22.5
1966-73	4.9	13.5	1.2	36.5	2.3	21.5	28.5

Source : Same as Table 4.3.

semi-NICs like Argentina, Brazil, Greece, Israel, Portugal, Spain and Yogoslavia.Total exports, grew at an annual average of more than 25% between 1970 and 1979. During this period manufactured exports also grew particularly rapidly, which in 1970, accounted for 70% of the total exports of the Asian NICs. Between 1970 and 1979 it maintained an average annual growth rate of almost 30% (Table 4.5). The share of East Asian NICs' in total manufactured exports of all NICs increased from 51% to 61% from 1970 to 1979.

The growth rate,however, slackened in the 1980s and actually became negative in 1982 owing to severe recession. Nonetheless, by 1984, exports regained the high rates of growth. The vigorours economic expansion in the US that began in late 1982 continuing through 1984 had a favourable impact on the growth of manufactured exports of the NICs. On the other hand, import demand for manufactures and intermediate goods spurred due to high rates of economic growth during the 1970s. The effects of increased export earnings can be also noted from Table 4.3 in the continued rise of the share of imports in the GNP in Korea, Singapore and Taiwan. Moreover, the NICs diversified exports in the 1970s, thereby reducing vulnerability to price and demand fluctuations in individual products. Thus, to say that manufactured exports have been an important source of growth for the NICs since the 1960s, would not be an exaggeration.

Moreover, despite an increase in non-manufactured exports (raw materials, agricultural and food products) from the NICs to other countries in the Pacific region, there was a relative decline of these products in the 1970s. However, one-fifth of

Table 4.5

Annual growth rate of total and manufactured exports of Asian developing countries in the 1970s and early 1980s (percent)

Country	Total					Manufactures	
	1970-79	1979-81	1982	1983	1984	1970-79	1979-81
NICs	28.5	19.2	-1.1	8.2	20.1	29.7	19.8
Hong Kong	22.1	19.9	-3.7	4.6	29.0	22.0	19.5
Singapore	28.0	19.3	-0.9	5.0	10.2	33.0	20.8
Republic of Korea	37.9	18.9	2.6	9.1	19.6	39.2	18.6
Taiwan	30.8	18.7	02.3	13.6	21.3	34.2	20.7
ASEAN	26.2	15.0	-4.1	0.1	9.4	39.4	15.5
Indonesia	34.9	23.8	-6.2	-5.3	3.4	47.4	28.1
Malaysia	23.3	3.1	2.3	17.4	15.3	38.0	9.0
Philippines	17.6	11.5	12.3	-1.8	9.1	33.8	17.0
Thailand	25.2	15.1	-1.2	-11.3	16.1	47.1	20.0
South Asia	15.7	7.4	1.5	8.2		17 2	-
Other NICs*	20.1	13.2	-5.5	3.7		24.1	23.7
Other developing countries	23.7	16.0	-16.2	-13.1		23.5	14.8
World	20.6	10.0	-7.2	-2.4		19.7	17.4

* = as defined by OECD (1979) - Argentina, Brazil, Greece, India , Israel, Portugal, Spain, Yugoslavia.

Source : Same as Table 4.1

NICs total exports were accounted for by primary commidiities. In any case what should be noted is that traditional and mostly labour-intensive exports including primary commodities still accounted for more than half of the exports of the NICs.

The above discussion should not overlook the fact that there were certain differences in the strategies pursued by the NICs. The strategy adopted in the Republic of Korea emphasized the development of heavy industry by providing credit at artificially low interest rates, strengthening direct government intervention, through state-owned companies and by introducing import controls in addition to tariff protection for selected goods. Such policies, on the one hand encouraged private investment to reach an unprecedented level in 1979 while, on the other also accelerated domestic inflation during a period in which growth of output slowed down and even turned negative, particularly in the early 1980s.

Meanwhile Taiwan and Singapore chose a different development strategy mainly aimed at sustaining export-led growth through expanded productioin of standardized products involving fairly high levels of skill and technology inputs. Taiwan facilitated the inflow of advanced technology supporting its implementation rather than direct intervention in capital markets and foreign trade and the Singapore government opted to intervene in the labour market.

Nonetheless, it can be aptly concluded that the better performance of the NICs is related to a combination of more thorough and timely adoption of outward-looking market-oriented policies. Since they lacked the natural resource wealth and had

little beyond abundant labour with which to begin their dirve towards modernization , they were in a way forced by circumstances to adopt the policies that they followed.

4.2 Foreign Capital : Its Significance and Contribution to NIC Growth.

Foreign capital flows to the NICs of East Asia during the past three to four decades have been considerably varied. Although the NICs represent a growing economic entity in the world economy, more notably with respect to trade, as far as global capital flows are concened, till recently or at least till mid - 1980s, they have been a `small economy'[1]. However, the large volume of literature available on foreign capital inflows into East Asian NICs, has not led to any clear hypothesis about the role of foreign capital in the NICs growth or industrialization. An attempt is made here basically to assess the contribution of foreign capital inflows, especially those of the principal components-development aid flows, direct foreign investment, and debt or foreign borrowing-all of which have had a direct bearing on growth and development of these economies.

With increasing development of international capital markets following the Second World War, the supply of capital for international flows was mainly determined by the industrial countries. The NICs began to contribute as lenders as well as borrowers to and from the international capital markets. But

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1. Total annual capital inflows into developing countries accounted for less than 10% of the total capital flows.

these economies have mainly been capital importers and price takers in these markets. The volume of capital they have attracted has been particularly determined by their demand for foreign capital which has in turn been determinded by their domestic policies.

Typical of developing countries, early inflows of foreign capital to the NICs mainly took the form of aid and short-term credit. In the 1950s, as the economies of the NICs strengthened, they became more creditworthy for commercial capital flows and began attracting suppliers' credit and direct investment. By the end of the 1960s they were strong enough economically to utilize other kinds of capital like bank flows and to a small extent,portfolio investment.

Assessing the contribution of foreign capital in East Asian growth, development and industrilization requires study of each of the principal components individually which follows.

4.2.1 Foreign Aid :

Aid flows were quite substantial at the beginning of the NICs' development effort. However, since the early 1970s, with Hong-Kong, Taiwan, and Singapore having effectively `graduated' from aid flows, these became limited. The main components of aid included all official concessional flows in the form of grants, concessional loans and technical assistance from bilateral and multilateral sources. The various indicators of aid flows are shown in Table 4.6.

The main donor of aid was the US which made substantial military and other `aid' contribution to Taiwan from 1950 to 1965 financing about 40% of its imports of goods and services and to

Table 4.6
Indicators of capital inflow into East Asia, 1969-83

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Korea, Republic of (US$ million)										
Use of fund credit (SDR million)	-	-	-	-	-	110	217	302	280	202
Private unrequited transfers	142	95	105	119	155	154	158	193	170	434
Official unrequited transfers	102	8	63	50	36	67	67	153	53	37
Direct investment	-3	3	56	63	93	105	53	75	73	61
Portfolio investment			-	-	-	-	-	74	70	42
Other long-term capital	578	425	559	447	507	939	1291	1183	1257	2008
Other short-term capital	142	224	287	-16	3	697	1123	534	-10	18
Capital inflows as a share of GNP (Percent)	9.8	8.7	9.9	5.2	4.7	9.8	12.2	7.0	3.9	4.3
Capital inflows as a share of gross fixed capital formation (Percent)	46.2	38.1	46.1	25.7	20.2	38.5	47.7	29.2	14.5	14.0
Singapore (US$ million)										
Use of fund credit	-	-	-	-	-	-	-	-	-	-
Private unrequited transfers	-16	-23	-23	-2	-14	-41	-38	-46	-41	-36
Offical unrequited transfers	3	13	11	5	10	2	-	-3	-4	-3
Direct investment	38	93	116	191	389	596	611	651	335	739
Portfolio investment			-	51	-	-	-	36	121	-6
Other long-term capital	35	47	42	25	92	76	58	79	64	-14
Other short-term capital	-58	33	129	129	242	-172	-89	83	86	294
Capital inflows as a share of GNP (percent)	1.0	9.7	13.3	13.9	18.1	10.0	10.3	1[illegible].2	9.3	13.0
Capital inflows as a share of gross fixed capital formation (percent)	4.2	30.1	36.8	36.9	50.1	26.1	29.3	40.1	27.8	37.7
Taiwan (US$ million)										
Use of fund credit	-	-		-	-	-	-	-	-	-
Private unrequited transfers	13	20	13	15	5	13	11	22	7	-19
Offical unrequited transfers	-5	-6	-2	2	-5	-2	-5	-1	-2	-7
Direct investment	51	61	52	27	62	83	35	64	42	110
Portfolio investment			-	-	-	-	-	-	-	-
Other long-term capital	-116	14	-93	-10	218	386	332	488	284	177
Other short-term capital	14	98	-69	-20	-703	631	217	-223	-1360	-1817
Capital inflows as a share of GNP (percent)	-1.2	3.0	-1.7	-	-4.2	8.0	4.0	1.9	5.3	-6.4
Capital inflows as a share of gross fixed capital formation										

the Republic of Korea which peaked at about $250 million by 1963.Hongkong's economy was subsidized by the UK until the 1960's. The NICs also took advantage of the US military presence in South-east Asia. Japan also paid reparations to most of the East Asian countries and assisted them through concessional lending.

In the late 1940s and upto early mid-1950s, aid to the NICs initially took the form of grants for budget support both,to the colonial administrations at first, and then to the newly independent governments. During this period aid accounted for the bulk of foreign inflows, since private capital was mainly limited to short-term credit.

Aid enabled the countries of East Asia, particularly Republic of Korea and Taiwan, not only to expand social and physical infrastructure but also to pursue subsidized import substituting pro-urban industrialization policies at the cost of agricultural development. Moreover, the problems of this kind of industrialization were worsened by aid flows in the form of overvalued local currency. In any case, the currency tended to move in that direction because of the monetary and fiscal policies that accompanied the development policies implemented at the time. However, these economies moved ahead in using multilateral concessional sources of funds ahead of other developing countries and used IMF facilities more intensively. In the 1960s, aid -to- GDP ratios fell and aid became less concessional as aid flows to East Asian countries reached a plateau. With the exception of Krueger's analysis of aid in the

Republic of Korea (Krueger:1979), the role of aid flows in East Asian growth remains to be analysed.

4.2.2 Direct Foreign Investment :

Direct Foreign Investment as a proportion of capital formation and in total import of capital has assumed far less importance in Taiwan and the Republic of Korea and multinationals have had a small presence in relation to their economies as a whole as compared to Singapore where it has assumed relative importance over the period 1970-83. The potential impact of direct foreign investment (DFI) has been recognized to have been significant in several areas for the developing East Asian economies. Amongst the important areas for these NICs in view of the increasing emphasis on export-based industrialization, trade has been one such important area involving its link with DFI. The role of DFI in the growth of exports of the NICs, particularly manufactured export, and thereby its role and significance on their development process has been of considerable importance, though the role varies for different types of exports as well as in different markets. Parry reports the share of direct multinational enterprises exports in the total manufactured exports of several developing countries as estimated by Nayyar (1978)[2].

Republic of Korea	15 percent	Singapore	70 percent
Taiwan	20 percent	India	5 percent
Hong Kong	10 percent	Pakistan	10.15 percent

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2. Parry T.G.,"The Role of foreign capital in East Asian Industrialization, Growth and Development" in Hughes Helen (ed.) ,"Achieving Industrialization in East Asia",Cambridge University Press, Cambridge, 1988,Pp.112.

Table 4.7

Net Private direct foreign investment flows[a] (US$ million)

		1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Hong Kong	OECD	23	26	31	58	143	81	215	154	145	252	342	374
	IMF	-	-	-	-	-	-	-	-	-	-	-	-
Korea,Republic of	OECD	5	14	32	67	261	81	51	83	28	184	1	-207
	IMF	-3	38	56	63	93	105	53	75	73	61	16	-7
Singapore	OECD	9	16	22	46	108	92	70	67	86	147	355	650
	IMF	38	93	110	191	389	596	611	651	335	739	941	1669
Taiwan	OECD	-	-	-	-	-	-	-	19	19	28	67	163
	IMF	51	61	52	27	62	83	35	64	42	110	123	-

a - table indicates figures by OECD and IMF

Source : Same as Table 4.1

In Taiwan, over the 1970s, foreign investment accounted for about 8% of investment in manufactures, lesser in the Republic of Korea. More importantly, they have had restricted access to the domestic market.Somehow, by one or other means they have been directed towards exports.

Multinational enterprises have located manufacturing facilities oriented to export markets in the East Asian region- Hong kong, Korea, Singapore, and Taiwan. The importance of DFI in the export of manufactured products varies. In Hong Kong, foreign firms were active in exporting manufactured products such as clothing, textiles, plastic products, electronics and toys. However, the marketing advantages enjoyed by foreign firms over local firms in the marketing of these products was negligible. On the other hand, in Singapore, foreign firms, particularly Japanese and US based, were dominant in exporting manufactured products including the traditional products still being manufactured.

In Korea, certain sectors were prominent for the role of foreign firms in exporting. In areas such as petrochemicals, electric machinery and electronics and textile industries,foreign firms operating via joint ventures have been identified as playing an important role in exports. In fact, the role of DFI in exporting seems to be proportionately more important than its role in the overall economy . The proportion of total commodity exports directly accounted for by foreign firms increased from 6.2% in 1971 to 17.6 in 1975 (Westphal et. al. 1981) and to over 20% in 1978. The most important role of foreign firms in Korean exports has been in textiles, electrical and electronic products,

with extension of provision of production know-how and critical inputs in the latter (Westphal et. al. 1981).

The cases of Singapore and Korea provide a stark contrast with respect to DFI. While in the Republic of Korea, around 75% of the overall licensing agreements during 1973-80 were negotiated by locally owned firms (IMF : 1985a), almost all transfer of technology to Singapore takes place through DFI.

Another aspect of DFI in the NICs has been intra-regional trade which has been an important source of DFI in the East Asian NICs and has also been associated with significant flows of production technology and know-how. The intra-regional transfer of technology has been particularly important in the case of Hong Kong, Korea and Taiwan. Hong Kong has tended to export know-how embodied in DFI emphasizing on production design, management and marketing know-how. Taiwan's main technology exports have been embodied in equipment exports rather than DFI which itself has been directed towards securing raw materials and maintaining its market share. The Republic of Korea's technology exports has been embodied in its outward DFI and overseas construction, technology licensing and exports of machinery and equipment independent of DFI [3].

4.2.3 Medium-and Long-Term Capital Flows :

In the 1950's in combination with aid or DFI,governments and private enterpreneurs in the East Asian countries were often

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3. Westphal L. et. al. ,"Export of Capital goods and Related Services from the Republic of Korea," World Bank Staff Working Paper 629, World Bank, 1984, Washington D.C.

first eligible for suppliers' credit. However, by the 1960's,unlike many other developing countries,the NICs' policy framework strongly oriented towards exports enabled them to avoid debt problems arising out of suppliers' credits at a time when countries with devastated economic policies contributed to wide-spread `debt crisis'. By the mid-60's the East Asian countries also began to make use of bank loans as their economies strengthened further and supply of capital increased. Packages of DFI, suppliers' credit and bank loans became increasingly common. In the short but sharp recession of 1975, some East Asian governments started borrowing more broadly for budgetary purposes to offset declining exports and fall in income following the rise in petroleum prices.

Capital inflows, short- medium- and long-term began to emerge within the region in the 1960s. Hongkong was the first to become an international capital market location. Singapore followed in the mid 1970s. With the exception of Korea, East Asian countries have traditionally been fairly modest borrowers among developing countries.The debt obligation of East Asian countries are relatively modest particularly in relation to heavy borrowers in Latin American countries. Most of the debt problems arise from the ratio of debt-to-exports rather than debt-to-GNP since export earnings signify the debt serving capacity of a country. It in is this sense that the obligation of the East Asian countries becomes relatively modest. In fact, despite its relatively higher indebtendness amongst East Asian nations, Korea was able to manage the debt because of its strong export performance.

Though all the East Asian NICs started the post-war period with some opposition to the idea of foreign capital and its participation in their economies, it was recognized ultimately that industrialization would have been more difficult to achieve without foreign aid ,foreign loans or DFI. Though official aid and loans were the most acceptable as compered to DFI on political grounds, the countries received a substantial inflow of foreign funds in one form or another.

II

The Republic Of Korea :
Growth With Increasing Outward Orientation

Korea attained independence from first the Chinese and then Japanese Colonization in 1945, but truely speaking, the years following independence were extraordinarily difficult which influenced the pattern of subsequent political and economic events. With the establishment of the Republic of Korea following partition in 1948, considerable economic progress was made in the first two years.

Adjustments first to partition and then to dislocations caused by the Korean war in June 1950 left the South Korean economy in 1955 in much the same shape as it had been at the end of Japanese occupation. Manufacturing accounted for only 8% of GNP in 1955 whereas primary sectors accounted for almost half of the GNP. Export contributed only 1.4% to the GNP and manufactured exports were almost non-existent. The above facts are brought out in Table 4.8.

4.3 The Interplay of Trade and Incentive Policies :

Referring back to Table 4.8 the industrial expansion of Korea from 1955 to early 1960s was geared particularly towards the home market. A major role was played by import substitution in light manufactured and non-durable consumer goods. In 1956, exports accounted to less than half their value in 1950, the beginning of the Korea war. In the late 50s, however, growth of exports began to accelarate slowly. By 1960, their real value surpassed that of 1950 by almost 16% though in absolute terms as

Table 4.8
Korea: Selected major Economic Indicators, 1955-75

Indicator	1955	1960	1966	1970	1975
Computation of GNP per Capita					
GNP (thousand million won; 1970 prices)	938.2	1,129.7	1,529.7	2,589.3	4,107.7
Population (million persons)	21.5	24.9	28.3	31.4	34.7
GNP per Capita (thousand won; 1970 prices)	43.6	45.3	54.0	82.4	118.4
Percentage Shares of GNP (1970 prices)					
Value Added in:					
Primary Production	47.5	42.6	41.0	29.2	23.0
Manufacturing	7.9	10.8	13.9	21.6	31.9
Social Overhead	4.2	6.0	8.5	13.3	13.7
Services	40.4	40.6	36.6	35.9	31.4
Gross Investment	10.0	8.5	12.9	27.2	26.3
Exports of Goods and Nonfactor Services	1.4	2.4	9.2	14.7	28.3
Imports of Goods and Nonfactor Services	11.2	10.4	9.8	24.8	27.2
Percentage Shares of GNP (current prices)					
Government Revenue	10.5	19.8	16.1	20.1	19.7
Government Savings	0.6	4.1	5.7	7.5	3.6
Total Domestic Savings	3.7	1.6	7.7	17.1	17.7
Gross Investment	11.9	10.9	15.1	27.2	27.1
Exports of Goods and Nonfactor Services	1.6	3.3	8.5	14.7	30.2
Imports of Goods and Nonfactor Services	9.8	12.6	15.9	24.8	39.6

Compound Annual Growth Rates (percent)	1955-60	1960-65	1965-70	1970-75
GNP (1970 prices)	3.8	6.2	11.1	9.7
GNP per Capita (1970 prices)	0.7	3.6	8.8	7.5
Manufacturing Value Added (1970 prices)	10.3	11.8	21.3	18.5
Index of Manufacturing Output	12.0	9.5	24.2	23.2
Total Exports (1970 prices)	16.3	24.0	36.5	25.0

Source : Same as Table 4.3

well as in relation to GNP, they remained small. The share of total exports in GNP at current prices was only 3.3%.

Manufactured exports beginning from a small base, rose rapidly in the early 1960s. Around 1965 the real turning point in both export and industrial growth occured. It was the end of a period of trade liberalization and other major policy reforms. In the following decade manufactured export growth coupled with rising domestic demend, fueled industrialization much faster than before. Within the decade 1965-75, the ratio of total exports to GNP more than trebled and the share of GNP originating in the manufacturing sector more than doubled. Manufactured products constituted 42% of total exports in 1965 and 74% in 1975. As observed in Table 4.8 almost every indicator of development performance improved remarkably after the mid - 60s..

Korea's trade and industrial incentive policy structure during the latter half of the 1950s was predominantly one of import-substitution. Large-scale purchases of the Korean currency (Won) at the official exchange rate by the resident UN military organization served to maintain an overvalued exchange rate. In fact, the history of Korean development strategy and policy changes is one of continued, though sometimes intermittent, movement towards an increasingly open economy marked by major liberalization in the mid-1960s. During the late 1950s, a multiple exchange rate system and import controls heavily protected the domiestic market. High tariffs were imposed on imports for which close substitutes were domestically produced. Products, mainly finished consumer goods without substitutes, had lower tariffs. Serveral major import substituting industries were

exempted from tariffs on import of machinery and intermediate goods. To offset greater overvaluation of the Won, quantitative restrictions on imports were imposed increasingly. Quotas were the main tool for controlling imports.

Regarding exports, the discrimination was not as great as might appear. Export earnings were convertible in a free market and commanded a substantial premium. Moreover, direct cash subsides to exporters were also provided.

Fueled by import-substitution in non-durable consumer goods, the growth of industrial output was quite rapid-12% per annum during the period. However, as opportunities for 'easy' import substitution diminished rapidly in the early - 60s industrial growth began to falter.

Policy makers came to recognize and accept the view firmly that rapid economic development depended upon export-oriented industrialization. Their argument for such on opinion was the very poor natural resource base. Also, further opportunities for import substitution were to be found only in intermediate and durable goods for which the limited domestic market would not justify eatablishing large plants and would involve increasing inefficiency. Beginning in 1961, with the temporary establishment of a unified exchange rate, a number of attempts were made at policy reforms and liberalization and in 1964-65 a number of reforms were successfully implemented.

A major complimentary policy change was the lasting establishment of a uniform exchange rate in 1964 when the Won was devalued to 255 to the US dollar. It was designed mainly to

simplify the exchange rate regime and offset domestic inflation rather than to increase export incentives. Since 1964, devaluations continued at discrete intervals with continued intervention by the Bank of Korea to maintain stability of the nominal rate between the intervals.

Trade controls were gradully relaxed after the 1964 devaluation following an increase in the number of items eligible for unrestricted imports. In 1967, the system was further liberalized with the replacement of the `positive' list by the `negative' list under which commodities not listed in the trade program were automatically approved for import. Moreover, the tariff system remained practically unchanged until 1967 when minor changes were implemented, but the overall impact remanied negligible. All in all, the net result of these policy changes was the establishment of a system that generally favoured exports over import substitution.

4.3.1 Relative Importance of Export-Led Outward Orientation and Import Substitution :

Many authors have argued, and some justifiably so, that Korea's trade orientation was responsible for its phenomenal industrialization success. Considerable evidence shows that promotion of manufactured labour - intensive exports helps industrialization [4].

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4. Westphal L. and Kim K.S.(1982)-"Korea",in Balassa B. and Associates, "Development Strategies in Semi - industrial Economies", M.D., Baltimore, John Hopkins University Press, Published for the World Bank, 1982, Pp.212-274.

In Korea, government policies succeded in attaining a high and sustained rate of growth through industrialization. Table 4.9-A shows the high rates of growth recorded in production especially in manufacturing as well as in employment and foreign trade.

Investment and exports were the two major expansionary forces in the economy. In the first phase of the period i.e. 1961-69, these grew at about the same rate but during 1970-78, the second phase, exports grew at a significantly greater rate than investment. Table 4.9-B also reports the same facts, albeit in a different form.

An interesting observation that emerges from the remarkable economic transformation of the the Korean economy is the relative importance of export expansion and import substitution over time. The figures given in the table below show the total percentage contribution of each, i.e. export expansion and import substitution, to the growth of aggregate output for each sub-period [5].

	1955-60	1960-63	1963-66	1966-68
Export Expansion (EE)	12.9	6.3	31.4	21.3
Import Substitution (IS)	10.2	-6.9	8.9	-06.6

As the table shows, for each sub-period, the contribution of EE is much more than of IS, the greatest during 1963-66. Obviosuly so , since it was the period when Korea initiated major policy reforms and began on its path of rapid growth. For the

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5. ibid, Pp.258.

Table 4.9
Korea : Selected Indicators of Growth

A. Average Annual Compound Rates of Growth at Constant Prices,1961-1969 & 1970-78 (Percent)

	1961-69	1970-78
GNP	8.5	9.7
Agricultural production (Includes forestry & fishery)	5.0	2.8
Manufacturing production	16.5	19.0
Employment	2.8	4.1
- Agricultural	-0.8	0.9
- Non-Agricultural	7.8	6.8
- Manufacturing	11.8	10.4
Gross domestic capital formation	25.4	13.4
Exports of Goods & Services	29.6	24.1
Imports of Goods & Services	19.3	17.5

B. Indicators of Structural change during 1961-78 (Annual Average in percent)

	1959-60	1968-69	1977-78
1. Share in GNP (at constant market prices)			
- Agricultural production	45	34	19
- Manufacturing	8	16	25
Gross Domestic capital formation	8	28	33
Exports of Goods and Services	2	12	31
Imports of Goods and Services	12	27	39
2. Share in Exports (at current market prices)			
- Agricultural	29	8	8
- Marketing	39	7	1
- Manufacturing	32	85	91

Source : Eprime, Eshag (1991).

earlier period (1955-63), primary export and import substitution in manufacturing were the chief characteristics. After 1960, growth of exports was dominated by manufactures and there was relatively much less import substitution in the 1960s as a whole as compared to the late 1950s. The total contribution of exports between 1955 and 1968 was 20 percent, most of it attributable to growth of manufactured exports wihch accounted for 75% of the change in total exports.

The overall contribution of import substitution was negative, albeit near zero. Whatever modest contribution to manufacturing growth, was offset by the rising import shares in other sectors of the economy.

Also telling are the figures in the table below which show the direct percentage contribution of export expansion and import substitution to the growth of manufactured output in each sub-period[6].

	1955-60	1960-63	1963-66	1966-68
Export Expansion (EE)	5.1	6.2	29.4	13.0
Import Substitution (IS)	24.2	0.9	14.1	-00.1

During the late 1950s, exports played a relatively minor role in industrialization whereas there was extensive import substitution in consumer non-durables and light industry intermedlate products. As a result, EE contributed only 5.1 percent to manufacturing during the period 1955-60. Once again

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6. Adapted from the same source as in (4).

the greatest contribution of EE was during 1963-66, the period of major policy reforms. Thus, in aggregate terms, export expansion contributed more than import substitution to Korean economic development.

During the late 1950s, exports played a relatively minor role in industrialization whereas there was extensive import substitution in consumer non-durables and light industry intermedlate products. As a result, EE contributed only 5.1 percent to manufacturing during the period 1955-60. Once again the greatest contribution of EE was during 1963-66, the period of major policy reforms. Thus, in aggregate terms, export expansion contributed more than import substitution to Korean economic development.

Another aspect of the role of import substitution in Korea is the absence of large-scale and wide spread import substitution that can be explained in part by a backward-linkage effect realized from exports to the domestic production of intermediate imports, in the form of increased demand for domestically produced increased inputs and foreign-exchange effect due to increased production made possible by the foreign exchange earned (through exports) or saved (through import substitution). The backward linkages were responsible for almost a tenth of the growth of manufactured output and more than 15% of the growth of primary output.

The large contribution of export growth to Korean industrialization and the selective exploitation of backward linkages from exports explains the lesser role played by import substitution. Moreover, the rapid growth of foreign exchange

earnings from exports has been a main factor in allowing selective import substitution. Owing to abnormally small shares of both exports and imports in GDP at the end of the Korean war and also in order to pursue its comporative advantage, Korea was obliged to increase these shares to exceptionally high levels.

Thus, by effectively harnessing its abundunt supply of skilled labor for manufactured export production and through successfull trading, Korea, in the 1960s, was successful in overcoming its acute scarcity of natural resources and sweeping aside the constraints that a small domestic market could impose on growth. Moreover, Korea's longer-term trade strategy has, of late ,received an added twist from the difficulties encountered in raising funds abroad. Exports are seen as not only the engine of growth but also as a means for closing a burdensome current account deficit. By shifting strategies that did not work, Korea acieved gains through realizing their comparative adevantage.

4.4 Foreign Capital and The Growth in External Debt :

An important aspect of capital inflows into Korea was that, large inflows of capital provided breathing space during the years of its recovery which enabled it to revive growth before undertaking any policy action. From early 1950s through mid-1960s, substantial deficits in Korea's current account were financed mainly by foreign aid. The social and economic upheaval caused by the war combined with Korea's poor economic endowment forced greater reliance on foreign assistance. Programmes for reconstruction of infrastructure and industrial plants ravaged by the civil war were completed by 1957 with financial assistance

flowing in from abroad. Foreign aid totalling around $2.3 bilion was provided and the foundations of the industrial sector were laid. During the next few years the economy registered a fairly respectable rate of growth with industrial expansion providing much of the impetus.

As noted earlier, foreign aid, which financed persistent external deficits, played a key role. US aid accounted for nearly all the aid received and consisted mainly of grants given in the form of project and non-project assistance, technical support and under PL - 480. In fact, Korea is argued to have been a success story mainly because of the large amount of foreign aid it received in the beginning of its development process which enabled it to create an industrial base and grow relatively faster than other developing nations at the time.

The importance of aid in laying the foundations of industrialization can be judged by the proportion of imports it financed. Foreign aid financed 75% of commodity imports for the entire period 1953-60, 87% in 1957 alone when aid was the highest at $383 million. In the 1960s with rapid growth in exports, foreign aid played a relatively less important role in financing imports, though certainly not insignificant by any means.

The government's willingness to run persistent deficits in the current account balance and its determination to fill any gap that arose between planned investment and domestic savings made possible to follow a basic policy of importing as much capital as was required for implementation of its programmes. In order to finance the wide gap between investment and domestic savings that arose because of the severe deterioration in the terms of trade

caused by the first oil shock of 1974, the Korean government was ready to borrow abroad heavily. As noted before,US aid was the major and perhaps the sole source of foreign capital during the initial period of Korea's development process. Over time, by the 1960s, Korea was ready to accept foreign loans also and finance its imports through long-term trade credits.

US assistance continued through the 1960s. With the overthrowing of the Rhee regime in 1960, there was a pronounced policy change and the new government began to promote inflows of foreign resources of all kinds. Prior to 1960, foreign capital inflows was entirely in the form of loans and trade credits. As a consequence of the policy changes in 1960, a rapidly increasing diversification of sources of foreign influence characterized the period since then. Over time, however, the share of capital inflows in total investment steadily fell, though even as late as 1972-76, the period of Korea's Third Five-Year Plan, it was 20 percent. Moreover, Korea also made efficient use of these foreign capital inflows. Its gross incremental capital - output ratio during 1965-75 was almost 2.4,very low compared with that of other developing countries.In fact, it accepted a temporary decline in growth so as to limit reliance on foreign loans and used the proceeds of the loans in productive investments. Though its reliance on borrowing was quite heavy, it was subsequently able to reduce the reliance for the same reason.During the 1960s much of the capital inflow was commercial credit, including private publicly guaranteed loans (See Table 4.10). Besides the US, private loans have flowed also from Japan and Western Europe.

Table 4.10
Net Foreign Capital Inflows
(million of dollars in current prices)

Item	1962-66	1967-71	1972-76
1. Public and guaranteed loans	274.7	1,613.9	3,054.4
Multilateral	13.7	86.4	773.3
Bilateral	261.0	1,527.5	2,281.1
Type			
Suppliers credit	143.7	592.2	-170.5
Financial institutions	9.6	292.3	1,285.4
Bonds	0.0	0.0	71.4
Governments	107.7	643.0	1,094.8
2. Private loans	13.4	131.1	247.4
Multilateral	0.0	0.7	44.2
Bilateral	13.4	130.4	203.2
Type			
Suppliers credit	13.4	89.2	-19.8
Financial institutions	0.0	39.0	161.5
Governments	0.0	0.0	62.4
Unclassified	0.0	2.2	-0.9
3. Direct foreign investment	16.7	72.2	420.8
United States	16.0	9.6	1.6
Japan	0.1	37.1	364.6
United Kingdom	0.0	0.5	2.7
Germany (Federal Republic)	0.3	2.2	2.4
Other	0.3	22.8	49.5
4. Total foreign loans and investment	304.8	1,817.2	3,722.6
Multilateral	13.7	87.1	817.5
Bilateral	291.1	1,730.1	2,905.1
United States	130.7	818.8	1,325.8
Japan	84.8	446.0	693.9
United Kingdom	0.3	90.9	271.4
Germany (Federal Republic)	37.0	72.2	69.1
Other	38.3	302.2	544.9
Grants / a	832.8	444.0	11.1
5. Total net foreign capital inflows	1,137.6	2,261.2	3,733.7

a - excludes military grants - figures refer to foreign economic aid received.

Source : Westphal L., Rhee Y.W., Pursell G.(1981).

Table 4.11
Comparative Data on Direct foreign Investment : Selected NICs abd SICs

Country	GNP 1976 (Billion$)	Net Direct foreign Investment Million$		Percentage of net foreign capital inflow	
		1967-71	1972-76	1967-71	1972-76
Korea	25.3	120.1	460.2	3.7	7.9
Brazil	143.0	1483.5	6158.3	33.8	22.9
Mexico	65.4	1283.9	2617.5	36.6	16.0
Taiwan	17.1	222.1	274.9	32.3	12.9
Thailand	16.3	236.1	499.0	26.1	28.0

Source : Same as Table 4.10

Table 4.12
Commodity Exports by foreign firms 1971-75

Item	1971	1972	1973	1974	1975
Commodity Exports (million$ in current prices)	1067	1624	3225	4460	5081
-By foreign firms	66	174	348	771	892
Percentege share of foreign firms in total	6.2	10.7	10.8	17.3	17.6

Source : Same as Table 4.10

4.4.1 Foreign Debt :

One of the problems of Korea's outward-looking strategy as pointed out by Park (1988) is that it has been burdened with a large foreign debt[7]. As seen in Table 4.13 more than half of Korea's GNP was committed to its debt.

The size of the debt has made the country more vulnerable than before to external shocks. The reason given by Park for such an accumulation of foreign debt is Korea's development policy which placed growth ahead of other objectives. The availability of foreign funds gave policymakers a free hand to continue with their growth priority and choose an adjustment path to external shocks that required little sacrifice of growth. Korea's dependence on foreign resources was expected to be reduced through rapid growth through export promotion. Though this has happened only to an extent, domestic savings has not been sufficent to sustain this rapid growth so that Korea's current account deficit has persisted and has been the principal cause of its debt accumulation.

Korea's reliance on offical and commercial external capital began in the 1960s. Although private savings improved substantially during 1965-75 reliance on external borrowing continued to be high, the primary reason being large increases in investment and substitution of borrowing for grant assistance formally provided by the US. Foreign savings financed about 15%

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7. Park Yung-Chul,"Korea" in Dornbusch and Helmers (eds.),"The Open Economy",EDI series in Economic Development, Oxford University Press for the World Bank, 1988.,Pp.343.

of total investment in 1973. But with the rise in import cost and scarcity of resources in 1974 and 1975, foreign savings ratio increased sharply and was more than 40% on an average. The direct result of this was a substantial increase in Korea's external obligations. (See Table 4.14)

In 1971, outstanding and disbursed debt reached 27% of GNP and the debt-service ratio reached a level as high as 22%. Outstanding debt continued to rise faster than GNP owing to the BoP crisis in 1974 and 1975 but the debt-service ratio declined sharply because of the rapid increase in export eqrnings. As a result, servicing of external debt did not prove to be an excessive burden for South Korea. In 1976, the foreign savings ratio to GNP declined to 7% ,the lowest in Korea's recent history.

The level of external capital was high in relation to GNP and investment through most of the period of 1962-76 (Table 4.15). During the First Five-Year Plan period, 1962-66, the proportion of foreign savings in total investment was 54.3% on an average, 39.5% during the second term 1967-71 and 43.7 during 1972-76. In 1966, the character of foreign savings changed. Earlier, the proportion of borrowing in foreign savings was negligible. But in this period,the net foreign borrowing as a proportion of total foreign savings began to rise-about 1/3rd in 1966. This was due to insufficent foreign assistance for implementation of the plan so that a number of projects became dependent on foreign loans particularly Japanese capital which flowed into Korea rapidly. Grant were a significant source for financing the substantial deficits in the BoP, with the US virtually the sole source of

Table 4.13
Profile of Korea's External Debt

Item	1965	1970	1975	1979	1980	1981	1982	1983	1984
Gross debt									
Billions of U.S. dollars	0.2	2.3	8.5	20.4	27.3	32 5	37.1	40.4	43.1
Percentage of GNP	5.9	28.2	40.6	32.7	44.6	48.4	52.4	53.7	53.2
Net debt									
Billions of U.S. dollars	0.1	1.6	6.8	14.1	19.8	24.3	28.3	31.1	32.9
Percentage of GNP	1.7	19.7	32.4	22.6	32.4	36.2	40.0	41.3	40.6
Debt service/GNP	0.5	3.3	4.1	5.2	7.3	8.1	8.2	7.6	8.3

Source : Dornbusch R. and F.L.C.H. Helmers (1988)

Table 4.14
Debt Outstanding and Debt Service 1966-76 (million$)

Item	1966	1971	1975	1976
1.Medium and long-term Debt outstanding and disbursed	326	2401	5958	7243
2.Debt Service	19	325	678	940
3.Debt Service ratio% (ratio of debt service payments to export of goods and non-factor services)	4.7	22.0	11.9	10.3

Source : Hasan, Parvez & D.C.Rao (1979).

Table 4.15

A. Growth of Investment (1953-70)	1953	1957	1961	1966	1970
Total Investment (billion won)	7.69	14.41	38.79	223.11	712.40
Ratio to GNP (%)	12.9	11.9	16.5	26.7	
Financing of Investment (Billion won)					
- Domestic Savings	4.54	-2.07	11.32	121.32	417.50
- Foreign Savings	3.15	16.48	25.29	87.63	249.32

B. Growth of Foreign Savings in relation to Investment and GNP (% based on current prices) (1962-76)	1962-66	1967-71	1972-76
Ratio of Gross Investment to GNP	16.6	26.3	27.0
Ratio of Domestic savings to GNP	6.9	14.8	17.0
Ratio of Foreign savings to GNP	8.7	10.4	11.8
Ratio of Foreign saving to Gross Investment	54.3	39.3	43.7

Source : A. Ichimura, Shinichi (1974).
B. Same as Table 4.14

grant aid until mid-1960s. (Table 4.16-A)

Net current transfers and capital grants equalled nearly 40% of the total deficit during 1965-75. They declined from 188% in 1965 to 50% and 11% in 1973 and 1975 respectively. All capital grants ceased with improvement in Korea's trade prospects in 1974. As observed earlier, private foreign direct investment represented a relatively small proportion of inflows of external capital. It averged less than 10% of the total-$35 million on an average annually between 1960 and 1975. It reached a peak of more than $140 million in 1973 and totalled around $370 million during 1972-75.

Korea's case, in fact, provides an example of a transition towards a high savings rate financed by initial large foreign borrowing (See Table 4.16-B). The extermely large current account deficts-9.1 and 6.8 percent as averages for the 60s and 70s-show how much of the growth was financed by drawing on external resources. As a result of high per capita investment rates, income growth was high. The growing per capita income in turn provided increasingly the resources to finance investment. By 1986-87, the current account had turned towards surplus and debt started to be retired.

Table 4.16 B

Korean Investment & Foreign Savings (% of GDP)

Period	Investment	Foreign Savings	% per capita income growth
1960-69	18.2	9.1	6.4
1970-79	27.6	6.8	7.9
1980-85	30.7	6.7	6.1
1985-86	30.7	0.2	7.3

Source : Chenery, H. and Srinivasan T.N.(1989), Vol.II, adapted, PP. 1411

Table 4.16

A. Sources of External capital, 1966-76 (million$ in current prices)

Item	1966-71	1972	1973	1974	1975	1976
Sources,of which	658	802	999	2452	2776	2332
Capital Grants	119	87	61	64	-	-
Net private direct Investment	36	74	137	103	53	76
Medium & long-term Capital (Gross)	472	784	828	1329	1773	1816
Net short-term Capital	137	-16	84	-45	680	602
IMF	1	-1	-18	156	130	97
Bank Borrowing	34	-53	-95	580	180	131
Other	-141	-73	2	265	-40	-128

C. Total Inflows of Medium & long-Term Capital 1962-76 (million$)

Year	Commitment	Disbursements	Debt Service	Net Transfer	Debt Service Ratio
1962	141.2	11.2	0.3	10.9	0.2
1963	70.1	60.7	5.5	55.2	3.7
1964	68.6	28.1	5.9	22.2	3.2
1965	143.2	53.2	9.7	43.5	3.8
1966	331.7	201.5	18.6	182.9	4.7
1967	551.9	252.3	43.2	209.1	8.1
1968	721.9	527.0	92.6	434.4	12.2
1969	853.7	604.0	113.9	490.1	11.4
1970	500.9	591.4	218.5	372.9	17.9
1971	755.5	658.1	325.2	332.9	22.0
1972	887.1	784.1	430.7	353.4	20.8
1973	1285.7	827.9	518.0	309.9	13.1
1974	2091.9	1329.2	646.1	683.1	12.6
1975	1442.2	1772.6	717.8	1054.8	12.6
1976	3704.0	1816.0	940.0	876.0	10.3

Source : Same as Table 4.15

4.4.2 Debt Service :

Korea's debt service burden was not significant until 1968 (Table 4.16-C) largely as a result of the increase in total borrowing during 1967-69, debt repayment rose rapidly during the early 1970s. Net transfer of external capital which had been increasing until 1969, declined in 1970 & 1971, despite continuing increase in the gross capital inflow. The debt burden was moderated in 1970s because of the rapid expansion of export earnings. As a proportion of GNP,debt-service payments averaged 6% during 1972-76. Debt-service on private debt was about 7% of total debt service during the period.

Although the debt-service ratio declined from the peak level of 12% in 1971 to less than 12% in 1975-76, debt service as a proportion of GNP increased.

As mentioned earlier, many of these loans have been suppliers credits of one form or another. This availability of private foreign capital has mainly been in response to Korea's good export performance.The adjustment to the oil shock of 1973-74 was reflected mainly in the large current account deficits in the BoP of Korea-$9.5 billion during 1974-79. Following the second oil shock, borrowing rose to $8.4 billion in 1980 in order to finance the resultant domestic savings gap of 10.2%. The current account deficit is important since it mirrors the demand for foreign savings and the current investment levels in Korea are being sustained by relatively large current account deficits (6.8% of GNP) which are not viable in the long run.Nontheless, continued capital inflows and booming exports and output played a

key role in reviving sustained growth,particularly after 1980. All in all, foreign aid and borrowing made a relatively substantial contribution to the Korean development as compared to foreign direct investment. Such discrepency owed itself more to the country's deliberate policies than any other factor.

4.5 Direct Foreign Investment :

As regards foreign investment policy, the technological development of Korea provides an illustrative example of protection and learning. There was, until very recently, little DFI. The Koreans undertook to do only what they themselves could and with strong demand facilitated by its export biases of policy, the entrepreneurs had strong incentive to push hard to find to ways to increase output. They learned step by step. Korean government policy actively encouraged the development of local technological capacity (esp. production technology) and in many industries, limited the degree to which foreign proprietary technology could be imported. DFI was thus limited to selected industries. Nonetheless, with a high degree of reliance on technology through imported inputs, by the 1970s, there was already considerable indigenous technological capacity. Foreign buyers and sellers continued to be the important source of technology for the growing and increasingly outward-oriented industrial sector.However, whatever the role of DFI, manufactured export marketing was undertaken primarily by foreign firms. Contact with foreign buyers also generated significant technology transfers in the form of guidance ranging from product design to management techniques.

During the post-policy reform period of 1961-78, direct investment was discouraged-its value estimated to have amounted only to about 5% of the outstanding external loans in 1978. One of the reasons for such a policy was the relatively low cost of loans compared to that of direct investment. Having started with a low debt-service ratio and success in promoting exports, Korea had easy access to foreign loans on relatively favourable terms. Another reason was the reluctance of the authorities to share the ownership and control of the Korean enterprises with foreign firms, especially Japanese. This prompted the Korean government to impose formal and administrative barriers against the inflow of DFI.

The first instance of DFI in the post-war period was observed in 1962. Initially, the inflows were small averaging only slightly more than $3.5 million a year during 1962-66. Thereafter, DFI though rapidly increasing, remained modest. During 1967-71, the annual average rose to almost $20 million and to more than $110 million during 1972-76. Japanese investment also flowed into Korea after 1965 which alone was responsible for 39% of total DFI in 1967-71 and 71% during 1972-76. On an average, however, between 1966 and 1971, overall DFI, though increasing in absolute terms, remained less than 4% of total foreign capital inflows.

Prior to 1970, cumulative direct foreign investment in Korea was less then $100 million in current prices. In total,foreign firms were responsible for only a small fraction of Korea's exports; 11% in 1970 and 14% in 1971. Since 1971 the share of DFI in total foreign capital inflows increased to an average of nearly 20% in

the succeeding years. This was mainly due to increase in Japanese investment following relaxation of Japanese government's restriction on foreign capital outflows. From 1970 to 1975 Korea's cumulative DFI was approximately $700 million.

The manufacturing sectors have always been the principal destination for DFI in Korea. They received four-fifths of the cumulative inflow through 1978. By the end of 1976 the cumulative gross inflow of DFI into Korea amounted to around $815 million of which 61% was from Japan and 19% from the US. Table 4.11 shows comparable data on DFI for Korea and other developing countries.As observed in the table, DFI as percentage of net foreign capital inflow into Korea was the lowest. One factor that might serve to partly explain the low percentage of DFI in Korea is its poor natural resource endowment. Secondly, much of it has been approved on the condition that it involves exports. The initial inflows of DFI into Korea were for import substitution and as such were oriented exclusively toward the domestic market. DFI virually made no contribution to the expansion of exports during the period between 1962-66 when export expansion replaced import substitution as the main engine of Korean development. Only during the period of 1967-71 did DFI began flowing into the export sectors albiet in modest volumes. As such foreign firms accounted for only 6% of Korea's total commodity exports in 1971. (Table 4.12)

After 1971, the accelerated inflows of DFI led to a rapid rise in the proportion of exports by foreign firms since most of the DFI was directed towards exports during this period. By 1975

foreign firms were responsible for almost 18% of Korea's commodity exports.

In other words, DFI started to have some importance in Korea's export drive only after export-led industrialization had become established as the predominant strategy. Moreover, only about one-fourth of manufactured export growth during the 1970s was assocated with operation of foreign firms. Also, the involvement of foreign firms in most of the products, that were among Korea's exports was limited or none at all. Nonetheless, foreign firms have helped to initiate the production of some intermediate inputs used in exports.

In summary,although Korea relied heavily on inflows of investment resources from abroad,these have been largely in the form of debt rather than equity. Technology has been acquired from abroad largely through means other then DFI. Although foreign resources have continued to make substantial contribution since early 1960s, the transactions in the use of foreign resources have been at `arm's length'.

III

BRAZIL

The Case of Successful Import - Substitution Growth[8]

Import substitution has been an important aspect of Brazilian industrialization both as to impetus and as to structure and sequence. In most of the presently developed countries, gradual industrialization was the basic element in growth and structural change. Brazil is an outstanding example of a different form of rapid development through import substitution. However, the economic policies followed by Brazil to promote growth and trade from 1950 through 1980, were believed to be controversial in the sense that analysts felt that they were highly unorthodox because though the result was impressive growth rates, the policies were never accepted to be appropriate for the country. Others argue that because of its dynamic economy. Brazil could afford to make any grandiose policy error. What follows is a modest attempt to review Brazil's economic performance from 1950 to the decade-end of 1980 and analyse the various factors that have gone behind Brazil's impressive growth rates. Whether the policies followed by Brazil were really not fit for it is a question left open. The section traces Brazil's economic development through the three major phases of initial import-substitution, outward orientation and a return to import-substitution. Thereafter, it assesses the contribution of foreign

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8. Most of the estimates in this section are adapted from World Bank (1983), "Brazil:Industrial Policies and Manufactured Exports", World Bank Country Study,Washington D.C.

Table 4.17
Changes in Brazilian Foreign Trade and Industrial Production. (1939=100)

Year	Quantum of Exports	Quantum of Imports	Dollar value of Imports	Dollar value of Exports	Exports Imports	Import Quantum of Raw Mat.	Import Quantum of Capital goods	Real Product Total	Real Product Agri.	Real Product Indus.	Real Product Mining
1939	100	100	100	100	117	100	100	100	100	100	100
1940	80	80	96	87	106	86	76	103	99	105	110
1941	83	85	107	118	129	82	73	109	104	116	122
1942	64	64	90	132	171	58	42	106	97	112	120
1943	68	77	120	154	150	81	69	113	103	125	125
1944	82	97	157	190	142	101	69	117	106	130	127
1945	82	95	189	217	150	105	124	118	101	137	126
1946	100	127	257	322	146	141	191	130	112	160	120
1947	95	175	466	378	95	155	280	134	112	167	116

Source : Baer, Werner (1965)

capital and the relative importance of inward and outward orientation in Brazil's impressive growth performance.

4.6 The Intiation of Industrialization and The Post-World War II Scenario:

Brazil's industrialization began in the last decade of the 19th century and by the beginning of the decade of the 1970s, it had a well established industrial sector and had achieved considerable import-substitution with an overall import-GNP ratio of 36 percent. The industrialization spurts which took place in the early decades of the twentieth century were caused mainly of external shocks which consisted either of interruption of supplies from abroad due to wars or of reductions in imports due to declines in foreign exchange which could not finance imports because of weakening international markets for Brazil's principal exports. The was was a powerful stimulant to further industrialization of Brazil due to the drastic curtailment of imports following the decline in foreign exchange. This caused internal shortages. The lower supply and unchanged demand caused substantial rise in the relative price of such goods thus creating an incentive for increased domestic production of Brazilan import competiting industries. Consequently, the phase of import-substitution industrialization was initiated.

However, it was only after the World War II that a deliberate and sustained industrialization drive was embarked upon by Brazil which markedly transformed the structure of its economy. Although difficulties with the external sector was the immediate cause for the post-World War II industrialization

spurts, the main dirrerence was its change from a stop-gap effort into a determined policy. However, manufacturing output grew more slowly between 1919 and 1932-about 1..5% per annum on an average. The poor performance of the manufacturing sector during this period could be attributed to the wavering application of principal economic policy instruments, whose chief concern was the operation of the coffee price support program at the cost of neglecting other sectors. Nevertheless, the importance of the exchange rate policy during this period seems to have been quite considerable which is indicated by manufactured output growth that accompained the currency depreciation period, 1921-23.

Until the 1930s, there was little attempt by Brazil to plan economic development, especially industrial development. In 1933, a new period of rapid industrial growth began. From 1932 to 1939, manufacturing output grew at an average annual rate of 1 to 8 percentage. By 1939, the ratio of imports to total supply of manufactures had dropped to 20 percent. Industrial growth continued during World War II although at reduced rates, averaging 5.4% per annum, as a result of the lack of access to raw materials and particularly, capital goods. In the two years after the end of war, foreign trade liberalization and the overvalued foreign exchange rate resulted in large flow of imports, particularly of capital goods. Thus, when import controls were reestablished in 1947, the industrial sector had been able to renovate a large part of its obsolete equipment. Thus, the first instances of government participation in industrial production was seen in the 1940s.

4.6.1 The Controversial Period of Rapid growth : 1945-1964

That Brazil was heavily dependent on the foreign market for its well being at the end of the war is obvious. In the decade and a half during the post-war period from the late 1940s until the early 1960s, the Brazilian economy underwent substantial structural changes owing to the government's industrialization policies. During the period, contribution of agriculture to the GDP fell from 27 percent in 1947 to 22 percent in 1961 (in 1947 constant prices). On the other hand, industry's contribution increased from 21 to 34 percent in the same period. Simultaneously, Brazil experienced one of the highest real growth rates in Latin America.

It has already been noted earlier that the post-World War II industrialization was more a result of a determined policy rather than a mere stop-gap effort. The basic reason behind this was the realization of the policymakers that Brazil could not attain a high rate of growth in the future by relying mainly on the export of its principal primary commodities that were experiencing a shrinking world market. In the past, as so much in the persent, a small handful of primary commodities made up Brazil's export list-coffee, cocoa, cotton and tobacco. The commodity imports was not so one - sided with each commodity sharing a fairly large proportion of total imports. The drastic fall in manufactured goods imports between the immediate post-war period and early sixties was to the tune of 10.9 percent in 1938-39 to 9.7 between 1948-50 to 1.5 in 1961. This reflects the import substitution measures adopted by Brazil. The overall relative importance of

foreign trade during the same period also decreased so that the ratio of exports and imports to GDP (at constant 1953 prices) declined from 11.2 to 8.9 % between 1947 and 1961.

In the initial stages of Brazil's industrialization, import substitution was encouraged as an ad-hoc response to balance-of-payments problems caused by trade disruption during the Great Depression and, as seen earlier, by external supply shortages during World War II. Nonetheless, the policy enabled Brazil to avoid the impact of the Great Depression. Real GNP fell by about 5 percent between 1929 and 1932, but thereafter quickly recovered. The overall growth rate of GNP was 4.5 % . Compared to those in other industrial countries, these rates were better. Between 1939 and 1945, the growth rates again declined owing to supply shortages. (See Table 4.18-A)

The drastic decrease in imports and the boom of Brazil's export during the war resulted in a substantial increase of the country's foreign exchange reserves from $71 million just before the war to about $800 million in 1946. In 1946, the government established a foreign exchange regime without any restrictions and import controls were abolished-no quantitative restrictions existed. However, the cruzeiro was kept at its pre-war value of CR1800 to the dollar which was claimed to be a deliberate policy by Brazil since it was keen to spend the war-time accumulated reserves in order to meet the pent-up demand for imports. The result was a deliberately overvalued exchange rate so that reserves were depleted within just a year and a half.Table 4.18-B shows clearly the end result of a completely control - free exchange regime. Import quantum increased by 40% and dollar value

Table 4.18

A. Average Annual Rates of Growth of Real GNP (Percent)

Period	Agriculture	Inustry	Total GNP
1920-29	4.0	5.3	5.2
1930-39	2.0	7.6	4.5
1940-45	1.6	4.6	3.1
1946-55	4.6	9.5	7.5
1956-61	4.6	10.0	8.0
1962-67	2.4	4.1	3.7
1968-73	3.9	13.1	11.1
1974-80	4.8	7.2	7.1
1981-86	1.6	1.6	2.8

B. Imports and Exports 1944 - 51 (Annual Rate of Growth in %)

	Exports		Imports	
Year	Quantum	Value (US$)	Quantum	Value (US$)
1944-45	6	16	5	6
1945-46	21	49	-17	50
1946-47	-5	17	40	80
1947-48	3	3	-10	-8
1948-49	-11	-8	16	-1
1949-50	-13	24	22	-2

Source : A. Same as Table 4.13
B. Same as Table 4.17

of imports by 80% while export quantum decreased and its value increased only by 17%. Eventnally, the controls were back in place and import-substitution was made the centre of a new growth strategy. The rationale behind such a move, it was argued, was that Brazil's comparative-advantage lay only in a handful of commodities that faced an inelastic external demand and that outward-looking policies would pull down the country with heavy losses in the external terms of trade... Moreover, the Korean War in 1950, which caused the export boom but made many imports difficult to obtain and the sharp drop in the value of exports in 1952 were taken as further evidence that dependence on imports needed to be reduced. A large part of the increased capacity to import was therefore utilized to create new import-substituting industries.

No doubt, the inward-looking policies were based on such controversial theories. Nonetheless, the outcome was nothing short of spectacular. Between 1929 and 1964 as a whole, real GNP grew, on an average at the annual rate of 5.6 percent and industrial output at 7.8 percent. Through 1946-64, the same growth rates rose to 7 percent and 8.9 percent respectively. However, as already noted, in the overall final scenario. real exports and imports on an average stagnated during the thirty five-year period of import substitution. Imports as a percentage of GNP fell from 23.8 percent in 1929 to 5.6 in 1964. What does all this imply ? - Simply that the new policy failed to maintain a proper balance between protection of infant - industry and comparative advantage in trade. The cruzeiro remained overvalued

and the fact that the economy grew at impressive rates was bacause savings, investment and economic diversification were encouraged.

Certain other estimates indicate that in the two decade following the war, a very substantial import substituting industrialization was under process in Brazil[9]. From 1945 to 1962, the growth rate of industry was 8 percent per annum on an average. Industrial output grew nearly four times and the share of industry in GDP increased from 20 to about 26 percent. Further, the ratio of manufactured imports to total supply of manufactured products dropped form 14 percent in 1949 to only 6 percent in 1964. Since by the early 1940s, import substitution in traditional goods had already advanced quite far[10], the main changes occured in the intermediate - goods industries which experienced very fast rates of growth. The end of the period saw the structure of manufactured output changing considerably with the share of traditional industries dropping from 66 percent of manufacturing value added in 1949 to 46 percent in 1964.

The process of change in the industrial structure of Brazil needs to be studied in conjunction with the process of import substitution which gave it its main impulse and also its shape. At the beginning of the post-war period, imports of nondurable consumer goods were already very few. During 1947-55 outstanding

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9. See World Bank "Brazil : Industrial Policies and Manufactured Exports", World Bank Country Study, Washington D.C.,1983

10. All import ratios reached below 10 percent.

progress in import substitution was made in consumer durables and by late 1950s most of these goods were domestically produced.

As consumer-goods imports reduced, the import substitution process entered the phase of producer goods-both capital as well as intermediate .Domestic production and imports of capital goods, both increased rapidly during the initial period of this phase around 1955-59. Domestic production of intermediate goods also expanded at a fast pace such that imports of these goods remained more or less at a constant level. By 1959,total manufactured imports as a proportion of total imports registered a marked declined. Imports of larger quantities of certain raw materials, on the other hand, were consumed by new industries.

Table 4.19 and Fig. 4.1 reflect how manufactured imports fell as a percentage of total supply. As already noted above, imports of non-durable consumer goods were already insignificant in 1949; imports of durable consumer goods were substituted rapidly during the early 1950s and those of capital and intermediate goods, throughout the period.

Table 4.20 summarizes the remarkable progress in economic growth made by Brazil from 1947 to 1965 albeit argued to be based on unorthodox economic policies. As the figures indicate, all major sectors of the economy grew rapidly and steadily throughout the period. From 1947 until 1962, GDP grew at 6 percent on an average annually. The highest growth rates were achieved by industry and manufacturing - 9.5 and 9.8 percent respectively.

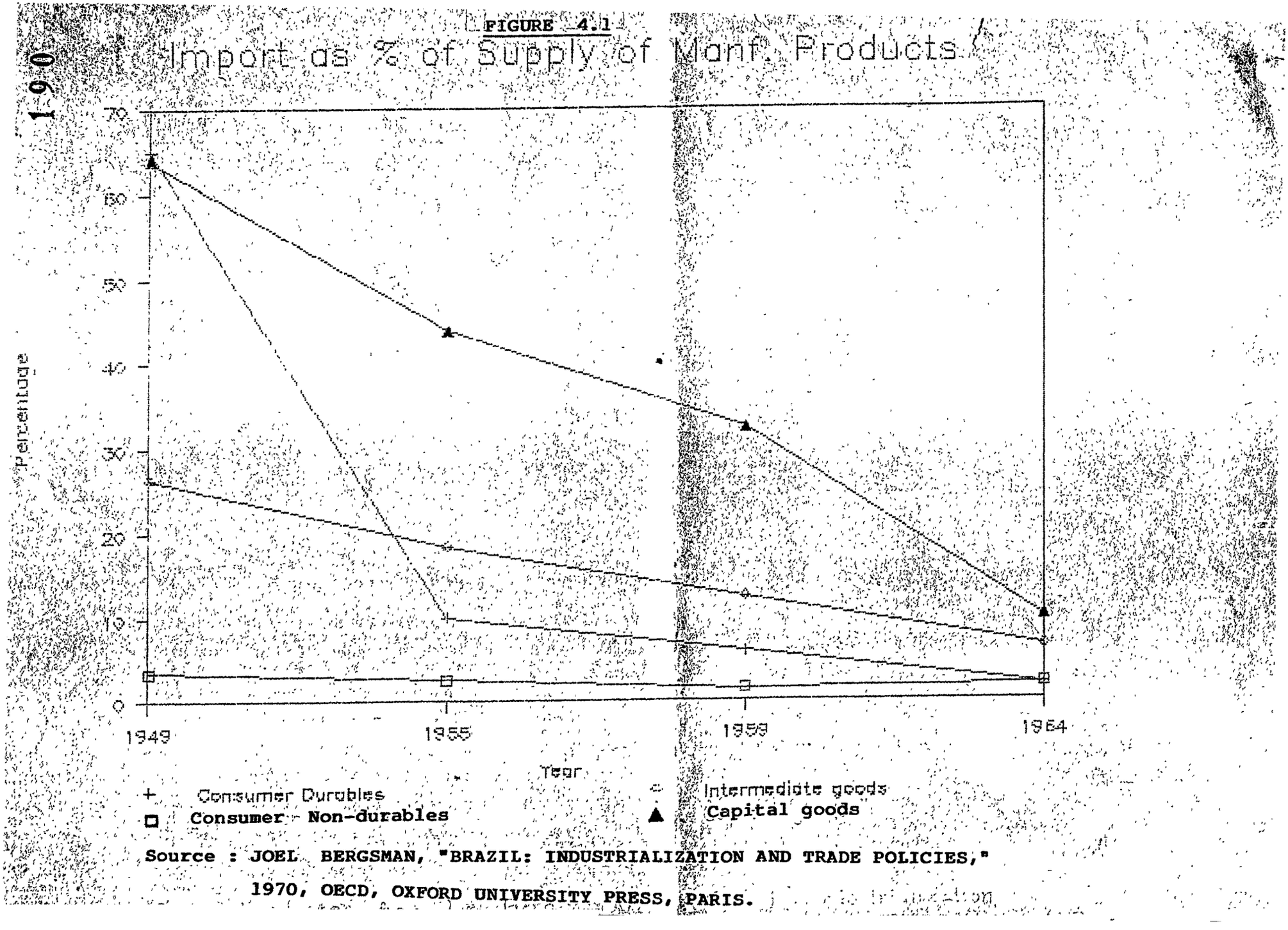
Thus, it is seen that by the start of the mid-1960s, Brazil had achieved quite a remarkable head-on in industrialization and growth and had also established a relatively strong and stable

Table 4.19
Structure of imports and domestic production of manufactured products, by use

Year	Consumer goods: Durables	Consumer goods: Non-durables	Producer goods: Intermediate	Producer goods: Capital	All manufactured goods
		Imports (billion cruzeiros of 1955)			
1949	8.9	5.4	18.2	15.8	48.3
1955	2.1	4.5	22.6	13.7	42.9
1959	2.9	2.8	21.2	29.2	56.1
1964	1.5	3.9	18.6	8.7	32.7
		Domestic production (billion cruzeiros of 1955)			
1949	4.9	140.0	52.1	9.0	206.0
1955	19.0	200.9	104.0	18.0	341.9
1959	43.1	258.0	159.6	59.5	520.2
1964	93.8	319.5	261.2	79.7	754.2
		Imports as percentages of total supply			
1949	64.5	3.7	25.9	63.7	19.0
1955	10.0	2.2	17.9	43.2	11.1
1959	6.3	1.1	11.7	32.9	9.7
1964	1.6	1.2	6.6	9.8	4.2

Source : Bergsman, Joel (1970)

FIGURE 4.1



Source : JOEL BERGSMAN, "BRAZIL: INDUSTRIALIZATION AND TRADE POLICIES," 1970, OECD, OXFORD UNIVERSITY PRESS, PARIS.

Table 4.20
Growth of physical output, 1947-65

Year	Agriculture	Industry	Manufacturing	G.D.P.
1947	89.5	81.4	80.4	86.5
1948	95.7	90.6	90.4	94.7
1949	100	100	100	100
1950	102	111	112	105
1951	102	119	119	110
1952	112	124	125	117
1953	112	135	137	120
1954	121	147	140	130
1955	130	162	166	138
1956	127	174	177	140
1957	139	183	186	151
1958	141	213	218	161
1959	149	241	245	173
1960	156	265	271	184
1961	168	293	301	197
1962	177	316	326	208
1963	179	318	325	212
1964	181	334	341	218
1965	211	318	326	228

Source : Same as Table 4.19

policy regime of import-substitution.

4.6.2 The `Miracle Decade' of `The Brazilian Boom' : 1964-1973

In the 1960s and the 1970s, Brazil achieved one of the highest growth rates in the world. The annual growth rate of per capita GNP averaged close to 5 percent during the period. Evidence shows that Brazil, during the previous years, had found itself among the group of nations who had steadily lost their share of exports in the world market and also among those nations whose exports had little chance of regaining their former preeminence. How, then, was it able to achieve the 5 percent growth rate for the 60s and 70s? The answer lies in the gradual decision of the Brazilian government to change the structure of the economy in the early part of the 1960s.

In 1964, policymakers decided to examine whether export stagnation was the result of external demand inelasticities or of poor exchange rate incentives. The outcome of the debate was the abolition of the multiple exchange rate system and devaluation of the currency. Import duties were reduced in 1966 and subsidies were provided for manufactured exports in 1969.

The market response was overwhelming; exports increased from $1.6 billion in 1967 to $6.2 billion in 1973. Industrial products, for the first time, became important export items. This reduced Brazil's vulnerability to changes in coffee prices. From 1968 through 1973, Brazil's growth rates exceeded 10% a year.

The economic policies adopted between 1964 and 1967 were geared towards correcting the internal and external disequilibria that had developed during the previous years and laid the

foundations for the very rapid growth of the 1967-73 period. Other measures directed towards reducing the inward orientation of the economy, already mentioned above, were also adopted. In addition to the more flexible exchange rate policy, import liberalization and export encouragement also took place.

Nonetheless, the initial period of 1964-67 did experience low rates of growth of GDP and of industry 3.9 and 3.6 percent per annum on an average respectively, while inflation also fell from 87 percent in 1964 to 27 percent in 1967. Exports and imports, however, registered some increases during these years.But as noted above, it was only after 1967 that growth of exports, imports, industry and in fact, overall economic growth, accelerated subatantially and so did manufactured exports. At the same time,the import ratio in a majority of industrial subsectors, for the first time in the history of Brazilian industrialization, began to increase. From 1967 to 1973, manufactured output grew at an unprecedented average rate of 12.9 percent per annum Manufactured exports grew at an average of 36 percent per annum from 1966 to 1972 and the average import ratio for the manufacturing sector increased from an all time low of 6 percent in 1964 to 7 percent in 1967 and 10.3 percent in 1971. The ultimate result of these developments was that industry's share in GDP which had remained constant at 26 percent between 1960 and 1967, leaped to 30 percent in 1972.

The impressive performance of the Brazilian economy from 1968 to 1973 is shown in Table 4.21.

Table 4.21

GDP and Industrial growth, 1966-1980.
(Average Annual Percentage Rates at constant prices)

	1966-67	1968-73	1974-80
GDP	4.4	11.5	7.1
Industrial Sector	6.4	13.2	7.7
Consumer Goods	4.8	11.9	5.0
a. Durables	13.4	23.6	7.7
b. Non-Durables	3.6	9.4	4.5
Capital Goods	4.5	18.1	7.1
Intermediate Goods	10.8	13.5	8.3
Manufacturing Industry	7.0	13.9	6.8

Source : World Bank (1983)

The boom of the decade was accelerated by the expansionary policies followed by the government, existence of a high degree of idle capacity in the manufacturing sector and a favourable international environment. Favourable balance-of-payments conditions allowed continued import of industrial raw materials and capital goods, resulting in an increase in the import ratio. Another major factor in explaining the Brazilian boom is the international scenario tha existed during the period which included a considerable expansion of international trade by the developed countries and a high level of capital movements. Alongwith an increase in total exports as mentioned earlier, manufactured exports also grew from $0.4 billion to $2.0 billion. As a result, the share of manufactured exports in total exports rose from 20.3 percent in 1968 to 32.4 percent in 1973. During the same period, the share of total exports in GDP rose from 5.2

percent to 7.6 percent.

The impact of the Brazilian `economic boom' is also in a way reflected in the growth of individual industries during the 1968-73 period. This is again borne out by Table 4.21. The highest growing industrial category during the period was the durable consumer-goods sector with a growth rate of 23.6 percent.

A prominently negative characteristic of the `Brazilian boom' was that by the late sixties and thereafter, very large investments were required to sustain the high rate of growth. At the same time, the extent to which the initial surge in growth in the early sixties was attributable to the enlightened policy regime or simply the successful utilization of the excess capacity available at the beginning of the decade, has been an argument which generated a lot of debate, albeit without any acceptable conclusion.

Thus, the period from 1964 to 1974 was the golden period of the so called Brazilian `miracle', which apparantly exhibited the virtues of outward-oriented growth policies.

4.6.3 The `About Turn' To Import Substitution : 1974 and after

While the first few years of the 1970s belonged to the 1964-73 period of stabilization and opening up of the economy to international trade, the period after 1974 was characterized by a partial return to the inward-oriented industrialization policies which were so naturally adopted and implemented during the two decades of the post-World War II era. A strong parellel ran in the type of industrial development followed, the policies adopted, the implications of the process

and the problems associated with it. However, at the same time, the Brazilian industrial sector and the economy as a whole, were quite different in 1974 and 1975 so that many dissimilarities did remain.

The honeymoon of the 'Miracle Years' ended with the advent of the severe oil shock and the euphoria was checked by the impact of a major deterioration in Brazil's merchandise balance induced by its dependence on imported oil. In the period foliowing the oil crisis, the Brazilian economy did experience rapid economic qrowth but did not reattain the growth rates of 1968-1973. The GDP growth rate dropped from 13.9 percent in 1973 to 9.8 percent in 1974. In 1975, the figure fell further to 5.7 percrnt. Between 1974 and 1980, GNP rose at an annual rate of 7.1 percent with the industrial sector and manufacturing industry growing at annual rates of 7.7 and 6.8 percent respectiyely. (See Table 4.21)

The economic policies that Brazil followed after 1974 marked a departure from those followed in the previous decade from 1964 to 1973. In more ways than one it was a return to the earlier regime of import substitution that ran through the 1950s and early 1960s. After opening up the economy to foreign markets from 1964 to 1973, Brazil beat a defensive retreat to the import substitution strateqy owing principally to the oil price increases of 1973 and the resultant deterioration of its terms of trade, although this time it was mixed with the awareness of the need to continue expanding and diversifying its exports, particularly manufactured exports The new element in the industrial policy followed after 1974 was the return to import -

substituting industrialization. Promoting manufactured exports - a continuation of the policies established in the previous years - was made particularly necessary by the sudden tightening of Brazil's foreign exchange constraint. The manufacturing export and import ratios which moved in the same direction till 1973 (downwards from 1945 to 1963 and upwards from 1964 to 1973), began to change in opposite directions after 1974. Looking at Table 4.22, one can observe that the ratio of manufactured imports to total domestic supply of manufactures,which increased from 6 percent in 1966 to 10.3 percent in 1971 and to 11.1 percent in 1974, fell again to 6.6 percent in 1979. On the other hand, the ratio of manufactured exports to manufactured output which had already been on the increase from 2 percent in 1964 to 7 percent in 1974, continued the trend and touched a little over 9 percent in 1979.

Table 4.22

Manufactured Import & Export ratios to Total output

(Percentage)

	1949	1964	1967	1970	1974	1979
Total Manufactured Imports	13.8	6.1	7.1	8.0	11.1	6.8
Total Manufactured Exports	2.3	2.0	2.6	5.7	6.9	9.1

Source : World Bank (1983)

The emphasis on manufactured exports had originated in the policy changes in the years 1967 to 1970 and consolidated in the early 70s. In other words, a very important source of

manufactured export expansion during the period of 1974 to 1980 was based on policy decisions taken during earlier years. It was in a way an extension of those policies whereby a number of firms (esp. in capital goods sector) undertook long-term export commitments in exchange for a package of incentives which included duty-free imports of machinery and input among others.

Simultaneously, the emphasis on import substitution, particularly in capital goods, after 1974 was a combined outcome of the suddenly tightened foreign exchange constraint, as mentioned earlier, and the expected high demand for such goods. This called for large investments with the objective of appoaching self-sufficiency by the end of 1979. However, the reduction of public investment programs resulted in substantial curtailment in demand which, in turn, resulted in problems of idle capacity in a number of industrial projects as soon as they were completed. This reflected the failure on the part of Brazil to recognise the medium-term impact of the 1973-74 external shocks on demand growth which came to be reponsible for the problems that began to develop in a number of capital goods industries as early as 1977; this inspite of increased barriers imposed on imports.

4.7 Exports : Performance and Role in Brazil's Development Phases

Throughout the post-war period, exports have been viewed as a `vent for surplus' by the Brazilian government and most businessmen. For almost all products, primary as well as manufactured excluding coffee, they have been quite pessimistic about the chances of increasing exports and uninterested in any

attempts to do so. A common attitude has been that the domestic market was big enough and demand for primary products did not grow. Moreover, other countries would never allow imports of Brazilian manufactures to increase to a significant amount.

In reality, one of the major causes of Brazil's performance with respect to exports since the Second World War was the continued overvaluation of the cruzeiro. As noted in the earlier part of this section, the overvaluation was already quite significent at the end of the war. The additional overvaluation was accumulated during the late 1940s by deliberately retaining the exchange rate at the pre - War levels even though imports, as a whole, were freed from other major controls. Though this was overcome by the early 1950s and early 1960s, the basic problem was that even at low levels, the cruzeiro remained overvalued. In order to promote exports, a once-and-for-all real devaluation was required which would have resulted in something like a once-and-for -all increase in the value of exports rather than a continuous increase. Table 4.23 shows further details of Brazil's export performance during the post-war period. Exports of manufactures, which were as it is never significant, were stagnant and declining. Colomn 10 of the table shows the `capacity to import' index or the purchasing power of exports in buying imports. The figures are interesting in as much as they indicate the level of foreign exchange with which to buy imports, which is the basic purpose of exporting.

It was only after the initial policy regime of import-

Table 4.23

Exports,terms of trade , and capacity to import, 1946-64

Year	Export value,million dollars					Exports quantum			Terms of trade	Capaci to imp
	Coffee (1)	Other food Products (2)	Raw Materials (3)	Manufactures (4)	Total (5)	Coffee (6)	Other (7)	Total (8)	(9)	(10)
1946	348	156	410	73	985	100	187	133	51	68
1947	422	192	447	91	1,152	95	177	127	64	81
1948	492	215	428	45	1,181	112	164	131	69	90
1949	631	114	316	35	1,096	125	119	117	63	73
1950	866	150	323	17	1,355	95	117	102	100	103
1951	1,058	167	523	20	1,769	105	120	109	102	111
1952	1,045	114	250	10	1,418	102	65	90	100	90
1953	1,089	148	202	11	1,540	100	100	100	100	100
1954	948	204	395	16	1,562	70	132	86	120	103
1955	844	212	343	24	1,423	88	132	100	94	94
1956	1,030	146	280	27	1,482	108	111	108	86	93
1957	846	198	322	26	1,392	92	124	100	87	87
1958	687	258	274	23	1,243	83	135	96	80	77
1959	733	234	210	105	1,282	112	140	117	72	84
1960	713	223	297	36	1,269	108	150	118	69	82
1961	710	225	418	50	1,403	109	183	128	69	88
1962	642	150	387	35	1,214	105	158	118	66	78
1963	749	219	397	41	1,407	125	155	130	69	90
1964	759	162	434	70	1,430	96	168	116	76	88

Source : Same as Table 4.19

Since then, the total value of Brazilian exports has experienced substantial growth. The average annual growth rates from 1965 to 1980 was 18.4 percent in current dollars. Manuufactured and semi-manufactured exports grew at a much higher rate of 27.9 percent per year during this period, reaching $11.4 billion in 1980. The share of manufactured exports in total exports increased from about 18 percent in 1965 to about 57 percent in 1986.

Brazil performed well also on the world export market during the period 1965-1980. Its share in world trade increased from slightly less than 1 percent during the 1960s to 1.1 percent during the 1970s (See Table 4.24). Brazil's share in developing countries export fell after 1973 and 1979 owing to the impact of increases in oil price on exports of oil-exporting developing countries. However, this share increased again from 1975 to 1978.Brazil's manufactured exports performed much better than total exports in the world market with a threefold increase from 0.22 percent of world trade in manufactures in 1965 to 0.64 in 1978. Compared to other developing countries, Brazil strengthened its position substantially, doubling its share in manufactured exports between 1965 and 1975.

The substantial growth of manufactured exports during the 1970s was accompained by major changes in the composition of exports, including reduction in the importance of agriculture - based products which explains their growth in 1980. A major factor in the strong manufactured export performance of Brazil since 1965 has been the diversification of markets. In contrast to other industrializing countries, Brazil has been a strong exporter to both indusrial and developing countries.

Inspite of recent high growth and a substantial volume, exports have, nonetheless, remained a small part of Brazil's industrial output, which is basically directed towards the large domestic market. The share of manufactured exports in production was only 8.3 in 1979. In recent years, export orientation of industry has somewhat increased, though not to the extent of exports overcoming their marginal importance for most industries. The small percentage of exports in Brazil's industrial output has been mainly the result of the historical process of industrial development, oriented to supply its large and growing domestic market. The role of exports has been merely to earn foreign exchange for essential imports. Moreover, the availability of competetive inputs and machinery for production has been a further constraint to higher exports in a number of industries in spite of the large and diversified Brazilian economy.

Table 4.25 summarizes the number of roles that Brazil's external sector has played in recent years. In the 1960s, the import substitution strategy resulted in exports being dominated by agricultural goods. As Brazil moved towards a more export - oriented open economy, the total exports-to-GDP ratio increased to 7.9 percent in 1980 and further to 8.4 percent in 1984. Moreover, agricultural exports fell to about one third in 1984 as manufactured exports increased.

On the other hand, imports grew from 5.5 percent of GDP in 1970 to 9 percent in 1980. Capital goods accounted for 36 percent of the total imports in 1970 which fell to 20 percent by 1980. The share of intermediate goods declined from 38 percent in 1970

Table 4.24

Brazil's share in World Trade [a] (Percentages)

	1965	1970	1975	1978	1980
re in Total World Trade	0.97	0.98	1.10	1.08	1.10
re in Exports form Developing Countries	4.40	4.92	4.14	4.21	3.62
re in World Export of Manufactures	0.22	0.27	0.55	0.64	n.a
re in Manufactured Exports from eloping countries	3.44	3.70	7.00	6.65	n.a

a = excluding Trade with Centrally Planned Economies

rce : Same as Table 4.21

Table 4.25

External sector merchandise trade (million US$ and %)

	1970	1975	1980	1983	1984
orts	2379	8670	20226	21899	27004
re (%)					
iculture	67	51	38	33	34
ufactures	13	27	42	50	54
ers	20	22	20	17	12
	100	100	100	100	100
orts-to-GDP ratio(%)	5.2		7.9		8.4
orts	2507	12210	22955	15429	13865
re(%)					
sumer Goods	15	10	11	11	7
l	11	25	44	56	50
ermediate Goods	38	33	25	17	27
ital Goods	36	32	20	16	16
	100	100	100	100	100
orts-to-GDP ratio(%)	5.5		9.0		5.3

rce : Meyers K. and McCarthy F.D.(1985)

to 25 percent in 1980. In 1984, the import-to-GDP ratio fell back to 5.3 percent under the contractionary pressures of the last few years.

4.7.1 Relative Importance of Import Substitution and Export Expansion : An Alternative View of Brazil's Growth Process.

The previous paragraphs reviewed the main trends in the industrialization process of Brazil. One aspect of this process that stands out is that the large, growing and well-protected domestic market was the principal destination of industrial investment-initial as well as successive-particularly after the Second World War. During the long post-World War II period of industrial growth, the import ratio, which was as such on the decline, kept falling continuously-to 14 percent in 1949 and 6 percent in 1964. Simultaneously, the ratio of manufactured exports to manufactured output remained at considerably low levels between 2 and 2.5 percent between 1949 and 1967. (See Table 4.22)

Looking solely at the import & export ratios, it is apparent that import substitution and expansian of domestic demand were the main sources of industrial growth and their relative importance kept varying till 1967. Thereafter increasing manufactured exports became important in the 1968-73 period while the import ratio increased for the first time after 1964, thus indicating a process of negative import substitution. The period after 1974 saw the beginning of a new regime in which both import substitution and export expansion appeared to be significant.

During the post-war period up to the early 1960s import substitution was an important source of demand growth and between 1949 and 1964, it contributed 24 percent of the increase in industrial output. In the mid 1960s, with the beginning of a gradual move away from the forced import-substituting industrialization policies of the 1949-64 period, a partial liberalization of the economy took place in the form of reduction in import restrictions and provision of incentives to export. The period from 1964 to 1971 reflects these policy changes which thus witnessed negative import substitution as also emergence of exports as a significant, though still a minor, source of industrial demand growth. By 1970, the overall prospects for continued import substitution were fairly limited as the average ratio of imports to total available domestic supply was 8 percent. Between 1970 and 1974 the ratio of manufacturing output increased reflecting the liberalization phase. On the export front, exports as a proportion of manufactured output, continued to be small in spite of rapid growth of exports. By 1979, manufactured exports accounted for 9 percent of manufactured output-a rise from 6 percent in 1970. (Table 4.22)

The aggregate results of the contribution of the sources of demand growth are shown in Table 4.26. For the 1970-74 period, negative import substitution was prevalent. However during the 1974-79 period, import substitution once again emerged as a positive contributing source. For manufacturing as a whole, import-substitution contributed 10 percent to the output growth. The estimates are borne out by the table as noted earlier, compared to 1949-64 period, which was also marked by import-

substitution policies, by 1974 the scope for further import substitution was far less. The contribution of export expansion (EE), during the same period for manufacturing output as a whole somewhat declined from 12% in the previous period (1970-74) to 9.4%; this inspite of a higher base. As seen in the table, the contribution of EE by capital and intermediate goods increased while that by consumer goods decreased during the 1974-79 period, which was the chief cause of the overall decrease in the contribution of EE for manufacturing output.

Another observation that comes out from Table 4.26 is the very large share of domestic market expansion in the Brazilian demand growth during all the sub-periods. This simply indicates the importance of the domestic market in a large country like Brazil.

Apart from all these facts, certain other observations emerge form Brazil's outward-orientation phase. Firstly, frequent exchange rate adjustments in line with inflation were instituted. This served to keep the real exchange rate constant so that uncertainty in foreign sales was reduced. These adjustments came in vogue after the export incentive schemes were introduced in mid-60s. Secondly, however, unlike South Korea, Brazilian exporters did not generally face a choice between domestic and foreign inputs. Access to duty-free imports was allowed only if similar domestic inputs were not available, apart from some concessions introduced in early 70's. Lastly, although selected agricultural products were promoted from late 60s onward, discrimination against primary activities continued.

Table 4.26
Sources of Manufactured Demand Growth, 1970-79 (%)

	1970-74			1974-79			1970-79		
	IS	EE	DE	IS	EE	DE	IS	EE	DE
Capital goods	-6.6	8.9	97.6	16.1	10.1	75.8	8.8	10.1	81.1
Intermediate goods	-11.6	8.1	103.4	14.6	10.1	75.3	6.1	9.0	85.0
Consumer goods	-5.9	18.4	87.6	2.5	8.1	89.3	0.0	9.1	91.4
Total manufactured import	-5.4	12.0	96.4	10.1	9.4	80.5	4.3	9.3	86.5

Note : IS = Import Substitution
EE = Export Expansion
DE = Domestic Expansion
Source : Same as Table 4.21

Table 4.27
Foreign Capital Flows to Brazil (In Millions of U.S.Dollars)

Year	Autonomous Capital			Compensatory Capital	Total
	Private	Offical	Total		
1947	47 (36)	-16	31	182	213
1948	80 (25)	-89	-9	24	15
1949	32 (5)	-67	-35	74	39
1950	28 (3)	-57	-29	-52	-81
1951	70 (-4)	-14	56	291	347
1952	118 (9)	2	120	615	735
1953	85 (22)	12	97	-16	81
1954	75 (11)	-53	22	203	225
1955	109 (43)	-70	39	-17	22
1956	248 (30)	-47	201	-194	7
1957	356 (114)	-66	290	180	470
1958	230 (110)	-28	202	253	455
1959	248 (124)	-32	216	154	370
1960	176 (98)	-84	92	430	522
1961	300 (108)	-32	268	13	281

Source : Same as Table 4.17

Thus, the above review shows that the mid-1970s shift in economic policies had a profound impact on the subsequent industrial growth of Brazil. However, the reversal of emphasis, back to import substitution, owing to the external sector crisis generated by oil price increases of 1973 and 1979, came at a time when prospects for further import substitution were quite limited so that expanding exports became increasingly imperative. Brazil realized that pushing the import-substitution policy beyond such a point would fail to achieve the desired growth and the policy then becomes self-defeating. Moreover, any growth that does result would only be at high costs.

4.8 The Dominating Dependence on Foreign Borrowing :

The importance of foreign savings in Brazil's economic growth has fluctuated over the post-war period. Although it crossed the 15 percent mark only once, it would be fallacious to disregard it as relatively unimportant since the areas it flowed into were of strategic importance in the Brazilian growth process - one of the them being financing of current account balance-of-payments deficits and another, financing investment activities. A large proportion of funds for the latter purpose came from external sources, mainly from new capital issues. Table 4.27 shows the way in which savings from abroad flowed into Brazil. The table persuades one to appreciate the crucial importance of both private captial (including private direct investment) and official compensating capital. Although , their relative importance has fluctuated over the years, the increasing role of private foreign savings, especially in the latter part of 1950s and early 1960s in financing investment activities has been

beyond doubt.

The foreign savings sector, though smaller than 10 percent of total savings played a crucal role in the sense that imports of capital equipment was made possible without which domestic capital formation would have seriously fallen short of what it actually was. Moreover, whenever the proportion of private savings was smaller than that of private investment, substantial foreign savings inflow made up for this deficiency.

Brazil is `honoured' to be a country having one of the highest external debts among developing nations. The cause of such a position has been the expansionary policies that the country sought to pursue following the first oil shock which entailed huge increases in foreign borrowing.

When the 'miracle' years of the 1964-74 period ended with a $4.7 billion trade deficit in 1974 owing to the quadrupling of oil prices, Brazil decided to keep growing at 7 percent. In order to promote external adjustment, the trade gap was to be filled by a controlled increase in foreign borrowing. Additional borrowing was encouraged, short-term debt was avoided and reserves were presumed to remain at safe levels assuming stability in the low interest rates and no additional adverse external shock. However, the second oil shocks in 1979 and 1980 and high dollar interest rates threw the country out of gear. Brazil's external debt went beyond control in 1980. Table 4.28 summarizes Brazil's debt position very succintly.

As the table shows, most of the increased external borrowing was either public or publicly guaranteed. While non-guaranteed medium- and long-term debt increased from $5.2 billion in 1973 to $23.1 billion in 1982, public and publicly guaranteed debt rose from $7.5 billion to $47.6 billion during the same period. By 1983, Brazil's total outstanding foreign debt reached $91.6 billion. In 1984, the total debt increased further but much of it was offset by a matching improvement in international reserves.

Table 4.29 gives Brazil's picture in a slightly different perspective, though the point it drives home is the same. What happened was that the annual current account deficit decreased from $7.1 billion in 1974 to $4 billion in 1977. Then in 1978, because of an unusually bad harvest which caused substantial export losses and worsened Brazil's terms of trade, the non-interest current account deficit increased again to $4.3 billion. Such adverse conditions, combined with the oil price and dollar

Table 4.28
Composition of external debt (In millions of US dollars)

	1973	1975	1977	1980	1981	1982	1983	1984
MLT debt	12681	23424	34963	56128	64305	70713	81319	88614
(of which)								
Public/Public Gtd.	7531	13831	21957	39523	44513	47589	-	-
Non-Gtd.	5150	9593	13006	16605	19792	23124	-	-
IMF	-	-	-	-	544	2648		
World Bank	1511	2128	2765	4585	5466	6319	-	
Other Official	3178	3969	6063	7654	8189	8601	-	
Short-term Debt	-	-	-	-	10467	13007	10319	12306
(of Which)								
BIS	-	-	-	-	500	-		
U.S. Treasury	-	-	-	-	-	876	-	
Arrears	-	-	-	-	-	-	2340	
Total External Debt	-	-	-	-	74772	83720	91638	100920
Net-Interest Payments	-	-	-	6311	9161	11353	9555	
Average Terms (all creditors)								
Interest (%)	8.6	8.6	8.3	12.7	15.3	13.0		
Maturity	13,3	9.4	10.1	9.7	9.6	11.2		
Grace Period	3.9	2.7	3.9	3.7	3.2	3.3		
International Reserves		4041	7256	6913	7600	3600	3580	7380

Source : Same as Table 4.21

Table 4.29
Brazil's Current Account Deficit, 1971-84

Year	Non-interest current account deficit	Net interest Payments	Current account deficit
1971	1.0	0.3	1.3
1972	1.1	0.4	1.5
1973	1.2	0.5	1.7
1974	6.5	0.6	7.1
1975	5.2	1.5	6.7
1976	4.3	1.8	6.1
1977	1.9	2.1	4.0
1978	4.3	2.7	7.0
1979	6.5	4.2	10.7
1980	6.5	6.3	12.8
1981	2.6	9.1	11.7
1982	5.0	11.3	16.3
1983	-2.7	9.5	6.8
1984	-10.2	10.0	-0.2

Source : Same as Table 4.13

interest rate increases, required much stronger adjustment policies in 1979 since these were pushing Brazil's foreign debt to unprecedented levels. Domestic savings were no longer found to by sufficient to support growth policies. External savings, which in the past, financed additional investment, were now utilized to promote increased consumption. In 1981, the non-interest current account deficit once again dropped sharply to $2.6 billion from $6.5 billion in 1980 but the cost was a 1.6 percent decline in Brazil's real GDP. Interest payments increased by $2.8 billion from 6.3 in 1980 to 9.1 in 1981. At this point, Brazil, breaking its past tradition, resorted to heavy short-term borrowing to delay an external liquidity crisis and extending balance-of-payments loans to the government. All this, however, did not help. By late 1981, the current account deficit increased to $16.3 billion. External reserves depleted repidly and Brazil was forced to apply for a fresh IMF loan. Table 4.30 compares the external indebtedness of Brazil with that of South Korea and India in terms of major debt ratios.

In contrast to South Korea, Brazil utilized the proceeds of foreign borrowing in large part to maintain current consumption and a major share of new investments was channelized into high-cost import-substutiting industries. As a result the debt-service ratio rose to a threefold level from 21.8 in 1970 to 63.1 by 1980 while the same for Korea, remained relatively unchanged and, in fact, fell slightly from 20.4 to 19.7 for the same years because of prudent utilization of foreign loans. Also of interest are the debt export ratios for both countries (Table

4.30). The ratio remained more or less at the same high level for Brazil during 1980 and 1989 whereas it fell threefold for Korea mainly owing to its superb export performance.

Total External Debt & Debt Ratios

	Total External Debt as Percentage of GNP						Total Debt Service as percentage of exports			
					as Percentage of exports					
	1970	1980	1985	1989	1980	1989	1970	1980	1985	1989
Brazil	12.2	31.2	43.8	24.1	304.8	301.6	21.8	63.1	34.8	31.3
S. Korea	23.3	48.7	43.0	15.8	130.6	44.7	20.4	19.7	21.5	11.4
India	15.4	11.9	15.0	24.0	135.7	259.5	25.1	9.1	12.7	26.4

Source : World Development Report,1987 and 1991 - condensed from World Development Indicators.

4.9 Direct Foreign Investment :

Brazil is one country which has been open to DFI ever since the beginning of its development process. Unlike similar developing countries that adopted an import-substitution,inward-looking strategy, Brazil welcomed DFI quite readily, more so after 1964 and more than any such other large country. How far this has fostered economic growth remains a question that may perhaps have no unanimous answer.

Inducements to foreign private investment have been very important to Brazil. More than that, there was a general conviction that Brazil presents a large and potentially rapidly growing market. Moreover, the post-war period has had an additional attraction of almost continuous economic growth. Protection against imports in the initial period of Brazil's industralization proved to be, in a way, a double-edged sword. The foreign firms in their home countries suffered a loss of markets and a subsidiary in Brazil enjoyed a protected market. Moreover, remittances of earnings and capital were

unrestricted from 1953 until 1962. However, inflation and difficulty of obtaining domestic finance for expansion of operation (or even keep it constant) did require reinvestment of a large proportion of the earnings for most firms, either domestic or foreign. Nevertheless, the most important type of direct subsidy to foreign investment was the special treatment for imports of both capital equipment and current inputs, namely that from 1955 onwards, these could be done without any foreign exchange transactions ; the rate for buying foreign exchange for most machinery imports ranged up to 56 percent higher than the rate at which foreign exchange was sold to buy cruzeiros.

The amount of direct foreign private investment that flowed into Brazil from 1947 to 1964 is shown in Table 4.31. Most of this investment went into manufacturing especially since 1950. Significant levels of foreign private investment were attained in the 1956-62 period - around $100 million per year on an average with roughly 10 percent of total investment in manufacturing.

A significant aspect of Brazil's foreign investment policy is that it has relied on foreign investment both as a source of technology and of capital to carry out successfully large investment programs under its development plans. One of the most striking features of Brazilian exports of products that require relatively advanced and sophisticated technology is the overwhelming presence of multinationals. They account for most of the exports in all groups barring a few based an natural resources. The large share of multinationals in Brazilian exports have two basic reasons. First as just mentioned, these firms already have more sophisticated technology so that their presence among exports requiring more of such technology is hardly surprising. Second, since they already have well established

Table 4.31
Direct Foreign Private Investment, 1947-64
(annual flow in million US $)

Year	Amount
1947	36
1948	25
1949	05
1950	03
1951	-04
1952	09
1953	22
1954	11
1955	43
1956	90
1957	144
1958	110
1959	124
1960	98
1961	108
1962	69
1963	30
1964	28

Source : Same as Table 4.17

marketing networks, they have much easier access to international markets than local firms.

Moreover, many of the foreign firms originally attracted to invest in Brazil because of the large domestic market it offered, apparantly eventually, began using Brazil as a platform to export to other developing, and in certain cases developed, countries once they established sufficiently large-scale plants.

Thus, from the present review of Brazil's story, one can understand that giving any verdict on its trade and exchange rate and overall external policies would be controversial. An external debt of $100 billion combined with a 220 percent inflation rate can hardly be regarded as virtues of a success story. At the same time, the 7 percent recovery in the growth rate since 1984 most certainly cannot be regarded as evidence of failure. Brazil's trade balance improved in 1984 which resulted more from the structrual adjustment policies initiated in mid-1970. The country was now able to export what it previously imported. especially capital goods. Imports fell from $15.4 billion to $13.9 billion inspite of import liberalization and the economy grew annually at 4.5 percent. The trade balance largely reflects the effectiveness of import-substitution policies, particularly the increase in domestic oil production.

However, a net external debt (total debt minus reserves) with an annual interest payment of $10 billion indicates a heavy burden on the country. In other words, in the absence of further external loans and foreign direct investment, such a burden forces Brazil to transfer abroad 4.3 percent of its current GDP. The export success achieved by the country in recent times is largely consumed by the increasing charges on its external debt.

Table 4.32

A. Brazil, Balance of Payments : 1950-67 (Million $)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Capital account													
Governments transfers and Long term loans (net)	-56	-16	5	-20	91	130	23	-46	-30	-43	-36	125	127
Private transfers and long term loans (net) of which :	27	58	87	81	97	141	215	303	257	301	122	276	126
Direct investment	39	63	94	60	51	82	140	179	128	158	138	147	132
Changes in reserves, etc	90	296	24	388	135	-200	-173	116	193	90	344	-59	294
Other private short term	-118	25	562	404	-111	-77	-17	53	27	-59	81	-115	54
Total capital account	-57	363	678	45	212	-6	48	426	447	289	511	227	601
Errors and omissions	-51	106	30	-75	18	33	-63	-131	-180	48	10	49	-140
Balance of goods and services	108	-169	-709	30	-230	-27	15	-295	-267	-337	-521	-276	-461
Exports : Goods	1,359	1,771	1,416	1,540	1,558	1,419	1,483	1,392	1,244	1,282	1,270	1,415	1,215
Services	44	62	69	114	104	123	152	198	165	153	193	135	113
Imports : Goods	934	1,703	1,702	1,116	1,410	1,099	1,046	1,285	1,179	1,210	1,293	1,292	1,304
Services	361	599	491	508	482	470	574	600	497	552	691	524	485

B. Brazil, Balance of Payments : 1961-84 (Million $)

Year	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Export	1,403	1,214	1,406	1,430	1,596	1,741	1,654	1,881	2,311	2,739	2,878	3,991	6,199	7,951	8,670	10,128	12,120	12,659	15,244	20,132	23,293	20,175	21,899	27,004
Imports	1,292	1,304	1,294	1,086	941	1,303	1,441	1,855	1,993	2,526	3,250	4,235	6,192	12,641	12,210	12,383	12,023	13,683	18,084	22,955	22,091	19,395	15,428	13,937
Trade balance (1)-(2)	111	-90	112	344	655	438	213	26	318	213	-372	-244	7	-4,690	-3,540	-2,255	97	-1,024	-2,255	-2,823	1,202	700	6,740	13,068
Services and transfers	-327	-362	-283	-263	-372	-471	-490	-534	-599	-835	-915	-1,245	-1,695	-2,432	-3,160	-3,762	-4,134	-5,966	-7,902	-9,984	-13,217	-17,710	-13,308	-12,902
Current account (3)+(4)	-261	-452	-171	81	283	-33	-277	-508	-281	-622	1,287	-1,489	-1,688	-7,122	-6,700	-6,017	-4,037	-6,990	-12,742	-12,807	-11,728	-16,310	-6,837	166
Autonomous capital flows	327	244	3	140	79	205	66	541	850	1,060	1,566	3,492	3,512	6,254	6,189	6,595	5,278	11,891	7,657	9,679	12,917	7,851	1,538	-1,822
Error and omissions	49	-138	-78	-217	-31	-19	-34	-1	-20	107	257	136	355	-68	-439	615	-61	-639	-139	-344	-578	-368	-670	215
Surplus or deficit (-) (5)+(6)+(7)	115	-346	-244	4	331	153	-245	32	549	545	536	2,479	2,179	-936	-950	1,192	630	4,262	-3,215	-3,472	611	-8,828	-5,969	-1,441

Source : A. Little, I. , Scitovsky, T., Scott, M. (1970)
B. Same as Table 4.13