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Part I

Introduction

Chapter 1

An Overview: 1950-70

In this volume we propose to examine India's foreign trade regime in its interaction with domestic policies and objectives, so as to assess its efficiency and growth. Earlier analyses of India's trade and industrialization policies have focused largely on the criteria underlying the allocation mechanisms, both domestic and foreign, and have examined many of the principal, static inefficiencies arising from these mechanisms.[1] The present study goes substantially beyond these issues in two major respects:

1. We examine at length the efficiency and outcome of the liberalization efforts represented by the June 1966 devaluation and the accompanying policy measures, thus casting light on the important issues raised by attempts at lessening the restrictive nature of the QR-regime and on the optimal methods of effecting a transition to a less restrictive foreign trade regime; and

2. We analyze at great length several issues relating to the growth effects of India's foreign trade regime, examining the impact on savings, innovation, inducement to invest, and other such effects which are correctly considered to be important in reaching an overall judgment on the desirability of the economic policy framework.

This chapter, which constitutes Part I, contains a broad description of the central economic and political characteristics of the Indian economy (such as industrial licensing and targeting under successive five-year plans), and a general review of the principal developments in economic indices (such as GNP, price level, foreign trade and agricultural production) since 1950. We then proceed to divide the period 1950–70, to which our analysis is confined, into several phases as defined by Bhagwati-Krueger for the NBER project, whose main elements are spelled out at the beginning of this volume. Having then defined the phases, our study proceeds in Part II to a discussion of the "anatomy" of exchange control, concentrating on the period 1956–66. The purpose of this analysis is to indicate the methods of allocation and intervention in the foreign trade and payments sector practiced during this period by the government, and to trace their *economic* impact. The analysis concentrates here on the static efficiency effects of the foreign trade policies only in a general way; statistical analysis of the allocation effects as well as of differential returns to alternative acts of investment that follow from indiscriminate and automatic protection is deferred to later treatment along with the other growth effects of the regime. Part III presents an analysis of the period 1966–70, focusing on the outcome of the "liberalization episode" constituted by the June 1966 devaluation and associated policy changes. Finally, Part IV treats the growth effects of the foreign trade regime, taking the entire 1950–70 period as its canvas, and analyzes a number of possible linkages between India's economic performance and her foreign trade regime (taken in conjunction, of course, with her domestic economic regime).

THE INDIAN ECONOMY SINCE 1950

India became independent in 1947. By 1950, the country had formally initiated efforts at planning for accelerated growth consistent with the objective of social justice. This implied that a succession of five-year plans was to define the overall contours within which economic and social efforts were to be undertaken. The First Plan was to run from 1951 to 1956, with others following in continuous succession until a three-year interruption prior to the Fourth Plan.

The First Plan was essentially put together around a Harrod-Domar model. The emphasis of this approach, as is now well understood, is on *flow* analysis and the Plan therefore focused on fiscal policy aimed at raising domestic savings to the degree required by the projected investment levels that result from planned income expansion and the estimated marginal capital-output ratio. At the same time, the main thrust of the Plan was to build infrastructure. But the Second Plan (1956–61) was conceived around a *structural* model of the Feldman-Mahalanobis variety and this led to an emphasis on determining and controlling the pattern of investments, thus greatly reinforcing the tendency later imparted by the foreign exchange crisis that began with an overexpansion of investment in the first year of the Second Plan.[2] Thus the Second Plan witnessed the initiation and subsequent intensification of two basic pillars of policy that were strongly to influence the economic efficiency of the regime: (1) industrial targeting and licensing and (2) exchange control over all current transactions, resulting in the licensing of imports of capital goods, intermediates and consumer goods.

Indeed, in the analysis presented in this volume we will find that the interaction of these two licensing measures compounded disproportionately the inefficiencies that would have followed from the operation of either by itself, thus illustrating the point that it is not possible to analyze the effects of the foreign trade regime without taking fully into account the institutional mechanism at the domestic level as well. This emphasis on industrial and import licensing was to continue through the decade of 1956–66. Efforts to reduce its impact were undertaken through the early 1960s, and they were to culminate in the devaluation of June 1966 and in the associated policy changes that aimed at liberalizing the foreign trade regime. In view of their critical importance in assessing the efficiency of the foreign trade regime, the main features of the industrial licensing mechanism will be described in some detail below.

We should also note here, for later amplification, the importance of several other institutional features of the Indian economy: (1) a significant growth of public sector investment in areas outside of infrastructure; (2) a (less) significant growth of Indian trade with the Soviet bloc under bilateral agreements; (3) an increasing canalization of profitable imports, and partial handling-cum-subsidization of exports, by the government-owned State Trading Corporation; (4) a strict (*ex ante*) regulation, on a case-by-case basis, of the inflow of private foreign capital and technology into the economy; and (5) in contrast to many LDCs, the availability of an efficient administrative service, entrepreneurial talent and educated, skilled personnel for manning the projected investments. Before discussing these institutional features in detail, we review some of the major features of India's economic performance since 1950.

Basic Indices.

National Income

According to the data on net national product presented in Table 1–1, the Indian economy seems to have grown, in real terms, at 3.5 to 4 percent per annum on the average during the first decade of planning, from 1950–51 to 1960–61, and then experienced a decline during the Third Five-Year Plan to an average rate of growth of about 2.5 percent. It is important to note that the end of the Third Five-Year Plan was attended by serious drought which led to an unprecedented decline in agricultural production, thus pulling down the overall rate of growth for the Third Five-Year Plan and for 1966–67.[3] A recovery in agricultural output brought a sharp rise in national income in the following year, followed by moderate though sustained rates of growth until a

TABLE 1-1

Net National Product, Total and Per Capita, 1950–51 to 1972–73

	Net National Product at 1960–61 Prices		Annual Growth Rates (percent)		Index Numbers (1960–61=100)	
	Total (Rs. billions)	Per Capita (Rs.)	Total	Per Capita	Total	Per Capita
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1950–51	90.9	253.1			68.4	82.7
1951–52	93.1	255.1			70.1	83.4
1952–53	96.4	259.1			72.6	84.7
1953–54	102.6	270.8	3.7	1.8	77.3	88.5
1954–55	105.3	272.9			79.3	89.2
1955–56	108.9	277.1			82.0	90.2
1956–57	115.1	286.9			86.7	93.8
1957–58	113.2	276.9			85.2	90.5
1958–59	122.3	292.6	4.0	2.0	92.1	95.6
1959–60	124.5	292.2			93.7	95.5
1960–61	132.8	306.0			100.0	100.0
1961–62	137.3	309.3			103.4	101.1
1962–63	139.9	308.2			105.4	100.7
1963–64	147.7	318.3	2.6	0.4	111.2	104.0
1964–65	158.8	335.1			119.6	109.5
1965–66	150.8	310.9			113.5	101.6
1966–67	152.3	307.9	1.0	−1.0	114.7	100.6
1967–68	166.1	328.2	9.0	6.9	125.0	107.3
1968–69	171.5	331.1	3.3	0.7	129.2	108.2
1969–70	180.9	341.9	5.5	3.8	136.2	111.7
1970–71	188.6	348.6	4.3	2.0	142.0	113.9
1971–72	191.7	346.0	1.7	−0.7	144.4	113.1
1972–73	188.5	333.0	−1.7	−3.8	141.9	108.8

SOURCES: For the period 1950–51 to 1959–60, unpublished material made available to the authors. For 1960–61 to 1972–73, *Economic Survey*, Government of India, 1973–74.

new pronounced slowdown came with still another fall in agricultural production in 1971–72 and 1972–73.

Population and Per Capita Income

The growth of per capita income, as shown in Table 1–1, has been less than the growth of national income because population has grown. And the growth rate of population, as is clear from Table 1–2, has *accelerated* in the 1960s from its 1950s level. The percentage of urban population has marginally increased from 16 percent in 1951 to 18 percent in 1961 and presumably to 20 percent by 1971, so that the overwhelming bulk of the population continues to be rural.

TABLE 1–2
Population, Decennial, 1931–71
(millions)

			Urban			Rural	
	Total	Annual Average Increase (%)	Subtotal	Annual Average Increase (%)	Percent of Total	Subtotal	Annual Average Increase (%)
Census date (March 1)							
1931	279		33		12	246	
		1.34		2.6			1.1
1941	319		44		14	275	
		1.25		3.5[a]			1.0
1951	361		58[a]		16	303	
		1.98		3.1			1.7
1961	439		79		18	360	
		2.25		3.3			2.1
1971[b]	547		109[c]		20	439	

Source: *Basic Statistics Relating to the Indian Economy: 1950–51 to 1970–71,* Government of India, Planning Commission, Statistics and Surveys Division, New Delhi.

a. The originally reported figure for urban population in 1951 was 62.4 million and this is the figure used here in calculating the percentage increase from 1941 to 1951. The 1951 figure, however, was subsequently adjusted downward when the 1961 census adopted a more rigorous definition of urban population. Figures for the earlier years have not been adjusted.

b. As of April 1.

c. Urban population for 1971 is estimated on the assumption of a further increase of 2 percentage points from 1961 in share of total population.

Domestic Savings

While the growth of national income, both absolute and on a per capita basis, has been modest, performance on the criterion of domestic savings effort was satisfactory during the period of the first three five-year plans (though the steady increase in the rate of saving has not been sustained since 1966, as we shall also see in Chapter 16).

Thus Table 1–3 shows that the savings rate, as a percent of NNP, went up from an average of 6.28 during 1950–52 to an average of 11.14 during

TABLE 1–3

Tax Revenue and Savings in India, 1950–51 to 1968–69

Year (1)	Tax Revenue as Percent of NNP[a] (2)	Domestic Savings as Percent of NNP[a] (3)
1950–51	6.92	7.30
1951–52	7.76	5.27
1952–53	7.22	5.11
1953–54	7.00	5.17
1954–55	7.91	6.17
1955–56	8.15	9.11
1956–57	8.30	8.13
1957–58	9.76	5.53
1958–59	9.15	5.64
1959–60	9.63	7.65
1960–61	10.98	9.21
1961–62	11.79	9.15
1962–63	13.33	10.08
1963–64	14.16	11.27
1964–65	13.42	10.12
1965–66	14.78	12.01
1966–67	14.33	9.87
1967–68	12.82	8.59
1968–69	13.51	n.a.

n.a. = not available.

Source: *Estimates of National Product, 1948–49 to 1962–63* and *Estimates of National Product, Saving and Capital Formation, 1960–61 to 1971–72*, Government of India, Department of Statistics, Central Statistical Organization, New Delhi.

a. The post-1960–61 NNP figures are the revised series and the pre-1960–61 figures are the conventional series.

1964–66. A role in this improvement was played by tax policy: tax revenue as a percent of NNP also went up from less than 7 percent at the beginning of the period to more than 14 percent at the end of it. The contribution of the public sector to domestic savings has, however, not been fully commensurate with this tax effort, as official current expenditures have risen more rapidly than governmental savings. Indeed, the public sector contribution to the domestic savings effort seems to have reached a peak of 29.3 percent (Table 1–4) by 1964–65 and then declined later rather steeply, though the data on this phenomenon are rather tentative.

External Resources

The inflow of external assistance to India has been low per capita, ranking India virtually at the bottom of the list of aid recipients.[4] By the criterion of aid in relation to GNP, India has fared a *little* better, for the simple reason that her per capita income is also at the tail end of the world distribution.

The data on external assistance to India as a percent of national income are given in Table 1–5. They underline the relatively small share of foreign aid in India's developmental effort; they also bring out clearly the abrupt fall in the role of foreign aid in her efforts since the peak reached in the mid-1960s.[5] While Table 1–5 shows aid utilizations, which differ from aid authorizations for well-known reasons, the conclusions we infer from it are sustained by the data on authorizations as well.

The role of private foreign investment in India has been even less important, given (1) the unwillingness of the Indian government to invite foreign investment uncritically, (2) the fact that the economy is so large that only a dramatic influx could possibly make the inflow large relative to national income, and (3) the outflow of capital from the older industries, principally tea.[6] Rather than burden the reader with detailed numbers, it should be enough to illustrate the rather small role of private foreign investment in Indian development by citing the figures for 1964–65. For this year, the gross inflow of portfolio plus direct investment into India was only about Rs. 1.02 billion, or slightly over .6 percent of the (conventional) NNP estimate for the year. And the net inflow, at Rs. 818 million was only a little over 0.5 percent of NNP.[7] Compared with the aid estimates in Table 1–5, the private inflow of all long-term capital was only about a seventh. The major investors on a country-of-origin basis were the United Kingdom, the United States and Japan, in that order, although the outstanding *stock* of private long-term capital was largely in British hands and has continued to be, given the heavy British investment in India before independence, the comparatively small inflow of private capital since, and the large British share in this inflow anyway. It should also be of some interest to note that, as of March 1967, the estimated distribution of private foreign capital in different sectors showed that manufacturing had 47.1

TABLE 1–4

Net Domestic Savings, by Source, 1960–61 to 1968–69

	1960–61	1961–62	1962–63	1963–64	1964–65	1965–66	1966–67	1967–68	1968–69
Distribution of net domestic savings (percent)									
Household sector	63.4	62.4	62.6	63.6	65.5	72.9	n.a.	n.a.	72.7
Private corporate sector	9.9	10.0	9.5	7.8	5.2	4.2	n.a.	n.a.	11.4
Public sector	26.7	27.6	27.9	28.6	29.3	22.9	n.a.	n.a.	15.9

n.a. = not available.

SOURCE: The 1960–61 to 1965–66 data from *Estimates of Saving in India, 1960–61 to 1965–66,* Government of India, Department of Statistics, Central Statistical Organization, New Delhi. The 1968–69 figure is in the Fourth Five-Year Plan.

TABLE 1–5

Utilization of External Assistance by India, as Percentage of Net National Product at Factor Cost, 1951–52 to 1969–70

	1951–52	1952–53	1953–54	1954–55	1955–56	1956–57	1957–58	1958–59	1959–60	1960–61
1. Loans	0.81	0.34	0.02	0.02	0.08	0.25	1.06	1.78	1.27	1.39
2. Grants	0.04	0.12	0.16	0.10	0.28	0.35	0.30	0.19	0.26	0.22
3. Assistance under P.L. 480/665, etc.	—	—	—	—	0.05	0.45	1.01	0.74	0.75	1.39
4. Total aid	0.86	0.47	0.19	0.11	0.40	1.05	2.37	2.71	2.28	3.01

	1961–62	1962–63	1963–64	1964–65	1965–66	1966–67	1967–68	1968–69	1969–70
1. Loans	1.60	2.02	2.21	2.38	2.37	0.41	0.47	0.39	0.37
2. Grants	0.15	0.10	0.09	0.10	0.16	0.06	0.03	0.03	0.01
3. Assistance under P.L. 480/665, etc.	0.61	0.81	1.05	1.07	1.14	0.21	0.20	0.09	0.09
4. Total aid	2.37	2.93	3.35	3.55	3.67	0.69	0.71	0.52	0.48

NOTE: The 1960–61 to 1969–70 estimates are for the revised NNP series. The 1966–67 to 1969–70 aid estimates are at the post-devaluation exchange rate.

SOURCE: *Economic Survey*, annual issues 1966–73, Government of India, Ministry of Finance, Department of Economic Affairs, New Delhi.

percent; services, 23.9 percent; petroleum, 16.8 percent; plantations, 11.4 percent; and mining, 0.9 percent.[8]

Price Level

The Indian economy has also been somewhat atypical, during 1950–1966, in that its price increases have been moderate over the period as a whole. This is clearly evident in the wholesale price index in Table 1–6, which shows the 1965–66 price index at 147.0 with base 1950–51, indicating a simple annual rate of increase of only 3 percent.[9]

On the other hand, this remarkable stability began to disappear after 1962–63. The rise in defense expenditure following the Sino-Indian border war of 1962 and the two serious agricultural droughts during 1965–66 and 1966–67 had much to do with this; and the subsequent moderation of the price increases to trend level during a recessionary period has again given way to serious price rises since 1972–73, reflecting partly the refugee and defense burdens arising from the Bangladesh crisis and also another bad harvest which afflicted the Indian economy (as well as the Soviet and the Chinese economies) during 1972–73.[10]

Production Structure

The importance of agricultural production in explaining the post-devaluation performance of exports and the price level is intuitively seen also by noting at this stage that agriculture has continued to play an important role in the production structure of the economy during the entire period of our study. Thus Table 1–7 shows that agriculture and allied activities continued during the 1960s to provide approximately half of net domestic product measured in current prices. On this basis there would seem to have been no significant decline in the role of agriculture in the Indian economy. This result is partly attributable, however, to the greater increase in agricultural prices than in those of other sectors. At constant (1960–61) prices the shares in NDP in 1969–70 were 43.7 percent for agriculture and allied activities, 22.9 percent for industry, 15.9 percent for trade and transport and 17.5 percent for services.

Agricultural Production

We may further note that according to the 1971 census, nearly 70 percent of the workers were employed in agriculture. Agriculture is the dominant supplier of wage goods and raw materials for the production of wage goods. It also accounts for more than a third of India's exports.

It is thus of importance for the reader to keep in view the major aspects of India's agricultural performance during the period of our study. In particular, it should be noted that, from the viewpoint of production trends, the period through 1964–65 must be distinguished from the subsequent period for two

TABLE 1–6

Index Numbers of Wholesale Prices, 1950–51 to 1970–71

	1950–51 = 100			1961–62 = 100			
Year (1)	Food Articles (2)	Manu-factured Articles (3)	General (4)	Agricul-tural Com-modities (5)	Food Articles (6)	Manufac-tures (7)	All Com-modities (8)
1950–51	100.0	100.0	100.0	—	—	—	—
1951–52	96.7	115.5	105.5	—	—	—	—
1952–53	88.9	96.8	89.4	—	—	—	—
1953–54	94.8	95.8	93.6	—	—	—	—
1954–55	84.1	97.4	87.0	—	—	—	—
1955–56	77.0	96.5	82.7	—	—	—	—
1956–57	90.9	102.9	94.2	—	—	—	—
1957–58	94.6	104.6	97.0	—	—	—	—
1958–59	102.4	104.9	101.0	—	—	—	—
1959–60	105.8	108.1	104.7	—	—	—	—
1960–61	106.7	119.9	111.7	—	—	—	—
1961–62	106.8	122.6	111.9	100.0	100.0	100.0	100.0
1962–63	112.1	124.7	114.4	102.3	106.5	102.6	103.8
1963–64	121.6	126.9	121.0	108.4	115.4	104.8	110.2
1964–65	142.1	132.9	136.6	130.9	135.4	109.0	122.3
1965–66	150.0	144.4	147.0	141.7	144.6	118.1	131.6
1966–67	177.7	157.8	171.1	166.6	171.1	127.5	149.9
1967–68	215.3	160.2	190.2	188.2	207.8	131.1	167.3
1968–69	205.6	163.2	188.0	179.4	196.9	134.4	165.4
1969–70	—	—	—	194.8	196.8	143.5	171.6
1970–71	—	—	—	201.0	203.9	154.9	181.2

NOTE: The blanks represent unavailable estimates.

SOURCES: *Basic Statistics Relating to the Indian Economy, 1950–51 to 1968–69,* Government of India, Planning Commission, Statistics and Surveys Division, New Delhi. *Economic Survey: 1970–71,* Government of India, Ministry of Finance, Department of Economic Affairs, New Delhi.

TABLE 1–7

Net Domestic Product by Sector of Origin in Current Prices, 1960–61 to 1969–70

(Rs. billions)

Sector	1960–61		1962–63	1963–64	1964–65	1965–66	1966–67	1967–68	1968–69	1969–70	
1. Agriculture and allied activities	*68.21*	*(51.0)*[a]	*71.97*	*83.57*	*102.14*	*99.45*	*120.11*	*151.40*	*145.02*	*156.14*	*(49.7)*
2. Industry	*26.88*	*(20.1)*	*32.06*	*37.05*	*40.94*	*43.84*	*47.96*	*52.56*	*55.96*	*62.67*	*(19.9)*
a. Mining and quarrying	1.44	(1.1)	1.78	2.04	2.04	2.34	2.52	2.90	3.16	3.39	(1.1)
b. Large-scale manufacturing	10.71	(8.0)	12.98	15.18	16.86	18.39	19.70	20.41	21.92	24.83	(7.9)
c. Electricity, gas and water supplies	0.68	(0.5)	0.87	1.09	1.28	1.44	1.77	2.00	2.43	2.66	(0.8)
d. Small-scale manufacturing	7.85	(5.9)	9.42	10.82	11.82	12.25	13.25	14.60	15.56	16.94	(5.4)
e. Construction	6.20	(4.6)	7.01	7.92	8.94	9.42	10.72	12.65	12.89	14.85	(4.7)
3. Trade and transport	*18.70*	*(14.0)*	*22.13*	*24.92*	*29.25*	*31.65*	*36.97*	*42.01*	*44.45*	*47.94*	*(15.3)*
a. Transport and communications	5.69	(4.3)	7.19	7.87	8.56	9.30	10.34	11.34	13.13	14.33	(4.6)
b. Trade, storage, hotels and restaurants	13.01	(9.7)	14.94	17.05	20.69	22.35	26.63	30.67	31.32	33.61	(10.7)

4. Services	*19.87*	*(14.9)*	*23.65*	*26.54*	*29.76*	*32.92*	*36.32*	*40.36*	*43.93*	*47.57*	*(15.1)*
a. Banking and insurance	1.58	(1.2)	2.24	2.49	2.88	3.41	3.62	4.16	4.59	5.04	(1.6)
b. Public administration and defense	5.38	(4.0)	6.68	7.78	8.90	9.89	10.99	12.47	13.93	15.02	(4.8)
c. Real estate and ownership of dwellings	3.86	(2.9)	4.47	5.28	5.62	5.96	6.38	6.59	7.00	7.29	(2.3)
d. Other services	9.05	(6.8)	10.26	10.99	12.36	13.66	15.33	17.14	18.41	20.22	(6.4)
Net domestic product at factor cost	*133.66*	*(100.0)*	*149.81*	*172.08*	*202.09*	*207.86*	*241.36*	*286.33*	*289.36*	*314.32*	*(100.0)*

SOURCE: *Estimates of National Product, 1960–61 to 1969–70*, Government of India, Department of Statistics, Central Statistical Organization, New Delhi.

a. Figures in parentheses represent percentage share of NDP.

reasons that critically affect the latter: (1) new technology—the so-called "Green Revolution" based on new varieties of foodgrains—began to spread from 1965–66 on; and (2) there were two unprecedented droughts in 1965–66 and 1966–67. The consequences of the droughts clearly dominate the effect of the Green Revolution so that the annual compound (semi-log trend) growth rate of agricultural output is 3.2 percent for 1949–50 to 1964–65 but falls drastically if we include the two drought years. It should be noted, however, that even when we exclude those years and extend the period to 1969–70, the annual compound growth rate is slightly lower at 2.9 percent, though the decline is imperceptible (from 3.0 to 2.9 percent) in the case of foodgrains (to which the Green Revolution is really relevant).[11] Thus the Green Revolution, at best, seems to have arrested a possible decline in *foodgrain* production but has not been effective in eliminating a slight decline in the overall trend growth rate in *agricultural* production.

We may also note that this growth rate has been the result of both area extension and growing yield per hectare, the two factors contributing in equal measure to the growth rate of total production. Moreover, the aggregate picture conceals divergent performances by different commodities. The new technology had its impact primarily on wheat. The estimated rate of growth of wheat production was thus 4 percent per annum during 1949–50 to 1964–65 but increases to 5.1 percent when the period is extended to 1969–70. The contribution of yield growth was 1.3 percent per annum in the former period but turns out to be 2.4 percent per annum over the longer period. Thus the new technology has accelerated the growth of yield per hectare and hence that of total output of wheat.

Shifting Structure of Industrial Production

Two things are notable about the performance of the industrial sector during the period of our study. First, the growth rate of this sector exceeded that of the agricultural sector and also accelerated through the three five-year plans. The index number of industrial production (Table 1–8) shows a compound, annual rate of growth of 5.75 percent in the First Plan, nearly 7.5 percent in the Second and close to 8 percent in the Third. The post-1966 performance has been less satisfactory because of the industrial recession which set in during 1966–67 and continued through 1969–70. This phenomenon is analyzed at length in connection with the June 1966 devaluation discussed in Chapter 8.[12]

Second, the structure of industrial production has gradually shifted away from a preponderant role for consumer goods production to a growing role for capital goods and intermediates. During 1951–63, for example, the relative shares in terms of gross value added, gross output at factor cost and gross output at market price, declined steadily for consumer goods, rose steadily

TABLE 1–8

Index of Industrial Production, 1951–72

(1960 = 100)

Year \ Weight	Consumer Goods Industries 37.25	Capital Goods Industries 11.76	Intermediate Goods Industries 25.88	Overall Index
1951				58.7
1952				60.8
1953				62.0
1954				66.3
1955				71.9
1956				77.9
1957				80.7
1958				82.1
1959				89.2
1960	100.0	100.0	100.0	100.0
1961	106.6	118.0	105.8	109.2
1962	108.0	153.0	113.6	119.8
1963	110.4	170.0	122.9	129.7
1964	118.6	206.1	132.2	140.8
1965	127.5	244.2	140.1	153.8
1966	131.3	210.1	136.7	152.6
1967	125.7	205.3	139.7	151.4
1968	131.9	210.3	148.2	161.1
1969	145.3	214.0	154.4	172.5
1970	154.7	224.6	158.8	180.8
1971	159.7	224.3	160.4	186.1
1972	168.2	243.5	171.2	199.4

NOTE: The weights shown apply to the series starting with 1960. Index numbers by end-use categories are not available for earlier years. The overall index shown above for years prior to 1960 (originally based on 1951 as 100) has been linked to the new index, based on 1960, in that year.

SOURCES: *Reserve Bank of India Bulletin,* November 1960, June 1961, June 1970, December 1972 and December 1973.

for capital goods and remained steady at around 35 to 40 percent for intermediates and raw materials.[13] Furthermore, by using alternative measures of import substitution and by carefully distinguishing among them, Padma Desai has shown that all measures underline the following conclusions: (1) for the period 1951–63, import substitution in the capital goods sector predominates; (2) the First Plan, however, was characterized by relatively substantial import substitution in the consumer goods sector; and (3) the Second Plan, with its emphasis on investment in heavy industries, registered the lowest import substitution in the consumer goods sector and the highest in the capital goods sector.[14] These conclusions must carry over into the Third Plan as well, as is evident if one examines the industrial production index during 1961–66: with 1960 = 100, it stands at 244.2 for capital goods industries, 140.1 for intermediate goods industries and 127.5 for consumer goods industries for 1965.[15]

Foreign Trade

We will have occasion later to analyze the foreign trade sector intensively. Here, in this broad overview of the Indian economy, we confine ourselves to a very general and brief description of the major features of India's trade performance and policies.

Import Licensing. Throughout the period under study, imports have been licensed. The proportion of licenses going to traders (the *Established Importer* licenses) has steadily diminished (from over 61 percent of all licenses issued in 1951–52 to less than 3 percent in 1970–71) and the proportion going directly to producers (the *Actual User* licenses for intermediates and the *Capital Goods* licenses for equipment) has now taken over the bulk (more than half) of available imports. The licensing has further been characterized by numerous restrictions on import specification, transferability and "indigenous clearance" to protect domestic suppliers of import-substitutes. Finally, the licensing has varied in degrees of restrictiveness. It was rather light during the First Plan, intensely severe during the Second, somewhat less so during the Third (except in the last two years), and perhaps equally so since then. It may be noted that import licensing has been operated, virtually throughout the period since the Second Plan, in conjunction with industrial licensing over much of the Organized Industrial Sector.

Exports. India has not merely a rather low ratio of exports to national income;[16] her share in total world trade has also been falling through the period of our study, as Table 1–9 highlights, and is now less than one-third as large as it was in the years immediately following World War II.[17] The composition of Indian exports has remained heavily biased toward "traditional" items such as tea, jute manufactures and cotton fabrics, these three items alone accounting for a quarter of India's export earnings as late as 1970–71. But new, "non-traditional" exports such as engineering goods, chemicals and allied products have grown in the 1960s to over 10 percent of India's total exports.[18]

TABLE 1–9
India's Exports and Share of Total Value of World Exports, 1948–70

Calendar Year (1)	World Exports (U.S. $ millions) (2)	Indian Exports (U.S. $ millions) (3)	Indian Exports as Percentage of World Exports (4)
1948	53,300	1,363	2.6
1949	53,900	1,309	2.4
1950	55,200	1,146	2.1
1951	74,800	1,611	2.2
1952	72,400	1,295	1.8
1953	73,400	1,116	1.5
1954	76,400	1,182	1.5
1955	83,200	1,276	1.5
1956	92,600	1,300	1.4
1957	99,300	1,379	1.4
1958	94,800	1,221	1.3
1959	100,600	1,308	1.4
1960	113,400	1,331	1.2
1961	118,600	1,387	1.2
1962	124,700	1,403	1.1
1963	136,000	1,631	1.2
1964	152,600	1,749	1.2
1965	165,400	1,686	1.0
1966	181,400	1,606	0.89
1967	191,200	1,612	0.84
1968	213,700	1,760	0.82
1969	244,900	1,835	0.75
1970	280,500	2,026	0.72

SOURCES: *International Financial Statistics*, Supplement to 1966–67 issues, March 1968, October 1973, International Monetary Fund.

Imports. The structure of imports has been shifted almost exclusively toward capital goods, intermediates and raw materials, the only consumer goods imported in any significant quantity being foodgrains. Import licensing has been used for this purpose; and the shift from EI to AU and CG licensing is also clearly linked to this phenomenon of the drastic decline of consumer goods imports. Table 1–10 quantifies the picture as of 1966–67 to 1968–69: the only consumer goods imports, other than food, come under the non-food

TABLE 1–10
Imports by Category, 1966–67 to 1968–69
(U.S. $ millions)

	1966–67	1967–68	1968–69
Food[a]	868	691	449
Non-food	1,903	1,986	2,096
(1) Machinery and equipment	363	289	265
(2) Maintenance imports	1,393	1,508	1,612
(a) Components and spares	415	402	434
(b) Raw materials and intermediates (excluding metals)	733	852	948
(c) Metals			
(i) Iron and steel	131	142	115
(ii) Non-ferrous	114	119	119
(3) Others	146	191	218
Total imports	2,771	2,677	2,545

SOURCES: Government of India, Ministry of International Trade, Office of the Chief Controller of Imports, New Delhi.

International Financial Statistics, May 1961, May 1971, December 1962, October 1967, November 1972, August 1973, International Monetary Fund.

a. Food here consists only of cereals and cereal preparations. A small amount of food and edible products is included in item 3 (others).

item (3) and these clearly were at most 5 to 8 percent of total imports by the late 1960s.[19]

Trade and Current Balance. In a QR-regime, the trade balance is of little intrinsic significance while the potential deficit (which is suppressed) and the resulting premia on imports are more important concepts. The Indian trade balance has been constantly negative for the simple reason that external resources have come in as aid and long-term investment and that the balance on invisibles account is both relatively small and again negative. The trade deficit has, in fact, been of the order of $700 to $1300 million, and the current account deficit of the order of $750 to $1500 million during 1961–62 and 1967–68 but has declined thereafter (along with aid flows generally). Thus during 1968–69, 1969–70 and 1970–71, the trade deficit was estimated at $497, $238 and $424 million, respectively, and the current account deficit at $676, $437 and $632 million, respectively.

Foreign Exchange Reserves. These estimates may be compared with the foreign exchange reserves position portrayed in Table 1–11. Note that the foreign exchange position became "thin" after the First Plan, the reserves being virtually halved during 1957 when the balance of payments crisis erupted with the onset of the Second Plan. The decline continued sporadically through the late 1960s.[20]

Key Institutional Features.

We now add a brief description of some of the basic institutional features of India's economic and political structure. An understanding of these features is essential if the reader is to put the analysis in this volume into proper perspective.

INDUSTRIAL TARGETING AND LICENSING

Beginning with the Second Plan, the practice of setting industrial targets became common, and subsequent plans have set out detailed targets for capacity and production in the Organized Industrial Sector.

In addition, the system has been characterized by comprehensive industrial licensing. Licensing has been wider in scope than targeting for the simple reason that it has extended to finer product classification; it has also had to contend with applications to create capacities in areas and in products that were not anticipated in the plan documents. Except for exemptions granted later during the period of our study, both in terms of the exemption limit on size of investment and in terms of exemption by industrial classification of the applicant, industrial licensing has been comprehensive.

The industrial licensing system has been operated alongside the import licensing system in that any expansion of capacity or altogether new investment has required both CG import licenses and industrial licenses through the bulk of the period since industrial licensing began with the Second Plan. This accounts for the important point, made later in this study, that the relaxation of industrial licensing in the late 1960s did not manage to change the restrictiveness of the economic regime because import licensing did not change in substance.

Industrial licensing has also been applied in an extremely detailed manner in relation to its intended purpose. Thus augmentation of capacity by marginal addition of equipment (even for the sake of achieving balance among the various branches of a plant), product diversification and other such responses to changing market conditions that would be normal in an efficient industrial environment have been constrained by the way industrial licensing has functioned.[21]

It should also be noted that a principal objective of the industrial licensing system was to prevent further concentration of economic power in large concerns. In practice, efforts to reach this objective were to be frustrated because the smaller entrepreneurs generally could not invest as much in the aggregate, or in the targeted industries, as contemplated under the Plans; and also

TABLE 1-11

India's Gold and Foreign Exchange Reserves, 1951–72

(U.S. $ millions)

End of Period (1)	Official Gold (2)	Official Foreign Exchange (3)	Official Reserves of Gold, Foreign Exchange and SDRs (2)+(3) (4)	IMF Gold Tranche Position (5)	Overall Reserves (4)+(5) (6)	Use of IMF Credit (7)	Net Position (6)−(7) (8)
1951	247	1,697	1,944	—	1,944	−72	1,872
1952	247	1,549	1,796	—	1,796	−72	1,724
1953	247	1,615	1,862	—	1,862	−72	1,790
1954	247	1,620	1,867	—	1,867	−26	1,841
1955	247	1,619	1,866	15	1,881	—	1,881
1956	247	1,188	1,435	28	1,463	—	1,463
1957	247	695	942	—	942	−173	769
1958	247	475	722	—	722	−177	545
1959	247	567	814	—	814	−132	682
1960	247	423	670	—	670	−63	607
1961	247	418	665	—	665	−188	477
1962	247	265	512	—	512	−292	220
1963	247	360	607	—	607	−298	309
1964	247	251	498	—	498	−154	344
1965	281	319	599	—	599	−287	312

1966	243	364	608	—	608	−361	247
1967	243	419	662	—	662	−456	206
1968	243	439	682	—	682	−374	308
1969	243	683	926	—	926	−240	686
1970	243	698	985	—	985	−10	975
1971	264	699	1,124	—	1,124	—	1,124
1972	264	566	1,098	—	1,098	—	1,098

NOTE: The figures include SDRs worth \$44 million, \$161 million and \$268 million for 1970, 1971 and 1972, respectively.
SOURCE: *International Financial Statistics,* International Monetary Fund.

because it became clear that the bureaucratic system of administered allocations was as disproportionately accessible to larger business houses with their connections and muscle as the market system was in view of their greater access to finance. Ultimately, by the late 1960s, the government was to shift to a policy under which the Large Industrial Houses, so designated, were to have their investments confined to the so-called "core" (generally heavy) industries. Under the same policy, a nationalized banking system was to encourage the expansion of the small-scale sector and a Monopolies and Restrictive Practices Commission was to be set up to watch out for and check the expansion of monopoly and concentration in Indian industry and to examine related issues. As we shall see, none of these changes, which were designed to permit and prompt the expansion of the Large Industrial Houses in approved (core) sectors, so as not to hinder the task of expanding *overall* investment in the economy, were really successful and for this reason, among others, industrial investments were to be slack in the late 1960s.

Public Sector

Among the most important institutional features of the Indian economy are the large share and continuing expansion of the public sector in overall, as in industrial, investments. This phenomenon is of particular importance as the impact of trade and exchange rate policies on allocation and production decisions within the public sector cannot be totally decisive: we should also take into account the ability of these investments to survive the market test owing to implicit subsidies (as when the public sector enterprises do not have to show "normal" profits). In practice, the difference between private and public sector performance does not go particularly beyond this. The reason is simply that the policy of automatic protection for domestic investments, whether public or private, has served to make the market test of survival more or less irrelevant for weeding out inefficient firms and industries; thus the additional impairment of the market mechanism, implied by the public sector not having to turn in "normal" profits, adds little of substance to this basic weakness of the Indian economic regime.[22]

The share of the public sector in total Indian investment has been estimated at over 46 percent for the First Plan, over 61 percent for the Second and over 58 percent for the Third. The public sector's share in Organized Industrial Sector investment has consistently run well over half of the total during this period. Within the industrial sector, furthermore, the government has invested significantly in heavy industry: steel, oil refineries, heavy electrical and heavy engineering being the major areas. The distribution by sector of cumulated investment in public sector projects during 1965–66 registered 40.62 percent for steel, 20.29 percent for engineering, 9.11 percent for chemicals, 12.22 percent for petroleum and 7.49 percent for mining and minerals. The remaining 10.29 percent was accounted for by financial institutions, shipping, aviation and miscellaneous activities.[23] The government has also sought, through two Industrial Policy Resolutions, to reserve certain "key" industrial sectors for public sector investment (e.g., steel); but in practice these restrictions have been treated with some flexibility.

Control of Inflow of Technology and Investment

We should next note the strict regulation of the inflow of technology and investment by the government throughout the period of our study. The "technical collaboration agreements" between Indian entrepreneurs and foreign sellers of technology have had to be approved and the royalty terms carefully screened and sanctioned. At the same time, clearance has been required for all equity investment, whether in joint ventures or in subsidiaries (which are generally disapproved in favor of joint ventures). This clearance has involved not merely the whole gamut of import and industrial licensing but also the additional restrictive criteria relating to royalty terms on associated technical transfers and to areas of permissible investment. In this regard, the Indian economy has again been characterized by more stringent restrictions on the inflow of technology and investments than the economies of many other developing countries seeking external capital.[24]

State Trading Corporation

The foreign trade of India is not exclusively in the private sector. This is true not merely in the sense that there are public sector enterprises whose current output is also being exported. It is rather that the State Trading Corporation, established in 1956, has come to handle a substantial volume of both import and export trade. It directly engages in trade and also occasionally permits private traders to effect deals, subject to the corporation's approval and commission, in commodities otherwise traded by the STC alone. By 1965, this trade was about 5 percent of total Indian trade. Thus, the role of the STC is not very significant; but it needs to be kept in view, especially as the STC has been a vehicle for channeling lucrative imports of some scarce commodities and also for subsidizing the exports of some other commodities through STC's absorption of losses on export sales. Two other corporations, of relatively minor importance, are the Minerals and Metals Trading Corporation (constituted in 1963) and the Metal Scrap Trade Corporation (constituted in 1964).

Trade Agreements

India has not been averse to conducting trade under bilateral trading agreements, not merely with the Soviet bloc but also with other developing countries. Trade with the Soviet bloc in particular has steadily increased. Thus, exports to the bloc were about 5 percent of total Indian exports during the Second Plan but grew to nearly 16 percent during the Third Plan and have steadily increased since. Nonetheless, the overwhelming bulk of Indian trade continues outside the Soviet bloc and outside the framework of bilateral agreements. Moreover, it is well known that both India and her trading partners conduct bilateral trade with keen attention to international prices, so that such trade presents no serious complication to the present analysis (nor do the operations of the State Trading Corporation discussed above).[25]

Political Structure

Since independence in 1947, India has been a parliamentary democracy and has enjoyed remarkable political stability. The government has witnessed long periods of firm leadership, with only three Prime Ministers in more than twenty-five years. The dominance of one party, the Congress party, through the bulk of the period has also increased political stability. The only interruption in this unparalleled record of political equilibrium was the struggle that broke out over the prime ministership when Mrs. Indira Gandhi succeeded Mr. Lal Bahadur Shastri. This upheaval led to the eventual bifurcation of the Congress party and the near-decimation of the faction that became the so-called "old Congress" before the "new Congress" emerged under Mrs. Gandhi's firm leadership.

The main thrust of the political leadership has been toward ideological positions identified with that nebulous word, socialism. This has implied attention to objectives such as the prevention of concentrated economic power and land reform, objectives which have not been pursued with the keenness that attends their affirmation in the country. The opposition parties have been on both left and right, ranging from laissez-faire Swatantra and backward-looking Jan Sangh to varying shades of revisionist and non-revisionist Communist parties eternally splintering and bickering. None of them have managed to pose a sustained and serious challenge to the ruling Congress party whose economic and political philosophy is fairly étatist and centrist.

The country is federal, with the central government overseeing state governments in as many as seventeen states.[26] The Congress party has generally managed to rule in the states as well, but not always and, in recent years, even less often. But even when the Congress party has had extensive control of the state governments, center-state frictions have not been reduced, for regional pulls tend to cut across party identifications.

Internationally, the country has experienced continuing problems on its borders with Pakistan and China. There have been three wars with Pakistan and one with China, and the burden of defense expenditure has been estimated at 3 percent of GNP since the 1962 war with China.

PHASES: 1950–70

Having given the reader an overview of the important institutional features of and the key economic-performance indicators for the Indian economy, we are now in a position to delineate the different phases (as defined in Appendix A) in the Indian foreign trade regime. And we propose to analyze the Indian economy in terms of the periods defined by these phases, in contrast to the customary analysis in terms of the five-year plans. The phases which we distinguish are identified in Figure 1–1, which also traces several of the major economic variables relevant to the delineation of the phases.

1950–56 (Phase IV).

This period corresponds roughly to the period of the First Plan. It was characterized by good harvests and hence a satisfactory agricultural expansion of nearly 5 percent per year. The index of agricultural production (1949–50 = 100) went from 90.5 in 1950–51 to 120.8 in 1956–57 for foodgrains and from 95.6 in 1950–51 to 124.3 in 1956–57 for all commodities. Indian exports fell as a percentage of world exports, remaining relatively stagnant in absolute value after the Korean War peak, and import demand balanced this off to result in a roughly equilibrated exchange rate which put little pressure on the QR-framework that had been inherited from the Second World War. The foreign exchange reserve position thus remained comfortable and official reserves remained close to $1.9 million through this period. There was no evidence of high import premia, systematic allocations of imports and industrial licenses and associated economic policies of the kind that were to spring up in the next period.

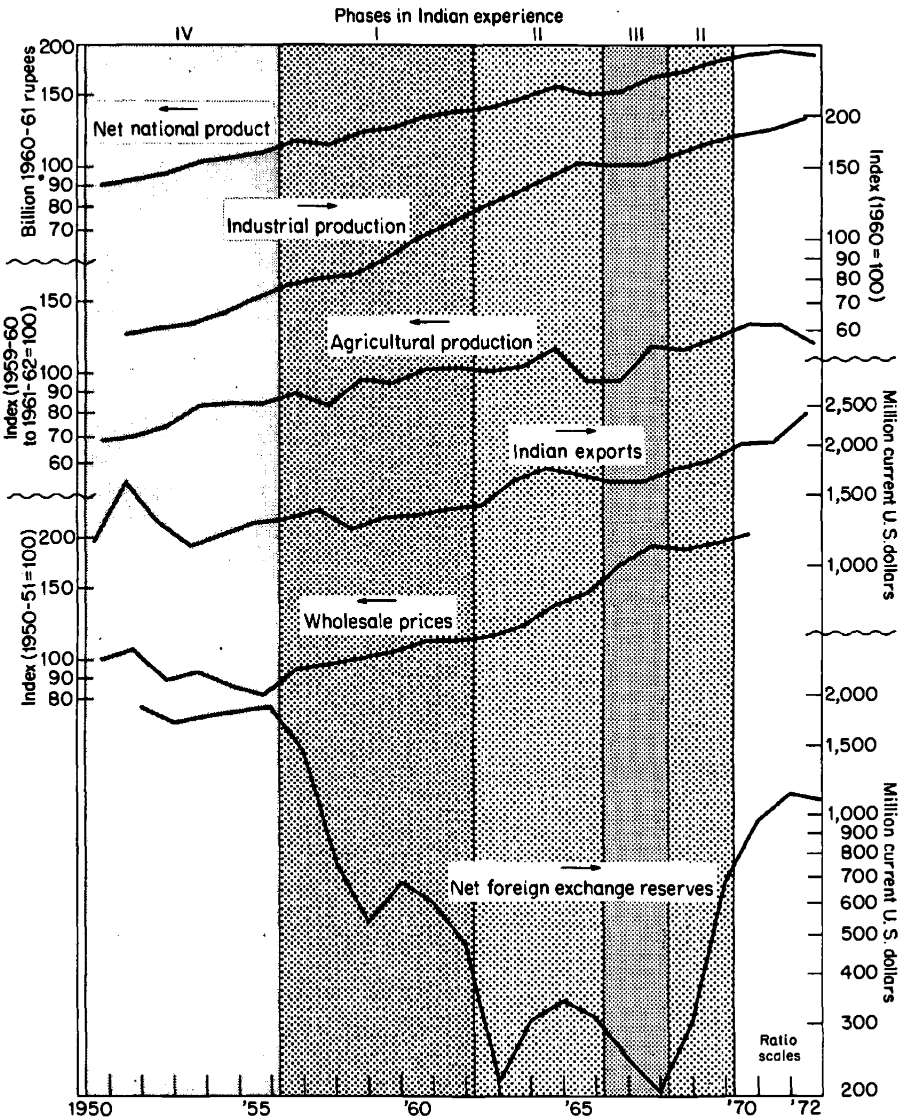
In a predominant sense, therefore, we can characterize this period as corresponding to Phase IV of the Bhagwati-Krueger schema. The convertibility was not total, the QR-regime was not fully absent and so Phase V, as defined, was not really present. On the other hand, the QRs were *not* systematically designed to adjust the international accounts and their scope was severely limited: they were, almost literally, left over from the Second World War and the machinery for administering them had not been dismantled.

1956–62 (Phase I).

By contrast, the period extending approximately from 1956 to 1962, broadly synchronizing with the Second Five-Year Plan, was characterized by the imposition of a QR-regime in the strong sense, provoked by a severe balance of payments crisis in early 1957. This was also a period of a shift in the investment pattern to manufacturing industry and to heavy industry as

FIGURE 1–1

Selected Macroeconomic Indicators for India, 1950–70



well,[27] imposition of strict industrial licensing,[28] accrual of significant aid flows, a rise in the domestic rate of saving, a severe reduction in foreign exchange reserves and a continuing stagnation in export performance (implying a falling ratio of exports both to GNP and to world exports).

Clearly, the period is somewhat easily characterized as Phase I, in terms of extensive and intensive emergence of the QR-regime as a method of adjusting the international accounts. At the same time, it should be noted that, coincident with the balance of payments rationale, the introduction of industrial licensing and industrial targeting simultaneously implied a rationale for the QR-regime which rested rather on the objective of selective industrialization, buttressed by QR-regime-generated, automatic protection—as we shall shortly discuss in Part III.

1962–66 (Phase II).

On the foreign payments front, the situation described above was more or less carried into the period 1962–66, with one significant exception which classifies this period as Phase II: export subsidization was begun in earnest around 1962 and intensified through the period on a whole range of exports.

Reserve position continued to be "thin"; aid flows were stabilized up to nearly 1964–65; QRs remained severe (the premia on imports, however, rose to unprecedented levels around late 1965 and early 1966 with the suspension of aid following the Indo-Pakistan War in late 1965); and export performance registered a significant improvement (until 1965 when a major drought affected the traditional exports adversely). Industrial licensing also continued to be severe but, toward the end of the period, efforts were made to loosen it up. Toward the end, the government also steadily deployed import duties to mop up the import premia.

This period can be broadly characterized as one involving "partial liberalization" in view of the export subsidization and growing resort to import duties (both of these policies involving therefore a growing, *de facto* devaluation); we should also note the halting moves toward more liberal industrial licensing procedures. These moves were to culminate in our "Liberalization Episode": the June 1966 devaluation and the accompanying import liberalization. We will thus characterize this period as Phase II.

1966–68 (Phase III).

With the 1966 devaluation and import liberalization (based on enlarged aid flows), we can identify the beginning of a third phase. The devaluation was also accompanied by an elimination of export subsidies and reduction of import duties. As it turned out, this period was afflicted by a second disastrous harvest, resulting in price increases and an adverse impact on traditional exports, and subsequently by an industrial recession. This liberalization episode, in consequence, was ill-starred for economic reasons. These difficulties were further compounded by the acute political pressure brought by aid donors for this change of policies—as we discuss in Chapter 10. Thus, for several reasons explored in Part IV in depth, Phase III did not lead to a Phase IV of yet further loosening up of the QR-regime and its attendant effects, but rather to a relapse, by 1968–69, into Phase II.

1968–70 (Phase II).[29]

By 1969–70, the liberalization appeared to have been largely reversed. The import premium was back to 30 to 50 percent on the average, export subsidies had been reinstated and were up to high levels, industrial de-licensing had amounted to little (especially because of continuing QRs), automatic protection with QRs was still the order of the day, and the picture looked very similar to (though marginally better than) that obtaining during 1962–65. The system had not really moved into Phase IV effectively but had rather relapsed into Phase II. In this sense, the liberalization episode had failed; it had also failed politically for the reason that exogenous developments (e.g., price rises due to drought) plus foreign pressures had (erroneously) discredited, in the political and public eye, such a liberalizing package and hence diminished the likelihood of its being tried again.

The delineation of the (approximate) phases in the Indian economy, as defined above, now enables us to proceed to the following analysis:

1. characterize the "anatomy of exchange control" for Phase I and Phase II, the former and the latter periods being similar in their import regimes but different in that exports were subsidized during the latter Phase; this is the subject of our analysis in Part II;

2. analyze in Part III the "liberalization episode" of 1966–68, beginning more or less with the June 1966 devaluation, determine the conditions that governed its outcome and draw lessons therefrom; and

3. examine in Part IV the overall growth effects of the foreign trade regime (broadly defined to include the exchange rate policy plus the *framework* of domestic policies such as industrial licensing), to determine whether the QR-regime contributed to India's rather unsatisfactory economic performance or improved it.

NOTES

1. For a comprehensive analysis along these lines see Jagdish N. Bhagwati and Padma Desai, *India: Planning for Industrialization* (London: Oxford University Press, 1970). This study, commissioned by the Organization for Economic Cooperation and Development, is part of a series on industry and trade in some developing countries edited by Ian Little, Tibor Scitovsky and Maurice Scott.

2. For a detailed discussion of the economic theory and techniques underlying the successive plans, consult J. Bhagwati and S. Chakravarti, "Contributions to Indian Economic Analysis: A Survey," *American Economic Review*, Special Supplement, 1970.

3. See Figure 1–1 for index numbers tracing the course of agricultural production over the period since 1950–51.

4. See Bhagwati and Desai, *India,* p. 181, for documentation and details.

5. The issue of whether foreign aid helped retard the domestic savings effort will be discussed in Chapter 16 where we reach the conclusion that there is little evidence for such a view. Note also that in Table 1–5 aid is being converted into rupees at post-devaluation prices from 1966–67.

6. For details, consult M. Kidron, *Foreign Investment in India* (London: Oxford University Press, 1965).

7. These estimates are taken from the *Reserve Bank of India Bulletin,* August 1969.

8. *Ibid.* This original source provides further breakdowns by direct and portfolio investments as well as by branches and "foreign controlled rupee companies."

9. For some of the *caveats* in interpreting this index, especially with regard to biases downward when prices are moving up, see Bhagwati and Desai, *India,* p. 76.

10. Our analysis, however, will stop around 1971–72 for reasons stated in the Preface.

11. These and other estimates in our discussion in this section are based on T. N. Srinivasan, "The Green Revolution or the Wheat Revolution?" in *Comparative Experience of Agricultural Development in Developing Countries of South East Asia since World War II* (Bombay: Thacker and Co. for the Indian Society of Agricultural Economics, 1972). More details and analysis are given there.

12. The index of industrial production during 1965, 1966, 1967, 1968 and 1969 was 153.8, 152.6, 151.4, 161.1 and 172.5, respectively, as estimated in mid-1972 and reported in the *Reserve Bank of India Bulletin.*

13. For detailed analysis, see Padma Desai, *Import Substitution in the Indian Economy* (Delhi: Hindustan Publishing Corporation, Jawahar Nagar, 1972). The data refer to the Organized Industrial Sector which is defined to include all establishments except those employing fewer than ten workers using power or fewer than twenty without power.

14. *Ibid.* See also an original paper by the same author, "Alternative Measures of Import Substitution," *Oxford Economic Papers* (November 1969), for a theoretical analysis of the rationales that may underlie the different measures.

15. In view of excess capacity in various industries and the tendency to deny imported inputs to consumer goods industries in times of abnormal foreign exchange stringency, the relative expansion of consumer goods *investments* may seem slightly understated if one tries to infer it from the relative expansion of consumer goods *production.*

16. This ratio, for example, was 4.8 percent in 1960–61. By a Chenery-type regression technique, however, it can be argued that India's exports are no smaller than what her size would indicate to be the "on-the-line" level. See J. Bhagwati and J. Cheh, "LDC Exports: A Cross-Sectional Analysis," in *International Economics and Development,* ed. Luis Eugenio de Marco (New York: Academic Press, 1972).

17. The interaction among external factors, domestic policies and export performance will be examined in later parts of this study.

18. If we include fish, art silk fabrics and iron and steel exports as well, the share rises to nearly 20 percent in 1970–71. The major traditional export commodities include coir yarn and manufactures, tobacco, leather and leather manufactures, coffee, iron ore, manganese ore and mica.

19. This shift of the import structure so that consumer goods imports are seriously reduced is typical of the postwar trend in many LDCs. See J. Bhagwati and C. Wibulswasdi, "A Statistical Analysis of Shifts in the Import Structure in LDCs," *Bulletin of the Oxford University Institute of Statistics* 34 (May 1972).

20. The reserves had recovered by 1972 to nearly $1 billion. This period, however, is beyond the scope of our study.

21. Some of these constrictive features were to be relaxed after 1965, as noted in Chapter 4. For fuller details of the licensing system until that time, consult Bhagwati and Desai, *India,* pp. 231–248.

22. While the additional impact on inefficiency in allocation may be marginal, the same is not true of the impact on savings. Thus, the early hope of Indian economists that growing public sector investments would generate public savings to support growing investment in the economy has not been realized.

23. The information in this section comes from *Annual Reports of the Working of Industrial and Commercial Undertakings of the Central Government,* Government of India, Ministry of Finance, New Delhi.

24. We do not discuss in this volume the rationale of these restrictions and whether, on balance, they helped or hurt the economy. Several works are now available on the theme of technology and foreign investment in the Indian economy, both for the private and for the public sectors: Bhagwati and Desai, *India;* Kidron, *Foreign Investments;* V. N. Balasubramanyam, *International Transfer of Technology to India* (New York: Praeger, 1972); Padma Desai, *The Bokaro Steel Plant* (Amsterdam: North-Holland Publishing Co., 1972).

25. See Asha Datar, *India's Economic Relations with the USSR and Eastern Europe, 1953–1969* (Cambridge: Cambridge University Press, 1972); reviewed by Padma Desai in *Economic Journal* (September 1973), pp. 976–979.

26. The number of states has increased over time owing to linguistic demands for the bifurcation of existing states and for other parochial reasons of one kind or another. In addition to the seventeen states in 1972–73, there were twelve "Union Territories" during 1972.

27. We have already discussed the estimates of import substitution in these areas during successive plan periods. See also Desai, *Import Substitution.*

28. We have indicated the main outlines of industrial licensing. For a more intensive analysis, see Bhagwati and Desai, *India,* pp. 231–248.

29. Although our analysis stops in 1970 because of data lags, Phase II has continued and indeed was intensified at least until 1973 by the economic stress of the events that led to the creation of Bangladesh in 1972.