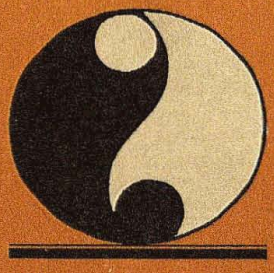
Journal of Indian School of Political Economy

Vol. XI, No. 3
July-September 1999



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JOURNAL
OF INDIAN SCHOOL
OF POLITICAL ECONOMY

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Indian Economy, Polity and Society

Vol. XI | July-September 1999 | No. 3

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Journal of Indian School of Political Economy, Pune

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FOREIGN DIRECT INVESTMENTS IN THE POST-LIBERALISATION PERIOD: AN OVERVIEW

K.S. Chalapati Rao, M.R. Murthy and K.V.K. Ranganathan

For a long time India's approach towards foreign direct investment was governed by the multiple objectives of self-reliance, protection of national industry and entrepreneurs, import of select technologies and export promotion. As a part of the Structural Adjustment Programme, along with virtually dismantling the industrial regulatory system, India sought to attract FDI with special favours and persuasion. While the new regime places heavy emphasis on attracting large amount of FDI, there is very little discussion on the various facets of actual implementation. This paper seeks to provide empirical content to the developments during the first seven years of liberalisation.

Introduction

For more than three decades after independence, India maintained a selective approach towards foreign direct investment (FDI) [Kidron, 1965; Goyal, 1979; India, 1969]. The approach was governed by multiple objectives of self-reliance, protection of national industry and entrepreneurs, import of select technologies and export promotion. The emphasis was on technology imports without financial participation by the technology supplier. This was intended to give the much needed boost to technological development as the recipients of foreign technology were expected to absorb the technology and modify and develop further with the help of their own R&D. It was believed that this could help India move on the road to technological self-reliance. Foreign investment in low technology areas was not encouraged in order to shelter local industry and to conserve foreign exchange. The policy regime since 1991 has been altered and the rationale for restrictions on and regulation of foreign investments in India that made India a partially closed economy have been given up. It was argued, that restrictions on Foreign Direct Investment (FDI) and imports and strict internal regulations Monopoly and Restrictive Trade Practices Act (MRTPA) and [Industries (Development and Regulation) Act, 1951, (IDRA)], enabled local manufactures to exploit monopoly rent, produce poor quality goods and services, gave high profits with no obligation or concern for the average consumer. From a position of selectivity, the transition to the present position is one of welcome to FDI and treating with special favours and persuasion. Drastic changes in Indian economic policies have been initiated to permit entry of foreign capital and free flow of international trade.

Beginning with July 1991, the government introduced a number of changes in the country's regulatory policies under the general acceptance of the policy package known widely as the Structural Adjustment Programme (SAP). The important departure from the past was in the form of: revision of the Industrial Policy Resolution, 1956 and Schedules A & B, resulting in the opening up of many a public sector reserved area;[1] drastic revision of IDRA with the objective of removing a major entry point hurdle[2] [GOI, para 23], doing away with the registration requirements under MRTPA; removal of the general ceiling of 40 per cent on foreign-held equity under Foreign Exchange Regulation Act (FERA); lifting of the restrictions on use of foreign brand names in the local market; removal of the restrictions on FDI entry into low technology consumer goods; abandonment of the phased manufacturing programme (PMP); dilution of the

K.S. Chalapati Rao, M.R. Murthy and K.V.K. Ranganathan are Principal Researchers in Institute for Studies in Industrial Development, Narendra Niketan, Indraprastha Estate, New Delhi - 110 002.

This study is an outcome of the project Global Capital Flows and the Indian Stock Market sponsored by the Indo-Dutch Programme on Alternatives in Development (IDPAD). The authors wish to thank S.K. Goyal, the Project Director, for his support and guidance. Thanks are also due to Biswajit Dhar and Vinish Kathuria for their critical remarks and useful suggestions. The usual disclaimers apply.

dividend balancing condition and export obligations; liberalisation of the terms for import of technology and royalty payments; permission to invest up to 24 per cent in the equity of small scale units; reduction in tax rates; etc. In the new policy regime, proposals for foreign investment need not necessarily be accompanied by foreign technology agreements.

The new regime placed special emphasis on attracting a large amount of foreign capital. To understand the significance of the change, one needs to examine the number, the size and the nature of the newly approved investments, actual capital inflows, take-over of local companies by FDI and performance in terms of net foreign exchange earnings by FDI enterprises. These issues are interrelated. Very often in the policy making circles and in the general discussion on the state of the economy, concern is expressed at the wide gap between foreign investment approvals and actual inflows. This study makes an attempt to obtain empirical content to these questions. The paper draws extensively from the studies completed as also under progress at the Institute for Studies in Industrial Development [Goyal et al., 1994 and 1995]. We make use of the aggregate data and information on individual approvals reported by the Secretariat for Industrial Assistance (SIA), Indian Investment Centre and other official agencies. Our attempt is a limited one, *i.e.*, to provide a broad picture of the flow of FDI and indicate the possible factors at play. We hope the insights into the operations of the new policy regime would help promote informed debate on the subject.

FDI refers to the participation of a foreign investor in the risk capital of an existing or a new undertaking. FDI does not always imply holding of the entire risk capital by a foreign undertaking though this used to be true when Foreign Company Branches operated in India and held a dominant position in tea, coffee and rubber plantations. The most common system of FDI flows is through participation in risk capital and gaining a say in management and control of the host country enterprise. In contrast, foreign portfolio investments are not associated with management control and are basically aimed at benefitting from capital appreciation and share in profits in the form of dividends. Financial participation is generally accompanied by the foreign partner providing technology support as well. This may be by way of process know-how, design and drawings of equipment or responsibility to provide managerial skills or evolve new marketing skills. Generally, there are no agreements which can be strictly classified as financial or technical. In select industries government approvals are automatic and subject to general limits on foreign equity levels and the size of payments for technology. The liberalisation of industrial policy in 1991 introduced a two-way approval process for foreign direct investment. First is the automatic approval route which is applicable to the industries listed in Annexure-III of the Industrial Policy Statement of July 1991 and is subject to limits on foreign equity participation. The initial limit on foreign investment was 51 per cent. Those seeking to invest under the automatic approval process, were required to formally inform the Reserve Bank of India (RBI). This requirement has since been dispensed with and companies need only to inform the RBI after issue of shares to a foreign company. The upper limit for foreign equity participation under automatic approval was raised from 51 to 74 per cent of the equity capital (and 100 per cent in case of Non-residential Indian (NRI)) in select industries in January 1997. The list of industries open for automatic approval was also expanded. In the Budget Speech 1999-2000 it was announced that the scope of automatic approval would be expanded further. If the foreign investors wish to enter other industries or feel the need to secure higher percentage of foreign equity for themselves, they need to go through a formal process

of case by case approval, with the Foreign Investment Promotion Board (FIPB) playing the main role.

As a result of the policy changes in 1991 and active promotion of India as a destination, the amount of FDI approved and received rose sharply. The total number of technical and financial collaborations approved during 1995, 1996 and 1997 did not appear to change but there is a clear trend for more financial collaborations and a decline in pure technical collaborations. (See Table-1). In terms of the amounts approved, the FIPB occupies a more important position compared to the RBI. While the RBI gave automatic approval in nearly one-fourth of the financial collaboration cases, the foreign investment associated with these proposals was only six per cent of the total investments approved. But for the change in policy in January 1997, RBI approvals would have accounted for even a still lesser share. In the context of the liberalisation of industrial policy, it is thus significant that much of the investment approved went through a formal procedure of approval unlike the automatic approval case where the investors might not have been so serious. During the initial period, equity hikes undertaken by many of the companies already under foreign control were approved automatically. After a sharp public criticism of the manner in which the hikes in the extent of foreign-held equity were affected at ridiculously low prices as compared to the prevailing market prices, the terms of issue were tightened[3] [Goyal, 1997].

The automatic procedure is, however, more effective in technical collaboration agreements. Out of the 5,791 technical collaborations approved up to August 1998, the RBI granted 3,248 approvals, *i.e.*, nearly 56 per cent. The relative significance of financial collaborations in the total approvals has increased rapidly during the 'nineties. From about 10 to 15 per cent of the total collaborations approved during the latter half of the 'seventies, the financial collaborations (FCs) accounted for a little less than one-third of the total towards the end of the 'eighties. The share of the FCs increased further after liberalisation of industrial policy and exceeded half of the total since 1993. During 1997 financial collaborations accounted for nearly two-thirds of the total, *i.e.*, double of their share in the late 'eighties. (Table 1)

Approved Foreign Investment

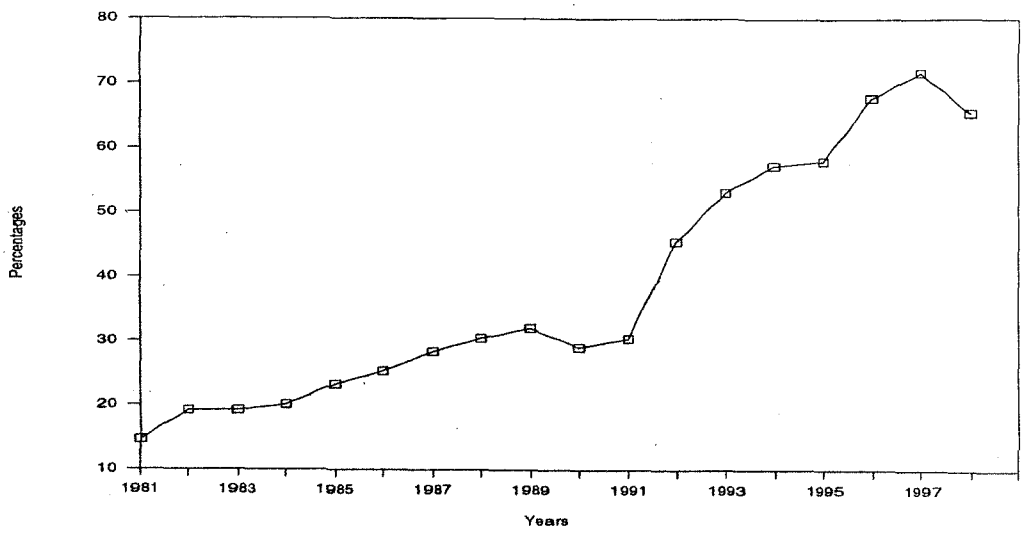
The overall value of the investment proposals and their approval by the government increased substantially since the adoption of new economic policies in 1991 (Table 1 and Figure 1). The size of foreign investments approved in 1981 was nearly Rs 10.9 crore. The peak year during the 'eighties was 1989 when the approvals aggregated Rs 316.7 crore. During the first year after adoption of the SAP, *i.e.*, 1991, size of approved foreign investment shot up to Rs 534.1 crore from the low of Rs 128.3 crore in 1990. Till August 1998, *i.e.*, during the seven years since adoption of the SAP package, official estimates place the gross value of the approvals at Rs 1,73,510 crore. This amounts to nearly Rs 25,000 crore per year. Out of this as much as Rs 1,46,040 crore or more than four-fifths was approved during 1995 to August 1998. Approvals since 1994 include GDR issues and Foreign Currency Convertible Bonds.[4] GDR issues are portfolio investments and lack the essential criteria of control over the enterprise; strictly speaking GDRs should not be treated as direct investment except for purpose of reporting[5] [UNCTAD, 1997]. If the GDR amount of about Rs 18,729 crore is taken out, the size of approved investments works out to Rs 1,54,781 crore for the seven years. There is a possibility of some other approvals also being included as FDI though these would not strictly qualify as direct investments since they lack the essential characteristic of control.[6] The approvals have grown significantly over the past seven years. Yet, India's share in total global inflows continues to

Table 1. Financial and Technical Collaborations: 1981 to August 1998

Year	No. of Approved Collaborations			Relative Share of Financial Collaborations Col 2 as % of Col 4)	Investment Approved (Rs Crore)
	Financial	Technical	Total		
(1)	(2)	(3)	(4)	(5)	(6)
1981	57	332	389	14.65	10.9
1982	113	477	590	19.15	62.8
1983	129	544	673	19.17	61.9
1984	151	601	752	20.08	113.0
1985	238	786	1,024	23.24	126.1
1986	242	715	957	25.29	106.9
1987	242	611	853	28.37	107.7
1988	282	644	926	30.45	239.8
1989	194	411	605	32.06	316.7
1990	194	472	666	29.13	128.3
1991	289	661	950	30.42	534.1
1992	692	828	1,520	45.53	3,879.1
1993	785	691	1,476	53.18	8,861.8
1994	1,062	792	1,854	57.28	14,190.0
1995	1,355	982	2,337	57.98	32,070.0
1996	1,559	744	2,303	67.69	36,150.0
1997	1,665	660	2,325	71.61	54,890.0
1998 (up to August)	820	433	1,253	65.44	22,930.0
1991-Aug '98	8,227	5,791	14,018	58.69	1,73,510.0

Note: Foreign investment includes Global/American Depository Receipts (GDRs) and FCCBs amounting to Rs 18,729 crore.
Source: (i) India, Department of Scientific & Industrial Research, Ministry of Science & Technology, *Foreign Collaborations: A Compilation*, (ii) India, Ministry of Industry, *Handbook of Industrial Statistics*, and (iii) 1991 onwards: India, Ministry of Industry, *SIA Newsletter*, September 1998.

Figure 1. Share of Financial Collaborations in Approvals



remain small. Even within South, East and South-East Asia, India's share was only 2.27 per cent. It is, however a significant improvement over the earlier level of 1.37 per cent during 1985-1990 [UNCTAD, 1997].

Extent of Foreign Ownership

As mentioned earlier, restrictions on the maximum percentage share of equity normally allowed to foreign investors (40 per cent, as stipulated under the FERA) were seen as a deterrent to foreign companies to invest in India. Removal of FERA restrictions on holding of majority stake should thus be expected to encourage foreign direct investment inflows, especially from large transnational corporations (TNCs). It should, therefore, be a justifiable expectation that the distribution of companies in different shareholding ranges would undergo changes. One may recall that a number of branches and subsidiaries of foreign companies were operating in India prior to the enactment of FERA. The number of foreign subsidiaries came down substantially due to the implementation of FERA[7] [Goyal, 1990]. This was in spite of the fact that majority foreign equity was not banned in cases of high technology and export-oriented companies. Some of the companies, notably those in the drugs and pharmaceutical sector, voluntarily diluted their foreign equity to 40 per cent [Goyal, 1982].[8] In the liberalised industrial policy environment the preference for gaining higher stake in equity becomes visible both in the case of new entrants and also for those which had earlier opted for equity dilution and shed the foreign subsidiary status. The extent of foreign equity shares in an enterprise would also reflect the foreign investor's perception of the need for a local partner. Foreign investors would normally prefer to have an Indian counterpart instead of going alone in a nationally regulated environment. The political sensitivities do not permit full foreign ownership. But, by having a national collaborator one can find easy and convenient routes to administrative patronage. This would be particularly true for new foreign investors. By associating Indian collaborators, foreign investors also obtain access to the local network of contacts, political support, business and a variety of operational advantages [Goyal, 1979]. Avoiding discrimination at the administrative level could be another motive for associating a local, preferably a large industrial house.

Table 2 provides the pattern of the distribution of approvals over the seven-year period 1991 to 1998 as compared to the three years 1981 to 1983. The shift in the pattern of approvals is only too obvious. In the early 'eighties, the distribution was overwhelmingly in favour of the percentage ranges up to 40 per cent. Out of the total amount of Rs 218 crore, as much as 89 per cent fell in this category. The share of 100 per cent subsidiaries in the approved investment was a mere 0.62 per cent. In contrast, 100 per cent foreign-owned subsidiaries accounted for more than one-third of the approved investment during the 'nineties, the post-liberalisation period. Subsidiaries of foreign companies accounted for nearly 65 per cent of the total approved investment during 1991-97. Those settling for up to 40 per cent foreign share accounted for nearly 13 per cent of the new investments.[9]

Table 3 shows that out of the 7,694 approval cases, 1,334 were for proposals with 100 per cent foreign ownership. Nearly three-fourths of these were approved during the post-1995 period. Further, the proportion of approvals for majority ownership (subsidiary status) increased gradually over the period. From a little less than one-third during the first one and a half years to 37.37 during the middle period (1993 to 1995) and to 58.77 per cent in the last two and a half years. In the last period, one-fourth of the approvals are for 100 per cent foreign owned enterprises.

Table 2. Distribution of Approved Investments According to Foreign Share

Foreign Equity Share Offered (Per cent) (1)	No. of Approvals (2)	Percentage in Nos. (3)	Approved Amount (Rs Cr.) (4)	Percentage in Amount (5)
A: August 1991 to August 1998				
Less than 10 per cent	324	4.21	547.08	0.37
10 to 24.99	869	11.29	4,856.58	3.25
25 to 40	1,229	15.97	14,768.54	9.87
40.01 to 50	1,629	21.17	32,949.27	22.03
50.01 to 73.99	1,669	21.69	26,370.64	17.63
74 to 99.99	640	8.32	14,238.93	9.52
100 per cent	1,334	17.35	55,839.60	37.33
All Cases[$]	7,694	100.00	1,49,570.63	100.00
B: 1981 to 1983				
Less than 10	6	2.19	1.11	0.51
10.0 to 25.0	70	25.55	24.95	11.45
25.0 to 40.0	160	58.39	168.31	77.22
40.0 to 50.0	9	3.28	10.65	4.89
50.0 to 74.0	22	8.03	11.20	5.14
74.0 to 99.99	5	1.82	0.38	0.17
100	2	0.73	1.35	0.62
All Cases	274	100.00	217.95	100.00

$ Excludes GDR Issues and cases for which information on foreign share/investment was not available.
Source: A: Generated from a database developed at the Institute using collaboration approvals reported in Indian Investment Centre, *Monthly Newsletter* and Ministry of Industry, *SIA Newsletter*, various issues.
B: [Goyal, et al., 1994].

Table 3. Increasing Share of Foreign Subsidiaries in FC Approvals

Period	Total No. of Approvals	Of Which Foreign Ownership		Percentage in Total	
		Above 50 per cent	100 per cent Owned	Above 50 per cent	100 per cent Owned
(1)	(2)	(3)	(4)	(5)	(6)
August 1991 to 1992	810	249	33	30.74	4.07
1993 to 1995	3,045	1,138	335	37.37	11.00
1996 to August 1998	3,839	2,256	966	58.77	25.16
Total Since 1991	7,694	3,643	1,334	47.35	17.34

Note: Excludes GDRs and cases where foreign share or amount of investment were not available.

Industry-wise Pattern of Approvals

FERA was enacted with multiple objectives in mind. In the scheme to permit higher equity share in high technology and export-oriented enterprises it was implied that FERA would help channelise foreign investments into priority areas. Even while retaining the basic concept of selectiveness, the post-July 1991 phase enlarged the scope for foreign investment. At the end of 1989-90, the manufacturing sector accounted for 85 per cent of the total FDI stock of Rs 2,705 crore

[RBI, 1993a, Pp. 1,031-51]. Plantations had a share of 9.5 per cent. Within the manufacturing sector, Chemicals & Allied Products stood at the top followed by Machinery & Machine Tools, and Electrical Goods & Machinery in that order. Liberalisation of industrial licensing in the form of freeing public sector reserved areas has been the single most important policy decision that influenced the sectoral pattern of FDI. It also appears that to generate a demonstrative effect, certain high profile collaborations like Coca-Cola had to be approved initially. With the emphasis on non-traditional exports and those hitherto treated as low-technology based industries, the change in industry composition of foreign investment was bound to take place. A major policy change in the new regime is with regard to drastic contraction in the public sector reserved areas, notably power and telecommunications.

Industrial policy changes, especially with regard to public sector led to a dramatic upsurge in approvals for new projects in power, oil and telecommunications. Nearly half of the total approved foreign capital was proposed in these sectors[10] (Table 4). If Iron & Steel and Air Transport are also taken into consideration, nearly half of the new investment proposals approved happen to be in areas formerly reserved for development in the public sector.

Table 4. Shares of Different Sectors in Approved Foreign Direct Investment (August 1991 to August 1998)

Industry/Sector (1)	No. of Approvals (2)	Approved Investment (Rs Cr.) (3)	Share in Total (per cent) (4)
Power & Fuels	339	54,103.93	31.20
Telecommunications	346	31,466.12	18.15
Chemicals (other than Fertilizers)	645	11,034.00	6.36
Metallurgical Industries	233	10,981.97	6.33
Service Sector	528	10,962.05	6.32
Transportation Sector	425	10,631.77	6.13
Electrical Equipments (incl. Software)	1,407	8,986.87	5.18
Food Processing Industries	546	8,132.39	4.69
Hotel & Tourism	212	3,488.61	2.01
Textiles (include Dyed, Printed)	417	2,764.04	1.59
Paper & Pulp (incl. Paper Products)	85	2,265.11	1.31
Industrial Machinery	413	1,931.02	1.11
Fermentation Industries	41	1,125.51	0.65
Sugar	6	1,000.75	0.58
Others	2,497	1,453.87	8.38
Total	8,140	1,73,413.31	100.00

Source: Based on data provided in Ministry of Industry, *SIA Newsletter*, September 1998.

During the initial two years of the adoption of the liberalisation package, fuel and power projects accounted for 40 per cent of the approved investments [Goyal et al., 1994]. But by 1996, telecommunications was at the top position with 23.55 per cent in total [SIA Newletter, 1996]. Next in importance is the 'Service Sector'. However, since most of the investment in the telecommunications sector was directed at cellular mobile and basic phone services, this investment could as well be treated as a part of the services sector. If the service sector is regrouped taking into account the other service categories like Hotels & Tourism, the service

sector would come to occupy the top position with as much as one-third share of the total investment. A regrouping in case of Food and Agro products brings its share to 6.33 per cent.[11] This sector is dominated by TNCs like Coca-Cola, Pepsi, Kellogg, Heinz and Seagram.

Industrial machinery accounted for 1.11 per cent only of the approved investment. The sectoral investments also include increase due to enhanced foreign equity stake in the existing foreign controlled companies. In this background, new foreign investment leading to expansion of production capabilities in the machinery sector could be even lower. It has also been observed that the sector is not receiving much attention even in technical collaborations. Compared to the 1986-1990 period, the average number of approved technical collaborations declined by 5.95 per cent for the Industrial Machinery group and by 38.84 per cent for the Machine Tools sector during 1991-1995 [Murthy and Ranganathan, 1997, Pp. 3-9].

Due to the inclusion of GDR issues, official tabulations at times tend to be misleading. The attempt at adjusting the official sectoral totals for GDR approvals could not be carried further due to the vagueness in the product classification of some GDR issues as also to the non-standard nature of the official classification itself. If the industry distribution is adjusted for GDR approvals to the extent possible, the *inter se* ranking does not get affected in any significant manner within the top sectors.[12]

Discussion on foreign investments in India generally reflects the concern about their role in consumer goods industries. The *Economic Survey, 1996-97* placed the share of consumer goods sector at 15.31 per cent and that of capital goods and machinery at 13.14 per cent and that of core and infrastructure sectors at 49.13 per cent in the FDI approved during August 1991 to October 1996. However, while in relative terms the share of consumer goods industries may look to be small, in volume terms it is big enough to cause significant changes in the structure of many products. While food processing sector occupies the seventh position with less than six per cent share, the total approvals amount to Rs 7,500 crore of investment. Coca-Cola alone received approvals of nearly Rs 2,700 crore and approvals on account of Pepsi and its group companies work out to more than 1,000 crore. The changes that occurred in the Indian soft drink industry since liberalisation are of significant importance.[13] A number of consumer goods foreign companies are setting up holding companies in India. The approved foreign investment figures do not reflect the full potential of the investments involved in these approvals for influencing market structures. For instance, most of the takeovers, joint ventures and alliances of the Unilever group in India do not figure in the approved list: take over of Tata Oil Mills and its subsidiaries, Kwality ice cream, Kissan, Lakme and other enterprises does not get reflected in the size of new foreign investments. These were cases of Hindustan Lever (incl. the merged Brookebond Lipton) alone, which is a subsidiaries of Dutch-British Unilever. This holds true of many other existing large foreign controlled companies.

A point that remains very in-adequately debated is whether it is essential to relax the FDI policy with regard to consumer goods industries if the purpose of inviting FDI is to develop the core and infrastructure sectors with foreign participation. The character of infrastructure and service sectors is such that the foreign investors have to physically set up their operations in the country if they wish to extend their operations to the country. In contrast, in the manufacturing sector, be they consumer goods or others, the investor has the option of exporting to India instead of taking up local manufacture. Due to the rapidly falling trade barriers, this possibility has become more real. The possibility of treating the

two broad spheres, namely, the manufacturing sector and others independently for policy purposes is obvious.

Size-distribution of Approvals

We have seen in the above that approved investment is concentrated in Power & Fuel and Telecommunications. These being heavy investment sectors, their share in the number of approvals is small compared to the share in the overall investment approvals. The two sectors together accounted for 685 approvals or a little more than 8 per cent of the total approvals. Understandably, this sectoral character of the approvals will have its reflection in the size distribution of investments as well. From Table 5, it can be seen that the proposals with Rs 500.00 crore and higher investment each were only 58 out of 7,694, i.e., less than 1 per cent. But these claimed 38 per cent of the approved investments. If the approvals in the Rs 100 -- 500 crore range are also included, 296 approvals accounted for more than 72 per cent of the total investment. At the other extreme are the projects in the less than Rs 1 cr. bracket, which, while constituting a little less than half of the approvals, accounted for less than 1 per cent of the total investment. The pattern of the approvals makes it clear that the success or failure of the expectations with regard to inflow of foreign investment would be determined by a limited number of large projects and their industry characteristics.

Table 5. Distribution of FCs According to Size of Foreign Investment (August 1991 to August 1998)

(Amount in Rs Crore)

Investment Range (Rs Crore) (1)	No. of Approvals (2)	Amount Approved (3)	Per cent of Col. 2 (4)	Per cent of Col. 3 (5)
0 to 1 cr.	3,678	1,092.27	47.80	0.73
1 to 5 cr.	2,074	4,770.43	26.96	3.19
5 to 25 cr.	1,175	13,150.37	15.27	8.79
25 to 50 cr.	288	10,141.58	3.74	6.78
50 to 100 cr.	183	12,548.66	2.38	8.39
100 to 500 cr.	238	50,886.13	3.09	34.02
500 cr. & above	58	56,981.19	0.75	38.10
All Cases	7,694	1,49,570.63	100.00	100.00

Note: Excludes GDRs and cases where the investment figures and foreign shares are not available.

Country-wise Distribution of Approvals

Given the relative freedom now offered to foreign investors, one should expect that the sources of foreign investments would get further diversified. At the same time, since many large TNCs are based in the USA, the country may gain even a better foothold in India. At the end of 1989-90, US occupied the highest position with nearly half of the FDI stock. UK was in the second position with 19 per cent share followed by West Germany and Japan.[14] The four countries had a combined share of 83 per cent [RBI, 1993a]. As better or higher technology does not appear to be a special consideration for permitting new investments, one might witness a diversification of sources of investment. From Table 6 it can be seen that while USA stands at the top with a 27.48 per cent, share of the former top four countries (USA, UK, Germany and Japan) came down substantially to 44 per cent. Europe takes the second position with a 24.41 per cent share. In all, the developed countries account for two-thirds of the investment.

Table 6. Sources of Approved FDI (August 1991 to August 1998)

Country/Group (1)	Amount (Rs Cr.) (2)	Per cent Share in Total (3)
USA	42,029.72	27.48
Europe	37,340.48	24.41
- U.K.	11,980.65	7.83
- Germany	6,460.80	4.22
- Belgium	3,904.68	2.55
- Netherlands	3,723.80	2.43
- France	3,337.42	2.18
- Italy	2,632.74	1.72
- Switzerland	2,362.18	1.54
- Sweden	1,420.25	0.93
Other Developed Countries	18,658.14	12.20
- Japan	7,213.34	4.72
- Israel	4,226.51	2.76
- Australia	3,336.88	2.18
- Canada	2,042.77	1.34
- South Africa	1,746.88	1.14
South. East & South East Asia	19,674.89	12.86
- Korea (South)	6,031.17	3.94
- Malaysia	5,443.56	3.56
- Singapore	2,987.98	1.95
- Thailand	2,451.82	1.60
- Hongkong	1,742.10	1.14
Tax Shelters	23,199.64	15.17
- Mauritius	17,940.94	11.73
- Cayman Island	3,621.37	2.37
- Panama	621.44	0.41
- Bermuda	506.37	0.33
- Luxembourg	239.54	0.16
- Isle of Man	156.97	0.10
NRIs	7,424.69	4.85
West Asia	2,703.88	1.77
- Saudi Arabia	672.58	0.44
- U.A.E.	638.54	0.42
- Kuwait	584.28	0.38
- Oman	569.72	0.37
- Baharin	122.57	0.08
Erstwhile Socialist Bloc	988.10	0.65
- China	685.05	0.45
- Russia	257.73	0.17
- Slovakia	0.13	Negl.
- Byelorussia	0.05	Negl.
- Vietnam	0.03	Negl.
Latin America	787.90	0.52
- West Indies	515.43	0.34
- Mexico	252.43	0.17
- Argentina	18.40	0.01
- Jamaica	1.00	Negl.
- Brazil	0.63	Negl.
- Uruguay	0.01	Negl.
Africa	147.89	0.10
- Nigeria	147.54	0.10
Others	2.05	0.00
Total	152,957.37	100.00
Euro Issue (GDRs/FCCBs)	18,748.83	
Total	173,508.31	

A notable feature of the country-wise distribution is that Korea took the lead over Japan which played an important role in the 'eighties. Next important category is that of South, East and South-East Asian countries led by South Korea. These countries contributed nearly 13 per cent to the approved investment representing diversification of sources of FDI. A surprising case is that of small countries led by Mauritius, which are known as tax havens or tax shelters.[15] Many of the investments routed through Mauritius can be traced to US companies. Similarly, some of the investments from Mauritius as also Switzerland were found to have NRI association. Notable among these are the Rs 600 crore investment by Parmars whose proposal was approved in the name of International Petroleum, Switzerland and a project with Rs 300 crore investment approval for Chatterjee Petrochem (Mauritius). This is in addition to the officially reported Rs 5,900 crore investment by other NRIs. In the past too, certain TNCs from advanced countries invested in India through their subsidiaries and associates in locations other than their home country. For instance, foreign equity in Nestle India was held from Bahamas Islands and in Pfizer it was from Panama though their respective parent companies belong to Switzerland and USA respectively [Goyal, 1979]. If these factors are taken into account, the share of USA and NRIs could turn out to be more substantial.

The substantial share of NRIs in the total investment approved may resemble the experience of China. A significant portion of the huge investment in China is reported to have been contributed, over the years, by people of Chinese origin. Does it happen to be the case in India too? It remains an open question for further enquiry.

State-wise Location of New Foreign Investments

States have been showing considerable interest in attracting foreign investments. In this context and in the context of wide inter-state disparities in industrialisation, location of projects with foreign investments has assumed significance. Given the nature of approvals, however, the available information has serious limitations in reflecting the actual amounts that are likely to flow to different states. If one goes by the official figures, Delhi will be receiving the maximum amount of foreign investment followed by Maharashtra (Table 7). More importantly, in about 30 per cent of the cases, location was not indicated at the time of the approval. These projects account for approximately one-third of the total investment. While Delhi stands at the top, it is obvious that most of the corresponding 458 projects will not be located in Delhi. Delhi, in all probability, must be representing the neighbouring states or the foreign investors might have used the services of local agents for communication and for doing the initial spadework. Depending upon the nature of the project the actual location could be somewhere else in the country. Also, in case of the services sector, location will not carry the same meaning and equal significance when compared to the manufacturing ventures. Incidentally, most of the approvals for Cellular and Basic Phone services carry Delhi, Bombay, Bangalore and Madras as the locations for these approvals. For all practical purposes Delhi should also be clubbed with the others (un-indicated) category. It, therefore, means that for almost half of the investment, the location is not known in advance. In view of the importance of a few large projects in the approved investment, even a couple of projects can make a large difference to a state's share. And if for any reason, the projects do not materialise, the share in actuals could slump significantly. For instance, in the case of Orissa, the number of approvals is quite small and its high position is mainly due to a few major projects.

Actual Inflows of Approved Investment

While the investment approvals show a promising picture, at least in comparison to India's past experience, considerable anxiety is expressed in different quarters over the slow pace of inflows.[16] Given that the inflows do not start flowing immediately after the approval, one should expect a time lag between approvals and inflows, especially for large and long gestation projects. In these cases it is reasonable to assume that actual flows of capital would be gradual and vary with the project's progress. The number of approvals against which inflows have been recorded would, probably, give a better indication of the extent of likely implementation of approved foreign investment projects. This information is not, however, available. Official figures indicate that inflows constitute about one-fifth of the approvals [*Economic Survey*, 1999, p. 87].

Table 7. State-wise Distribution of Approved Foreign Investment (August 1991 to January 1997)

State (1)	No. of Approvals (2)	Amount (Rs Cr.) (3)	Share in Total Investment (per cent) (4)
Delhi	458	17,330.36	17.08
Maharashtra	832	12,676.39	12.49
Karnataka	434	5,493.90	5.41
Tamil Nadu	543	5,468.75	5.39
Madhya Pradesh	110	5,268.33	5.19
West Bengal	179	5,249.55	5.17
Orissa	49	3,790.79	3.73
Gujarat	251	3,762.54	3.71
Andhra Pradesh	295	2,511.27	2.47
Uttar Pradesh	219	2,444.52	2.41
Haryana	268	1,788.40	1.76
Punjab	66	821.20	0.81
Rajasthan	128	605.47	0.60
Other States	424	3,116.55	3.07
Others (state not indicated)	1,752	32,592.67	32.12
Total	5,814	1,01,494.02	100.00

Source: Based on Ministry of Industry, *SIA Newsletter*, February 1997.

Instead of the aggregate-level comparisons, a sector-wise comparison could give a better picture of inflows and project implementation. This is, however, possible if FDI inflow data is available for the industry groupings similar to the ones followed in the case of approvals. Unfortunately, RBI for some reasons, followed its own classification and level of aggregation. It is difficult to understand why investment figures are not being made available in a standardised format, which would enable meaningful comparisons. In spite of these problems of comparison, the fact that infrastructure sectors received very little investment becomes evident from the inflow data released by the RBI for the past four years (1994-95 to 1997-98). The top most position was occupied by Engineering (23.5 per cent) followed by Electronics & Electrical Equipments (13.7 per cent), Chemicals & Allied Products (11.5 per cent), Finance (10 per cent) and Services (7.4 per cent) (Table 8). Power, Fuel and Telecommunications do not figure in the details offered by RBI.

Table 8. Industry-wise Inflow of Foreign Investment: 1994-95 to 1997-98

Industry/Sector (1)	Amount US $ Mn. (2)	Percentage in Total (3)
Engineering	1,693.6	23.5
Electronics & Electrical Equipment	984.2	13.7
Chemical & Allied Products	829.0	11.5
Finance	732.6	10.2
Services	530.3	7.4
Food & Dairy Products	395.7	5.5
Computers	260.2	3.6
Domestic Appliances	183.8	2.6
Pharmaceuticals	146.3	2.0
Others	1,447.3	20.1
Total	7203.0	100.0

Note: Exclude inflows under the NRI direct investments route through the RBI.
Source: Reserve Bank of India, *Annual Reports* for 1996-97 and 1997-98.

Another way of looking at the inflows is by the country of origin. In a scenario of slow rate of inflows, knowledge of better project implementation by investors of certain countries may enable them to form more realistic future expectations. However, as noticed earlier, the increasingly important role played by tax shelters has further distorted the country distribution to such an extent that during the past three years, Mauritius reached the top position in inflows with a one-third share. USA was a distant second with a share of less than one-fifth! (Table 9).

Three factors should be noted in a discussion on inflows. *Firstly*, approvals have picked up significantly during the last two and a half years and account for two-thirds of the approved investment. *Secondly*, a few approvals (296) account for a substantial portion (72 per cent) of the total investment. And, *lastly*, industry composition is such that Power, Fuel and Telecommunications sectors dominate the approvals to a large extent. The policy formulation in respect of these sectors has been very slow. Some of these projects are also surrounded by national controversies. The Enron and Cogentrix are cases in point. Telecom sector witnessed a major scam. Slow pace of implementation of large infrastructure projects is thus a major reason for the poor rate of inflows.

Table 9. Country-wise Inflows of FDI (1994-95 to 1997-98)

Country (1)	Inflow (Rs Cr.) (2)	Share in Total (per cent) (3)
Mauritius	8,666	33.62
USA	4,700	18.23
Germany	1,595	6.19
Korea	1,561	6.05
Japan	1,453	5.64
UK	1,348	5.23
Netherlands	1,337	5.18
Others	5,212	19.86
Total	25,779	100.00

Note: Figures do not include NRI direct investment routed through RBI.
Source: RBI, *Annual Reports* 1996-97 and 1997-98.

On the other hand, implementation appears to be quick in consumer goods industries [Cheema, 1997].[17] The official approvals enabled many consumer goods TNCs to hike their shares reversing the impact of the FERA. This probably explains the near 50 per cent realisation of the approved investments within a year. Inflows during the year 1991 were reported to be Rs 351 crore out of the approved amount of Rs 739 crore. In some cases, TNCs preferred to follow the take-over route (especially in consumer goods) to make a quick entry or to consolidate their position in the Indian market. In a few cases, the take-over factor was hidden. For instance, Heinz started its operations by taking over the food business of Glaxo and Modi-RJR's foray into manufacturing was through the take-over of a small cigarette manufacturer in Andhra Pradesh. Certain existing units were transferred to new joint venture companies while the original Indian companies continue to exist. We shall discuss this aspect further in the section on take-overs. The implementation also appears quick if it implies getting the products manufactured by local units and the foreign

company marketing them under its own brand names (e.g., Laboratories Garnier promoted by L' Oreal of France).

There is a view prevailing that the sluggish pace of capital inflows is largely due to the slow moving and hurdle creating bureaucracy and its failure to free itself from the old mind set. The fact, however, is that this view need not necessarily be relevant *in all the cases of delay*. The investors could also be responsible for the delays in a number of projects [RBI, 1985].[18] A long-term investment demands close study of the market. This is perhaps the reason that McDonald took almost five years to open its first outlet. Inability to decide on the local partners is yet another reason for delays or even abandonment in some cases. For instance, since 1991, BMW tried different partners but till now one is not sure whether the company will go ahead with the projects (motor cycles and passenger cars). Similarly, LG Electronics' attempt at joining hands with either RPG or Birlas did not meet with any success. Finally, it seems to have opted for a 100 per cent owned unit. This is also related to the foreign investors' perception of the Indian market. The continuing sluggishness of the economy can be expected to lead to delays or even abandonment of certain proposals. In certain cases, even though the product is available in the Indian market, the operations may have not have been set up fully. For instance, the automobile manufacturers' insistence on importing CKDs and SKDs (completely knocked down and semi knocked down) kits implies that full manufacturing operations have not yet been established. This may also imply that the companies might be keeping the escape routes open.[19]

Since project location is not always specified in a large number of cases location studies and negotiations with state governments for better terms might take time. One also suspects that in the initial period there was a strong possibility of inflating the investment figures by the foreign collaborators to ensure quick approval. Indeed, such a practice suited the government's strategy also as it wished to project large amount of FDI approvals as a measure of the success of its policies. Had sectoral policies preceded approvals, the rate of implementation could in all probability have been faster. Also, in cases where the Indian partners or state governments tried to protect the local interests (e.g., Indian Oil Corp in case of East Coast Refinery,[20] Madhya Pradesh government in case of diamond mining in the state,[21] Industrial Development Bank of India (IDBI) in the case of steel plant in Orissa,[22] Gujarat Government in the case of Parmar Refinery[23]) which resulted in delays, or even abandonment of a project, official machinery may not be faulted. When it comes to extracting the maximum out of the ventures for themselves, NRIs did not seem to lag behind others.[24] Tikoos and Balsaras are the other prominent NRIs apart from Hindujas and Pauls who promised large investments but delivered too little.

Take-overs and Implementation of FCs

Significantly, in spite of the low level of capital inflows, the structure of many consumer goods industries has got altered in a substantial manner. In the liberalised policy environment, the Indian entrepreneur seems to have lost his bargaining power and well-known Indian brands have been taken over by TNCs providing them a ready market with lesser competition from local industry. The process is continuing. Take-overs have the additional implication that they do not add to new production capacities or employment opportunities.[25] On the contrary, these can add to the growing outflow of foreign exchange. A survey conducted by us in 1993-94 revealed that the major consideration of the Indian parties in entering into a collaboration agreement was to get superior technology. 'Access to foreign funds' was way below in the ranking [Goyal, et al., 1994]. One implication of these observations is that had the official policy not been liberalised,

the Indian promoter could have refused foreign stake taking advantage of the fact that the policy prohibited foreign investment in many areas. This may be understandable because for many small and medium projects, raising funds from the public was not a problem given the promising stock market. As we shall see in the following, in a number of companies with foreign equity, the relative significance of foreign investment was quite small.

The controversy over ICI's (UK) attempted entry into Asian Paints, its major competitor in India, brought into sharp focus the phenomena of TNC take-over of Indian companies. When Parle's brands were sold to Coca-Cola not much debate was generated. Similar was the case when TOMCO was taken over by Hindustan Lever. One reason for this could be that in the latter two cases, the Indian promoters withdrew on their own while in the former, the promoters resisted the TNC's entry. The fact, however, is that in many other cases the ownership of Indian companies changed hands affecting market structures significantly. In this process, probably what has not attracted much attention is the transfer of units as distinct from take-over or merger of a whole company (Table 10 for an illustrative list). This route was adopted

Table 10. Illustrative List of Unit/Division Transfers to Joint Ventures

Unit to be Transferred/Transferred (1)	Remark (2)
Apar Lighting Division	Transferred to the joint venture GE-Apar Lighting Ltd.
Compressor unit of Kirloskar Brothers	Transferred to Kirloskar Copeland
Compressor units of SIEL and Kelvinator	Taken over by Tecumseh Venture
Engine Valves Division of Kirloskar Oil Engines	Proposed to be transferred to a JV with MWP, subsidiary of Mahle, Germany
Halol Plant of Hindustan Motors	Being used by the joint venture with General Motors.
Hinditron Equipments Mfg Co. Ltd. and Hinditron Computers Pvt Ltd. (certain assets and know-how) and all the shares of Hinditron Information Technologies Ltd.	Acquired by Digital Equipment (India) Ltd., a JV between Hinditron Group and Digital Equipment.
India Linoleum Unit of Birla Jute	Transferred to Birla DLW Ltd., a 50:50 JV with DLW of Germany
Kalyani Plant of Premier Automobiles Ltd.	Transferred to Pal-Peugeot Ltd., a JV with Peugeot, France
Kirloskar Filters Division of Kirloskar Oil Engines	To be transferred to a JV with Knecht of Germany
Kurla Plant of Premier Automobiles Ltd.	To be transferred to a JV with FIAT.
Luxor Pen manufacturing facilities	Transferred to Luxor Writing Instruments India Pvt Ltd. a joint venture with Gillette
Electric Metres Division of VXL Ltd.	Transferred to VXL Landys Gyr Ltd.
Motor Cycle Division of Escorts	Transferred to Escorts Yamaha Ltd.
Motor Cycle Engine Division of Hero Motors	Proposed to be hived off to a 50:50 joint venture with Rotax of Austria
Oral Care Divn. of Parle	Acquired by Gillette
Refrigerator Division of Godrej & Boyce Mfg	Transferred to the JV, Godrej-GE Appliances (with General Electric, USA)
Speciality Chemicals Divn. of Max India	Transferred to Max Atotech a 50:50 JV between Max and Atotech BV
Stabiliser Bar Division of Jamna Auto	To be taken over by NHK Jai Suspensions Ltd., a new joint venture in which the Japanese company will hold 74 per cent share.
Sugar Machinery Division of KCP Ltd.	To FCB-KCP Ltd., a JV with FCB of France
Two and Three Wheeler tyre plant of Ceat	Transferred to South Asian Tyres Ltd. a JV with Goodyear, USA

for entry into consumer durables and machinery sectors. For instance, after the transfer of two plants Premier Automobiles is a pale reflection of its original self, even though it might remain a company 'owned by Indians'. In a broader sense, hike in foreign share and entry of the hundred per cent foreign-owned companies, setting up of parallel operations by TNCs and even crowding of the Indian market with foreign companies (with possible reduction in number and size of operations of locally owned companies) could also be interpreted as leading to diminishing role of Indian entrepreneurs and general investors and consolidation of TNC control over Indian markets. Similar is the case with alliances whereby the competitors are turned into allies (e.g., transfer of Lakme's brands to a 50:50 joint venture with the Levers) followed by the purchase of Lakme's stake in the joint venture.

Had the Indian partners not resisted the foreign companies' attempts at consolidating their position, more joint ventures would have passed in to the latter's hands. TVS-Suzuki, Hero-Honda and Godrej-GE Appliances are the cases in point. While Honda raised its stake in Kinetic Honda to 51 per cent, it could not achieve the same in Hero Honda. GE is on a spree to consolidate its position in its joint ventures. It has already received approval for converting GE-Elpro Medical Systems into a wholly-owned one by acquiring Elpro's 49 per cent stake. It is also reported that GE is increasing its share in its joint venture with IPCL. After initial resistance, Birlas seem to have yielded to the pressure from their Swedish partners to allow majority stake in VXL Landys Gyr. Birlas are also at the receiving end in Birla 3M and Birla Kent Taylor. Whirlpool took over TVS Whirlpool and Fuller Intl took over Fuller-KCP. Suzuki's attempts at gaining majority control over Maruti Udyog are well known.

Some other relevant cases are: Mercedes Benz getting approval for increasing its share to 76 per cent in its venture with Telco; Bridgestone planning to increase its stake to from 51 to 74 per cent in its joint venture with ACC; Bausch & Lomb increasing its share in the Indian venture to 69 per cent; and Henkel hiking its share to 70 per cent in Henkel Spic. It may be interesting to recall that Pepsi was started as a joint venture of Voltas, Punjab Agro Industries Corp and Pepsico, USA. The two Indian partners are nowhere in the picture now. Blue Star got edged out of Motorola Blue Star and Hewlett Packard India. Similar was the experience of Hinditron group in Hinditron Tektronix and Digital Equipment, and Shrirams in SRF Nippondenso. Shrirams' share also got reduced in Shriram Honda Power.[26] One reason for these developments is that some of the joint ventures were formed either through transfer of units and hence did not involve any cash investments by local partners or they were formed prior to 1991 when restrictions on foreign stake prevailed. If the Indian partners initially obtained shares in lieu of the transferred units, they may not be in a position to provide necessary funds for expansion or bring in additional money to sustain the venture if it runs into trouble. On the other hand, after gaining experience, the foreign partner may find the local partner to be dispensable. For a joint venture to be meaningful, both partners should have some strengths to offer to the venture.

At one level, the take-over phenomenon seems inevitable because the worldwide boom in foreign direct investment is fuelled by mergers and acquisitions. Indian experience probably should not come as a surprise since take-overs and privatisation are gaining importance as a form of capital flows. For instance, in USA, acquisitions represented 85 per cent of foreign investment in 1995 with new establishments contributing only 15 per cent [OECD, 1997, p. 21]. According to

UNCTAD, cross-border mergers and acquisitions involving majority control accounted for almost half of global FDI flows in 1996. For some of the developing countries FDI from privatisation was an important component of the total FDI received by them during 1970-95 -- forty per cent of total FDI in Eastern Europe and Central Asia and 21 per cent in the case of Latin America [Bouton and Sumlinkski, 1997]. This shows that FDI has been substituting local ownership. One might thus say that FDI inflows could have been probably faster for India if there was a greater degree of privatisation and freer take-overs.

Public attention gets attracted more to happenings in the consumer goods sector. The illustrative list of consumer product companies given in Table 11 might help in understanding the popular perception of TNC takeover of the markets.[27] These cases illustrate the extent of new foreign entry in different consumer products. Visibility of TNC products increased in the market both through entry of new TNCs as also new brands/products introduced by the older ones.

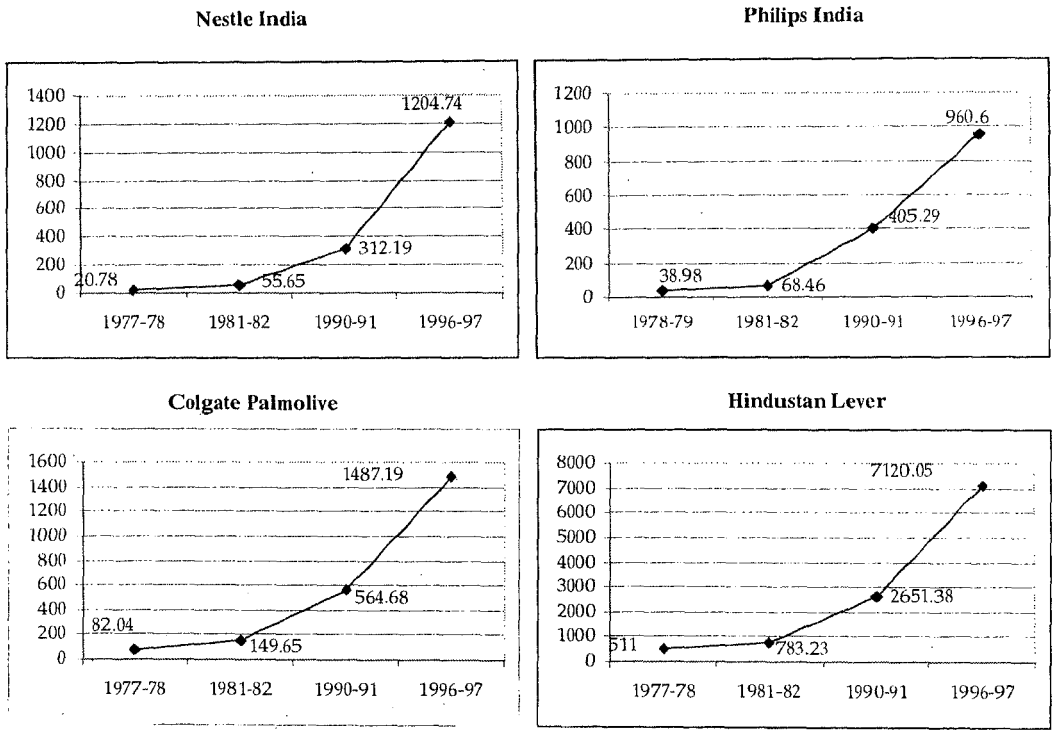
FERA, instead of being a hurdle to business expansion, operationally speaking, came handy for foreign corporations to obtain state patronage and access to institutional support that was denied to them as foreign subsidiaries. The removal of entry barriers in the post-SAP period has opened-up new opportunities for foreign corporations, most of whom already operate in India, to engage themselves in take-overs and mergers of Indian enterprises. The scope for such expansion did not exist with Chapter III of MRTPA being on the statute. Take-overs by existing foreign-controlled corporations is possible without any fresh capital being brought in from abroad. Table 12 shows the trends in the value of the turnover of the major consumer goods TNCs operating in India during the past two decades. (Also see Figure 2).

Table 11. Illustrative List of Financial Collaborations for Consumer Goods Approved in the Post-Liberalisation Period$

Consumer Electronics:	
Akai	*Other Food:*
Grundig	Danone
LG Electronics	Heinz
National Panasonic	KFC
(Matsushita)	McDonald
Samsung	Pizza Hut
Shivaki	Quaker Oats
Sony	Dunken Donut
Thomson	Kandos
	Baskin Robbins
Automobiles:	*Domestic Appliances:*
BMW	Daewoo
Daewoo	Electrolux
Fiat	General Electric
Ford	LG Electronics
	Samsung
General Motors:	Whirlpool
Honda	
Hyundai	*Garments:*
Mercedes Benz	Benetton
Volkswagen	KB&T
Volvo	Lacoste
Yamaha	Levistrauss
	Mexx
	Pierre Cardin
Alcoholic Beverages:	*Soft Drinks:*
Bacardi Intl	Cadbury Schweppes
Brown & Foreman Corp	Coca-Cola
Douglas Laing	
Foster's Brewing Group	*Cosmetics, Perfumes, etc.*
Henninger-Brau	Avon Products
Hiram Walker	Baccarose
International Distillers	Cussons Group
Macdonald & Muir	L'Oreal
Seagram	Maxim Cosmetic
United Distillers	Nectar Overseas
White & Mackay	Revlon
Confectionery:	*Miscellaneous:*
Agrolimen	Black & Decker
Chuppa Chup	Gillette
Lotus Chocolate	Kimberley Clark
Mars	Reebok
Perfetti	Sara Lee
Van Melle	Timex
Wriggley	General Electric

$ Excludes FCs for the existing foreign affiliates and subsidiaries.

Figure 2. Showing Growth in Sales of Major TNCs: 1977-78 to 1996-97



Based on data provided in *Bombay Stock Exchange Official Directory*. Net sales of Hindustan Lever include sales of Lipton and Brook Bond for earlier years.

Table 12. Showing the Increase in Turnover of Select TNCs (1977-78 to 1996-97)

Name of the Company	Net Sales at Current Prices (Rs Cr.)			Ratio of Sales	
	1977-78	1990-91	1996-97	1996-97 over 1990-91	1996-97 over 1977-78
(1)	(2)	(3)	(4)	(5)	(6)
Nestle India Ltd.	21	312	1,205	3.86	57.94
Colgate Palmolive (I) Ltd.	39$	405	961	2.37	24.64
Philips India Ltd.	82	565	1,487	2.63	20.29
ITC Ltd.	384	2,286	5,863	2.56	15.28
Siemens Ltd.	78	383	1,168	3.05	15.02
Hindustan Lever Ltd.@	511	2,651	7,120	2.68	13.93
Glaxo India Ltd.#	56	364	702	1.93	12.42

$ Data refers to 1978-79.

@ Figures prior to 1996-97 include sales of Lipton and Brooke Bond.

Glaxo sold its food products division to Heinz India Pvt. Ltd., during 1994-95.

Source: S.K. Goyal, 'Policy Processes', in Alternative Survey Group, *Alternative Economic Survey: 1991-1998*, 1998.

It is also observed that in this process, product monopolies are getting established, especially in the area of consumer goods and soft technology manufacturing. The cases in point are ice cream, soft drinks, soups, common salt, biscuits and the like. Since foreign corporations have world-wide experience at administering advertisement technologies, it is no surprise that within the last few years more than two-thirds of the national advertisement space is commanded by TNCs (Table 13 for a list of Top TNC advertisers). This is true of print as well as of the electronic mass media. The Indian commercial scene when judged in terms of advertisements appears as much under foreign influence as is true of the industrially advanced markets.

Table 13. Showing Top TNCs Advertisers during 1997

Name of the Company (1)	Advertisement and Other Promotional Expenditure (Rs Cr.) (2)
Hindustan Lever Ltd.	443.11
ITC Ltd.	172.60
Colgate-Palmolive (India) Ltd.	13.75
Nestle India Ltd.	79.89
Pond's (India) Ltd.	47.04
Castrol India Ltd.	42.87
Philips India Ltd.	41.49
Reckitt & Colman of India Ltd.	40.83
Smith Kline Beecham Consumer Healthcare Ltd.	31.91
Cadbury India Ltd.	29.62
Britannia Industries Ltd.	29.04
Procter & Gamble India Ltd.	25.64

The list is confined to Stock Exchange listed TNCs only.
Source: IDSS Corporate Database.

Export Prospects and FCs

The earlier policy on foreign investments placed special emphasis on export promotion. Foreign companies (FCs) with their knowledge of international markets, established brand names, superior technology and product acceptance, close association with the consumers through world-wide subsidiaries and affiliates, were expected to be in a better position to promote host country exports. Indeed, a number of studies in India focused on this aspect of TNCs [Goyal, 1979; Kumar, 1994; Subrahmanian et al., 1978; Dijck and Chalapati Rao, 1994]. The general finding of these studies was that either foreign controlled companies were not significantly better export-oriented than Indian companies and/or that their operations have had a negative direct impact on the overall balance of payments. In certain cases, the apparent better performance was mainly due to trading (often in unrelated products). In a somewhat recent instance of this nature it was found that Coca-Cola's exports from India included green coffee, black pepper, white hulled sesame and granite [*Economic Times*, 1995]. The export baskets of large trading houses have many things in common: commodities, garments, leather products, handicrafts and marine products.

The present policy, however, places very little restriction on this count. In a sense, exports are now a voluntary activity. In an earlier study it was observed that during 1991-92 to 1995-96, export orientation of 100 largest TNC affiliates/subsidiaries in India increased marginally from 8.07 to 8.64 per cent while the import dependence (imports as a percentage of sales) nearly doubled from 6.86 per cent to 12.94 per cent. As a result, these companies turned net losers of foreign exchange: from a positive balance of Rs 270 crore to a deficit of Rs 1,600 crore. Another major factor that contributed significantly to this development was the steep increase in payments in foreign exchange for technology, dividends, travel, etc., from Rs 120 crore to almost Rs 500 crore [Goyal, 1997].

Given the composition of investments, with emphasis on infrastructure sectors, it is too early to say to what extent the other sectors will take advantage of the improved infrastructure and generate exports. To form some opinion in this

respect, howsoever tentative, we made an attempt to analyse the export projections made by foreign collaboration projects during a year and a half (during 1996 and 1997). The projections are reported to the press but do not form part of the basic collaboration details reported regularly by the SIA and the Indian Investment Centre. We could procure a good number of the FIPB press releases for the period. The available releases cover an investment of Rs 25,000 crore and should, therefore, reasonably be representative of the recent position. From a study of the releases it emerges that the 1,239 approvals project total exports of the magnitude of Rs 52,335 crore over a five year period. We are conscious that since the approvals include large investments in infrastructure sectors, a comparison of investment and exports may not be fully justified. A comparison of number of projects may give a better idea of the future scenario. It was noticed that out of the 1,239 approvals, less than 400 projected any exports. However, even among these, as many as 164 anticipated exports are of less than Rs 5 crore per annum. Table 14 gives an illustrative list of FCs projecting exports of Rs 250 crore or more over a five year period. It is interesting to find that the very first case, KRC colour Monitor Tubes projects, exports worth more than Rs 16,000 crore. That this was not a printer's devil is confirmed by the fact that the corresponding press release gave the total projections at Rs 21,000 crore. The third largest projection was by Archana Telecom which is planning to set up a technology and resource park. The projected exports of Rs 1760 crore cannot obviously be on account of the company. The sectoral characteristics of the proposals and the amounts of export earnings projected reveal that textiles, trading and software companies stand at the top. Quite a few others are also in the computer software development. A number of textile units were approved under the 100 per cent EOU scheme.

Since these are only projections, one may not read much into these figures except drawing some broad conclusions that two-thirds of the projects do not have immediate plans for exports. The export areas and collaborators are such that in many cases these are not associated with large foreign investors. Some of them are NRIs. In some cases given the small size of the project, it is doubtful if the projected exports would materialise. It appears that there is no strong direct relationship between size of foreign investment and export projections. One implication of this is that if stepping up of exports is an important objective, foreign investment policy could be more selective.

FDI and the Indian Stock Market

Implementation of FERA made it obligatory for branches of foreign companies operating in India to register themselves in India with foreign equity of not more than 40 per cent. Those already registered but having more than 40 per cent equity held abroad were also to bring down the foreign share to 40 per cent.[28] Equity dilution through issue of additional shares to Indians turned out to be the most popular way of diluting foreign equity. For instance, out of the 46 companies studied only seven diluted equity solely through disinvestment and in another four a part of the foreign share was divested but simultaneously fresh shares were issued [Chaudhuri, 1979, Pp. 734-44]. The FERA strategy of conserving foreign exchange through foreign equity dilution was flawed because dividend payments constituted only about 4 per cent of the total expenditure on foreign exchange by the foreign subsidiaries in India. Raw materials imports was the single largest item accounting for 85 per cent of the total foreign exchange outgo. It was, therefore, foreseen that the impact of equity dilution under the FERA 'could only be marginal, even if all the subsidiaries are forced to bring down their foreign equity to 40 per cent level [Goyal, 1979, Pp. 43-44]. Indian investors were

Table 14. Illustrative List of Financial Collaboration Approvals Projecting more than Rs 250 Crore Exports each Over Five Years

Name of the Company (1)	Foreign Collaborator (2)	Product (3)	Month/Year Approved (4)	Foreign Equity (5)	5-Year Exports (Rs Cr.) (6)
KRC Colour Monitor Tubes	Winny Electronic Enterprises. Taiwan	Colour Monitor Picture Tubes for Computer Monitors	Nov. 96	70.00	16438.00
South Asian Petrochem Ltd.	EMS Inventa Ag, Switzerland	Bottle Grade Polyester Chip	Sept. 96	41.25	3487.70
Archana Telecom Services Ltd.	Universal Holding Ltd., West Indies	For setting up of an internationally compatible technology and resource park at Bangalore	Jan. 97	97.98	1760.00
	ED&F Man Netherlands BV, Netherlands	For setting up 100 per cent wholly owned subsidiary in India to conduct international trade in Sugar, Molasses Alcohol, Nuts and Spices, Cocoa and other de-regulated Goods	April 97	3.50	1102.50
Tata Industries Ltd. and Tata Information Systems	IBM World Trade Corporation, USA	Providing Information Technology Services	May 97	72.00	806.40
STI India Ltd.	Commonwealth Dev. Corporation, UK	Cotton Yarn, Polyester/Cotton Yarn, Cotton Knitted Fabrics	Feb. 97	9.71	733.93
Klinkenberg India Pvt. Ltd.	E Klinkenberg BV, Netherlands	Export of Agro Produce viz., Cashew Kernels, Groundnut Kernels, Seasame Seeds, Walnuts, Spices (Black Pepper, Cardamom, Red Chilli, Cumin Seeds, etc.), Tea & Coffee	July 97	0.01	694.63
Do	Sumitomo Corpn., Japan	To establish wholly owned subsidiaries in field of general trading	Nov. 96	14.00	654.50
Kanbay Software (I) Ltd.	Kanbay (Asia) Ltd., Mauritius	Computer software	Feb. 97	5.32	593.50
Gabriel India Ltd.o	Arvin Exhaust Intl., Netherlands	For manufacture and sale of exhaust system/catalyst	Aug. 96	11.84	563.00
Mandvi International Export	NRI	Basamati Rice	April 97	0.49	530.55
TMT (I) Ltd.	Agro Advies Buro, Netherlands	Cut Flowers	Oct. 96	160.00	528.00

(Contd.)

Table 14. (Contd.)

Name of the Company	Foreign Collaborator	Product	Month/Year Approved	Foreign Equity	5-Year Exports (Rs Cr.)
(1)	(2)	(3)	(4)	(5)	(6)
Makharia Organics Ltd.	NRI	Manufacture of Para Nitroaniline, other Aniline Derivatives & their Salts, Ortho Chloro Paranitroanilines, etc.	Sept. 96	32.00	480.00
Fabworth India Ltd.	NRI	All wool Worsted Fabrics	April 96	2.50	465.88
Nortel Mauritius Ltd.	Nortel Mauritius Ltd. Mauritius	To Set up a Wholly Owned Subsidiary in India which will participate in the development of the Telecom Industry in India by bringing in its latest technology into India and sup.	Nov. 96	157.50	437.50
Chemplast Sanrnar Ltd.	Euro issues, Euro issues	Issue of FCCBs to part finance an export oriented Textile Project	Aug. 96	17.50	400.00
Devarshi Cements Ltd.	Enderlien Project Engg. Germany	Cement; Portland Clinker and Power (for captive consumption)	Feb. 97	16.00	399.16
Bondex India Ltd.	Kobe Steel Ltd, Japan	Manufacture and Marketing of Spun-bonded Non-woven Fabrics	Sept. 96	3.60	364.85
KB+T Ltd.	Thakral Invest., Singapore	Men's Suitings	Nov. 96	10.93	359.90
Sritech information Tech.	NRI	For the Manufacture of Professional Integrated Receiver Decoders	March 97	1.76	354.24
Do	SHV Makro NV, Netherlands	To set up a Wholly Owned Subsidiary in India which would involve opening several whole sale stores in the main cities in India to introduce cash and carry distribution	Dec. 96	140.00	350.00
	LG Electronics Inc., Korea (S)	To set up a 100 per cent Owned Subsidiary company in India for the manufacture, marketing and sale of electrical and electronic appliances such as Washing Machines, Refrigerators, Air Conditioners	Jan. 97	204.75	350.00

(Contd.)

Table 14. (Concld.)

Name of the Company (1)	Foreign Collaborator (2)	Product (3)	Month Approved (4)	Foreign Equity (5)	5-Year Exports (Rs Cr.) (6)
Incab Industries Ltd.	Leader Universal (Mauritius) Co., Mauritius	Manufacture of Power and Telecom cables involved in project engineering jobs on contract basis	Nov. 96	16.00	348.22
Manish Jain	Hanil Synthetic Fiber Co., Korea (S)	Acrylic blanket, cotton yarn, polyester cotton yarn, cotton acrylic yarn, wool acrylic yarn	Sept. 96	7.88	338.38
S Kumars Synfabs Ltd.	Allied Textiles Machinery, UK	For manufacture of pure wool and wool/polyster/viscose blended fabrics	Sept. 96	5.00	330.29
Texmaco Ltd.	Howa Machinery Ltd., Japan	For manufacture of advanced spinning M/c	Sept. 96	10.20	307.00
Dynamix Dairy Industries Ltd.	NRI Schreiber International Inc., NRI	To manufacture a full range of value-added dairy products, such as Lactose Casein Cheese Baby Food Mineral Salts Butter and Ghee	Jan. 96	7.56	300.00
Associated Cement Co.s	Tele Quarz GMBH	Quartz Crystals of various specification	Nov. 96	19.11	288.87
Marquip Asia Pacific Ltd., Mr. Senthil Kurnar	Marquip Asia Pacific Ltd. Mauritius	Paper-pulp/paper-board making machinery including cutting machines of all kinds	July 97	2.95	286.31
Do	Intel Services Inc., USA	To establish a wholly owned subsidiary in India with two business organisations under two separate divisions	Feb. 97	42.00	283.50
Baidyanath Enterprises Ltd.	Yusung Co. Ltd. Korea (S)	Worsted wolen yarn	Oct. 96	1.79	282.65
Ritspin Synthetics Ltd.	NRI	Polyester Viscose Blended Yarn	Sept. 96	12.00	280.00
Kolhapur Steel Ltd.	Intl. Meehanite Meta. UK	Ductile Iron Pipe (100 Mm to 700 Mm ID)	Dec. 96	2.80	280.00
Ace Tech India Pvt Ltd.	Nova Technology Inc. USA	Integrated Circuits	Nov. 96	26.94	277.55
Mormugao Maritina Ltd.	Marubeni Corpn., Japan	To provide support services to water transport operation; maintenance of pler loading	June 97	5.40	266.05
M Fabrikant & Sons	M. Fabrikant & Sons Inc. USA	Exports and domestic sales of loose diamond	Jan. 97	0.35	262.50
Sarda Plywood Industries Ltd.	Polymer Group Inc., USA	For manufacture of Non-woven Fabrics	Sept. 96	43.75	254.63
	Lottex Management Inc., Canada	For setting up a wholly owned subsidiary in India which will establish and operate a manufacturing facility for computer terminals	Jan. 97	17.50	252.00

Based on official Press Releases released through Press Information Bureau of the Government of India.

attracted to FERA companies' public issues in a big way and the issues were oversubscribed many times. The prevailing capital issue guidelines ensured wide dispersal of shareholding after equity dilution. It was, therefore, suggested that the FERA proved to be a blessing for TNCs as they gained national acceptability not only with consumers but also with Indian government and policy makers *without any loss of freedom or control over their investments* [Goyal, 1979, Pp. 43-44]. Due to the entry of such companies with substantial foreign equity -- then popularly known as FERA companies -- foreign collaboration, especially participation in equity capital, was perceived as a qualification by the investors. FERA issues thus increased investors' awareness of the stock market as a medium of savings and thus helped mobilise resources.

Primary market is the main route through which new companies enter the stock market. A compilation of the public issues by unlisted companies during the post-liberalisation period may, therefore, provide leads for figuring out the future role of FDI in the stock market.[29] While rights and further issues by the already listed companies also form part of the primary market, we will not be considering these here because they do not reflect entry of new companies. For purpose of this exercise companies promoted/controlled by non-residents Indians (NRIs) are treated as a special category and have been kept out of the analysis.

Table 15. Foreign Equity Participation in IPOs

Year	No. of IPOs	Total Equity of IPO Cos (Rs Cr.)	No. of IPOs with Foreign Equity	Total Equity of IPO with Foreign Equity (Rs Cr.)	Percentage of IPOs with Foreign Equity in	
					Numbers	Equity
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1991-92	146	1,117.71	21	215.93	14.38	19.32
1992-93	468	3,471.32	31	502.32	6.62	14.47
1993-94	681	5,196.16	50	601.38	7.43	11.57
1994-95	1,288	9,503.48	87	1,560.50	6.75	16.42
1995-96	1,399	7,735.70	53	703.34	3.78	9.09
1996-97	719	5,927.61	26	395.75	3.62	6.68
Total	4,804	33,937.42	268	3,979.22	5.58	11.73

Source: Generated on the basis of data available in *Prime Annual Report*, various issues.

Even though the number of initial public offers (IPOs) with foreign equity as also the amount of foreign equity increased somewhat till 1994-95, their share in the corresponding total was small. The overall share of IPOs with foreign equity is less than six per cent and the share declined gradually over the years except for 1993-94 (Table 15). The share in the risk capital is somewhat higher at about 12 per cent. The share in equity also declined over the period. Size-wise distribution of IPOs with foreign equity suggests that in two-thirds of the cases the total equity was relatively small at less than Rs 10 crore. The distribution of companies with foreign investment is more skewed with as many as 235 companies (88 per cent of the total) having foreign investment of Rs 5 crore or less (Table 16).

Since Rs 5 crore is equivalent to about US$ 1.5 million,[30] it can be seen that the level of foreign equity is extremely small in an overwhelming number of cases. Notwithstanding the small size of the investments in individual projects, the share of the foreign collaborator which indicates the extent of the risk shared by him and his involvement as also the contribution to the coming into being of the new project, which might

not have been taken up in their absence, is also relevant in the present context. In this respect too, projects with substantial foreign shares (25 per cent or more for Foreign Controlled Company (FCCs)) constitute only one-fifth of the total. (Table 17) Out of the total 55, in 35 cases the foreign investment involved was not more than Rs 5 crore implying that during the period 1991-92 to 1996-97 only 20 FCCs with foreign equity of US$ 1.5 mn. or more entered the stock market.

Table 16. Size-wise Distribution of Financial Collaborations in IPOs$ (Number of Companies)

Equity Range (Rs Cr.) (1)	Total Equity (2)	Foreign Equity (3)
Less than Rs 5 Cr.	66	235
5 to 10 cr.	112	17
10 to 25 cr.	66	8
25 to 50 cr.	9	6
50 Cr. & more	15	2
All Cases	268	268

$ Only issues with foreign financial collaboration are analysed here. Excludes 14 cases for which foreign equity details are not available. The amounts involved in these issues were small.

Table 17. Foreign Share-wise Distribution of IPOs

Foreign Share in Equity (per cent Range) (1)	No. of Issues (2)	Percentage in Total (3)
Less than 1	3	1.12
1 to 5	46	17.16
5 to 10	65	24.25
10 to 25	99	36.94
25 to 40	36	13.43
40 to 50	11	4.11
50 & above	8	2.99
All Cases	268	100.00

From the foregoing it appears that FCCs are not prominent in the primary market in the post-liberalisation period. Slow pace of implementation of collaboration projects does not seem to be responsible for this phenomenon as the trends at setting up parallel - often wholly-owned - subsidiaries by large TNCs (Table 18), and increasing share of foreign majority cases indicate a general tendency to avoid the stock market. Compared to the pre-liberalisation period, the number of cases where majority foreign equity is sought and approved has increased substantially (Table 6). Many joint ventures (JVs) preferred 50:50 or 51:49 form or other combinations in which both the partners together hold 100 per cent ownership of the JV to the exclusion of ordinary Indian shareholders. These include the ventures of GE, IBM, General Motors, Daimler-Benz and Coca-Cola. The parallel operations of large TNCs are likely to have direct implications for the future growth of their listed affiliates.

Table 18. Illustrative List of TNCs having Listed Affiliates which Obtained Approval for Setting Up Wholly-owned Subsidiaries

ABB
American Cyanamid
Astra
BASF
Bayer
Cadbury Schweppes
Ciba-Geigy
Coats Viyella
Ferodo
Groupe Danone
Hoechst
Hoffman La-Roche
Knoll
Merck
Monsanto
P&G
Phillip Morris
Sandoz
Sandvik
Smith Kline Beecham
Timex
Unilever
Warner Lambert
Xerox Corp

As of now indications are that most of the major new ventures in the automobile sector do not have plans to offer shares to the Indian public.[31] An illustrative list of FCCs which have set up operations in the post-liberalisation period and which have not come to the public is given in Table 19. Indeed, the trend is in the reverse direction. An important case is that of Fuller International which has got delisted after the foreign shareholder acquired 100 per cent ownership of what was initially started as joint venture. In case of Tektronix India, the earlier attempt

to delist is reported to have failed and the company was keen to buyback the public shareholding [*Financial Express*, 1997; *Business Standard*, 1998]. In Daewoo Motors local shareholders have already been marginalised. In Nalco Chemicals the foreign holding has reached 80 per cent [*Financial Express*, 1998].[32] Similar is the case with Carrier Aircon in which the foreign financial collaborator's stake reached 88 per cent [*Economic Times*, 1998]. Ricoh was reported to be planning to buy the entire shareholding of financial institutions and the public in Ricoh India. It already holds 76 per cent of the latter's equity [*Financial Express*, 1998].[33] The share buyback provision introduced in the Companies Act recently and the proposed buy out facility in the Companies Bill may enable larger number of FCCs to opt for delisting.

Table 19. Illustrative List of TNCs which have set up Operations in India During the Post-liberalisation Period and had not Entered the Stock Market

Product Group (1)	Transnational Corporation (2)
Automobiles & Allied Products	General Motors, Ford, Mercedes Benz, Honda, Hyundai, Fiat, Toyota, Volvo, Yamaha, Cummins, Goodyear
Food & Beverages	Coca-Cola, Cadbury Schweppes, Kellogs, Heinz, Seagram, Hiram Walker, United Distillers, Perfetti, Wriggley, KFC, McDonald
White Goods, Consumer Electronics and Domestic Appliances	Daewoo, Samsung, Sony, General Electric, LG Electronics, Black & Decker, Kimberley Clark
Personal Care Products	Revlon, L'Oreal, Cussons, Unilever

FDI is side-stepping stock market in yet another manner. Some of the FCCs in the pharmaceutical industry have attempted to sell-off the existing units and promote new Wholly Owned Subsidiaries (WOS) or to transfer certain divisions/products to wholly owned subsidiaries of the parent company. For example, Pfizer Ltd., is reported to be planning to sell 51 per cent of its stake in Duchem, a 100 per cent subsidiary, to its parent Pfizer Inc.[34] This is expected to help the foreign parent to garner a larger portion of the profits from the sales of Becosules vitamin pills, Pfizer Ltd.'s top brand. Becosules is reported to be among the highest-selling brands in the Indian pharmaceutical industry. Some of the wholly-owned subsidiaries (WOS) specify conducting R&D as one of their objectives. This implies that the local listed subsidiary may not come to 'own' the outcome of the research.

Technical Collaborations

The official policy emphasis during the nineties has been on attracting large amount of foreign investment. It is, therefore, not surprising that while the number of foreign investment approvals increased from 1,355 in 1995 to 1,559 in 1996, and further to 1,665 in 1997, the number of approved technical collaborations (TCs) gradually declined from 982 in 1995 to 660 in 1997 which is almost equal to the figure for 1991 (Table 1). The reported technical collaboration agreements are an underestimate because, a number of financial collaboration agreements are accompanied by payments for technology in the form of lump sum and/or royalty payments. Such approvals can be classified as financial-cum-technical. On the other hand, filing of a formal collaboration agreement becomes necessary only when payments have to be made abroad. An examination of the technical collaboration

approvals reveals that a significant number of these were in fact entered into by the very joint venture companies that were approved in the new policy period. A few others could also be traced to the older/earlier JVs. It was also noticed that some of the foreign companies that initially entered into only technology licensing agreements have later on acquired equity shares in such collaboration projects. In other words, a purely technology transfer arrangement was later converted into a financial collaboration.

If these factors are taken into account, the actual number of independent technical collaboration agreements in the new policy regime may turn out to be fewer than during the 'eighties. These observations tend to indicate the decreasing importance of arms-length transfer of technology which is giving way to technology transfer among affiliates. Technology may then remain closely held by foreign companies with little chance of further local development.

Some of the technical collaborations approved in the case of large TNCs shed doubts about the real purpose of the agreement as also the possible behaviour of TNC subsidiaries. Some of these collaborations involve companies which have been operating in the country for many years. For instance, there is a collaboration involving Nestle India and Nestec (a subsidiary of Nestle) for the manufacture of infant weaning food. What is noteworthy here is not that Nestle India is manufacturing infant food -- it has been doing that for a long time -- but the Indian subsidiary has been allowed to pay royalty (3.5 per cent on domestic sales, and 5 per cent on external sales) [Goyal et al., 1994]. Another interesting case is that of Colgate. The list of collaboration approvals shows five TCs and one FC against Colgate Palmolive USA. The financial collaboration was in respect of increasing the foreign equity from 40 to 51 per cent in Colgate Palmolive India. One of the TCs was to impart technology for the manufacture of toilet soaps to the Indian subsidiary. Out of the remaining four TCs involving royalty payments to the US company, at least three were for toothpaste. Incidentally, Colgate Palmolive (India) markets the toothpaste manufactured by at least three of the four Indian parties seeking technology from Colgate Palmolive USA [Goyal et al., 1994].

Thus, technology and brand names are so closely controlled by the foreign parent companies that the local subsidiaries in spite of producing the items for years cannot pass on the technology horizontally. The fact that companies with substantial foreign holdings are likely to continue to look towards their foreign parent companies and follow in their footsteps is evident from the following observations of Glaxo India Chairman:

> The parent company, Glaxo Holdings, had divested its milk based products more than a decade ago to concentrate on pharmaceuticals and had achieved great success. Therefore, *there was no support* for Family Products Division (FPD) either in products or in marketing from the parent. *For any subsidiary it is very risky to go out on a limb on its own.* (emphasis added) [Glaxo (India) Ltd., 1996].

Payment of royalties in case of fully owned subsidiaries was another point of debate. In certain cases the government allowed such payments with the hope of encouraging R&D by TNCs. But it leaves the question as to who would benefit from such R&D.

Technology import has significant direct costs associated with it. The main forms in which payments are made for imported technology are through pre-determined lump sum payments and royalties on sales. That the approved collaborations imply an increasing and large foreign exchange outgo is reflected in the figures given in Table 20. The lump sum payments for purchase of technology increased more than seven times

during the period 1991 to 1995, far too rapidly compared to the increase in the number of collaborations. From Rs 980 crore in 1991, the approved payment increased to Rs 7,198 crore by 1995. To get a more realistic picture, one has to add the outgoings on account of royalties but this cannot be given here, as royalties are dependent on actual sales -- both domestic and exports.

Table 20. Approved Lump Sum Payments (1981-1995)

Year (1)	Approved Lump Sum Payments (Rs Cr.) (2)
1981	56
1982	142
1983	150
1984	300
1985	421
1986	588
1987	418
1988	584
1989	699
1990	574
1991	980
1992	2,281
1993	3,690
1994	2,300
1995	7,198

Source: [Murthy and Ranganathan, 1997, Pp. 3-9].

Summing Up

In the new era when the emphasis is on attracting a large amount of foreign investment, approvals for foreign direct investment marked a significant rise compared to the immediately preceding phase. The approval data reveals that while infrastructure sectors attracted maximum investment, consumer goods sectors also had an important place in the approvals. The broad category of services accounted for almost one-third of the total. The main factors behind the large approved amount appear to be the dereservation of public sector reserved areas, de-licensing, allowing larger share for foreign investors, and the general boom in global investment flows. The actual inflows while considerably small compared to approvals, many a time did not go into creation of immediate additional production capabilities. A good part of the new investment resulted in either consolidation of control by TNCs in their affiliates or in acquiring control over Indian companies or their operations.

The steep increase in the approved amount since 1995, especially during 1997, is a reflection of further relaxation in the official policy towards foreign investment. The logic and rationale behind FIPB approvals is not clear. How the terms were negotiated with the foreign collaborators is not public knowledge.[35] The larger amount seems to have been obtained by conceding control -- often absolute -- to foreign investors. In contrast, the experience on the technology import front indicates that the scope for independent transfer of technology has reduced drastically. One main implication is that purchasing technology on market terms may become increasingly difficult. In the liberal policy environment, the foreign investors are opting for sole or joint ventures to one time sale of technology. A corollary is that once foreign companies acquire control, their local affiliates may neither have the freedom nor the incentive to invest in R&D. They will continue to look towards their parent companies for technology improvements. Even if they conduct any R&D, it is difficult to visualise that the local subsidiaries will be given the right over their innovations. This will entail continuous outflow on account of royalties and lump sum payments. The trends on the technology acquisition front, therefore, warrant a careful review.

Size and sector-wise distribution of the approvals suggests that relatively small number of proposals falling under power, fuel and telecommunications sectors account for almost half of the approved investment. However, in view of the large investments and importance of the infrastructure sector, pricing would remain a crucial factor. Considerable sums can be siphoned-off both at the implementation stage and after the projects go onstream. Downward

revision of cost estimates by power sector projects, in response to severe public criticism, suggests the need for a cautious and transparent approach in case of large projects. Besides dividends, in case of infrastructure projects foreign companies would focus on equipment imports, technology payments and long term fuel supply. Since the infrastructure ventures are generally majority/wholly foreign owned, dividends would have lesser significance compared to the long term assured flows to parents and affiliates on other heads. Hence, an approach that foreign investors should be best left to themselves since they bear the entire risk, may not be prudent.

Further, the high share of infrastructure and service sectors in approvals implies huge servicing burden as these (except a few like software) cannot generate direct foreign exchange earnings on their own. Indications are that the scope for substantial export earnings through new FDI is rather limited. It is, therefore, imperative that if only certain sectors are going to contribute to export earnings, such sectors can be dealt with on a different footing for attracting FDI. A point also arises whether it is essential to relax the FDI policy with regard to consumer goods industries if the purpose of inviting FDI is to develop core and infrastructure sectors. Infrastructure and service sectors are such that the foreign investors have to physically set up their operations in the country if they wish to extend their operations to the country. National policy may seek to exploit this compulsion to its advantage.

The fact is that FDI approvals in the post-liberalisation period are increasingly for setting up of subsidiaries. It may, therefore, be not surprising that very few companies with substantial foreign equity entered the stock market during the post-liberalisation period. This is in contrast to the post-FERA experience when many large and well-known FCCs came to be listed. Recent experience indicates that no major FCC is going to be listed on the Indian stock exchanges. FCCs may, therefore, remain outside the regulatory framework which listing requirements impose on the companies; local investors will be avoided from sharing the benefits which they might if large TNCs' shares are listed. The development of stock market may get affected adversely with large and well-known FCCs staying away from it and limiting the future growth prospects of listed affiliates.

The sector-wise distribution of approvals enabled the government to claim that FDI is coming into infrastructure sectors in a big way and to underplay its role in consumer goods sectors. Pattern of inflows, however, give a different picture with infrastructure not figuring prominently. Increasing dominance of foreign companies in consumer goods sectors is a reality. Take-over of Indian companies has been going on in a subtle and gradual manner. Take-over need not always reflect the weakness of Indian companies and brands.[36] The MRTP Act was rendered ineffective in the initial days of liberalisation and the need for setting up a watchdog for overseeing competition in the domestic industry has been ignored till recently.

The High Level Committee on Balance of Payments, in the initial stages of liberalisation, felt that:

(i) Our growth process is substantially determined by domestic savings and investment; foreign investment plays quantitatively very small but qualitatively a significant part (in terms of foreign trade, technology, competition inducements). The strategy, policy and procedures should reinforce the qualitative aspects;
(ii) Government policy towards direct foreign investments has to be discriminating. An open door policy is not likely to produce optimum results unless supported by checks and balances;

(iii) Government should maximise the benefits from the technology brought in by foreign investors. This can be done by identifying the thrust areas/sectors for foreign investments, and working out the linkages so that technology gets absorbed at the earliest; and

(iv) A National Investment Law should be seriously considered codifying the existing policy and practices relating to dividend repatriation, disinvestment, non-discrimination subject to conditions that may be specified, employment of foreign nationals, non-expropriation, and sanction and servicing of external commercial borrowings [RBI, Bulletin, 1993b, August, Pp. 1,139-80].

It is debatable if the experience of the past eight years matches these expectations of the Committee.

NOTES

1. Only five areas remain reserved for the public sector. There is notable revision regarding: generation and distribution of electricity; mining of metalic ores, gypsum, sulphur and diamonds; irons and steel; ship building; aircrafts and air transport, and telephones and telephone cables.

2. Industrial licensing is now confined to industries with 'security and strategic concerns, social reasons, problems related to safety and over-riding environmental issues, manufacture of products of hazardous nature and articles of elitist consumption'.

3. For instance, against the ruling market price of Rs 700 Colgate allotted shares to its parent company at Rs 60. The total amount gained by the parent company in the process was about Rs 720 crore. Similarly, in the case of Castrol, the corresponding figures were Rs 1,050, 110 and Rs 330 crore respectively.

4. For the sake of convenience, here after we shall refer to these as GDR issues.

5. UNCTAD defines foreign direct investment as an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy ... in an enterprise resident in an economy other than that of the foreign direct investor ... Foreign direct investment implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy.

6. It is not possible to classify each FC approval as portfolio investment or otherwise.

7. The number of Indian subsidiaries of foreign companies came down from 202 in 1973 to 66 by March 1988. The number of foreign branches had reduced to nearly 300 by 1981 compared to 541 in 1972.

8. These companies could, however, retain full control over their Indian affiliates through restrictive clauses in the Articles of Association of the affiliates.

9. These results hold good even if one excludes cases involving equity hike.

10. Industry classification for individual approvals was not available. This restricts the possibility of cross-tabulations.

11. Also included are: Sugar (0.58 per cent); Fermentation Industries (0.65 per cent); Vegetable Oils and Vanaspati (0.11 per cent); Horticulture (0.07 per cent); Agriculture (0.07 per cent); and Floriculture (0.16 per cent).

12. The large GDR issues include: VSNL (Rs 2,625 crore) and SBI (Rs 1,750 crore).

13. Similarly, in the advertising sector, the approvals do not indicate any significant amounts - we could trace approvals for less than 15 crores - but it is well known that the sector is now dominated by foreign advertising agencies.

14. At the time of Independence three quarters of the foreign capital was owned by the British. For understanding the role of colonial rule by the British in this process, (see Kidron, 1965).

15. Indeed, even Singapore and Hong Kong are used for tax saving purposes. This might explain why some of the US TNCs and NRIs sought approvals through these countries.

16. It is reported that the government was planning to associate an American consultant with the foreign investment approval machinery to help improve the situation!

17. Based on a reply in the Parliament it was estimated that consumer Goods accounted for 28.5 per cent of the inflows till March 1996. In addition, automobiles accounted for another 7.1 per cent of the Rs 10,000 crore inflows recorded till that time.

18. Past experience also indicates that factors other than bureaucratic delays could seriously affect implementation of foreign collaboration approvals. For instance, during 1977-81 infructuous collaboration proposals formed 43 per cent of the effective agreements. Inability of the parties to agree on the terms of collaboration, failure of the collaborators to fulfil their commitments and emergence of unfavourable conditions such as imposition of emergency, financial stringency and raw material difficulties were the main reasons cited in this regard.

19. Even though, Sony has set up its operations in the country, its Managing Director said in an interview that 'It will make sense to manufacture in India only if we make not less than half a million sets in India, which will take time' [Indian Express, 1997].

20. The points of contention were: (i) demand for higher share by Hindujas, (ii) tying up crude purchases with private promoters' group companies, and (iii) using the joint venture for marketing the products of private promoters.

21. De Beers, which was initially tipped to get the assignment, is known to market all the produce under their control through their London-based Central Selling Organisation for which they earn a commission. The company controls over 70 per cent of world rough diamond supply. They regulate supply of roughs and in the process are known to delay development of new mines and to cut back production. Russia has been having a tough time in arriving at an agreement with the group and has decided for open tenders for some of its mines.

22. Caparo group was unhappy with IDBI for not agreeing to the higher debt-equity ratio (3:1) suggested by them for financing the project.

23. Press reports (1993) on the project reflect the hollowness of the claims of the promoters.

24. For a few instances of unfavourable terms of collaborations involving NRIs, see (Goyal, et al., 1994). Indeed, one tends to be circumspect about the production buyback agreements and export commitments reported in issue prospectuses involving NRIs.

25. This, however, does not mean that the taken over companies would not get new technology and production capabilities in the future.

26. The problems in dealing with large TNCs are highlighted by a recent case. Dabur India entered into a joint venture agreement with Osem of Israel. Osem agreed to take up a minority stake of 40 per cent leaving the remaining to Dabur and also to allow the joint venture to make all the products manufactured by itself. In the meantime Osem was taken over by Nestle. Nestle was reported to be insisting for a majority stake in the joint venture (Excelsia Foods). (see Economic Times, 1997)

27. At one time Pepsi's entry into *bhujia* marketing was seen as stepping on the traditional Indian terrain. But when Nestle entered pickles and sweets (advertised heavily during the current festive season as *Mithai magic*) no adverse reaction was noticed probably because Nestle refrained from using Bandar *Mithai* or *Bengali Sweets* unlike Pepsi which called its product *Bikaneri Bhujia* after a place in Rajasthan famous for the item.

28. Higher levels of foreign shares were to be allowed depending upon the area of operation and export orientation. Foreign airlines and shipping companies were treated on a reciprocity basis.

29. *Prime Annual Reports* which are compiled by Praxis Consulting and Information Services Pvt. Ltd., are a major source of detailed data on the primary market.

30. This is based on an exchange rate of Rs 32 which prevailed for most part of the period under study.

31. Even though some of them have been set up as joint ventures of listed companies (which gives an option for the local investors to indirectly take advantage of the benefit), the listed companies have been gradually losing control over the JVs.

32. On being asked by the shareholders, the chairman of the company clarified that '(T)here is no proposal at present to delist our securities'.

33. This report was, however, contradicted by the company management later on.

34. It was expected that the approval for a 100 per cent subsidiary by Pfizer would hit the share price of Pfizer India [*Financial Express*, 1999a and 1999b].

35. Nor are the reporting systems streamlined.

36. A case which seems to have important ramifications is the reported move of Novartis to take over Althrocin, the main brand of Alembic Chemicals and also the second-highest selling brand in the country. This case, coupled with Coca-cola's failure to 'kill' Thums-Up, indicates that it is not the weakness of the product/brand per se but the Indian entreprenueir's fear that he may not survive in the new environment and the lure of large money which are responsible for handing over their companies/brands to foreign companies.

ABBREVIATION

FCC	Foreign Collaboration Company
FCs	Financial Collaborations
FCs	Foreign Companies
FDI	Foreign Direct Investment
FERA	Foreign Exchange Regulation Act
FIPB	Foreign Investment Promotion Board
FPD	Family Products Division
GDR	Global/American Depository Receipts
IDBI	Industrial Development Bank of India
IDRA	Industries (Development and Regulation) Act, 1951.
IPO	Initial Public Offer
MRTPA	Monopoly and Restrictive Trade Practices Act
NRI	Non-residential Indian
PMP	Phased Manufacturing Programme
RBI	Reserve Bank of India
SAP	Structural Adjustment Programme
SIA	Secretariat for Industrial Assistance
TC	Technical Collaborations
TNC	Transnational Corporation
UNCTAD	United Nations Committee for Trade and Development
UNCTC	United Nations Centre on Transnational Corporations
WOS	Wholly Owned Subsidiary

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INTRA-INDUSTRY TRADE UNDER ECONOMIC LIBERALISATION: THE CASE OF INDIAN CAPITAL GOODS INDUSTRIES

C. Viramani

This paper analyses the structure of India's foreign trade in capital goods within the conceptual framework of Intra-Industry Trade (IIT). It is found that the liberalised policy environment biases trade expansion towards IIT. The analysis of bilateral trade between India and USA supports the hypothesis that the North-South IIT is predominantly vertical in nature, that is, the simultaneous exchange of commodities differentiated by quality. In most of the industries, India exports cheap varieties to, and imports the expensive varieties from, the USA. The growing importance of horizontal IIT - the simultaneous exchange of commodities differentiated by attributes excluding quality - is also observed. The implications of the findings suggest that the export promotion strategies should aim at the exploitation of comparative advantage at the finer industry level.

INTRODUCTION

Under the inward orientation strategy of development, the domestic industry in India was protected under the umbrella of various controls and the commodity pattern of trade was shaped mainly by the nature and bias of protection policy. However, the economic liberalisation process was started in the early 1980s and got intensified in the early 1990s.[1] It is held that liberalisation would enhance growth by creating an environment in which production units respond to market signals. An important aspect of this restructuring process is the reallocation of productive resources from import competing activities to export activities. The opportunities and challenges emanating from greater international integration necessitate exploitation of economies of scale and narrow specialisation in production. In other words, production and export of all varieties in a specific product spectrum become impossible if economies of scale in production are to be reaped. In this context, it becomes important to analyse the structure of exports in its relation to imports. For understanding this dimension of trade pattern, trade theorists have evolved the concept of Intra-Industry Trade (henceforth IIT), which means the simultaneous occurrence of exports and imports within the same industry.

Empirical research on the structure of India's foreign trade within the conceptual framework of IIT is, however, scarce [Panchamukhi, 1997, p. 286]. This is somewhat surprising as evidences[2] suggest that IIT is not a phenomenon restricted to advanced industrialised countries. The present study analyses the trends, nature and quality of IIT in Indian capital goods industries during the post economic liberalisation period. While trends in the level of IIT are examined in the multilateral (India versus the rest of the world) and bilateral (India versus the United States of America [USA]) contexts, the nature and quality of IIT are analysed only in the bilateral context. The period covered in the study includes the years 1987-88, 1994-95 and 1995-96 (henceforth 1988, 1995 and 1996). The rationale for the selection (of industries, countries and years) will be spelt out later in the paper.

Section I discusses the conceptual and measurement aspects of IIT. It also delineates the link between trade liberalisation and IIT. Section II focuses on the trends in the level of IIT, along

C. Viramani is UGC Doctoral Fellow in Centre for Development Studies, Prasanthanagar Road, Ulloor, Thiruvananthapuram, Kerala, 695 011.

This paper is drawn from the author's M.Phil thesis submitted to Jawaharalal Nehru University in 1998. The author is grateful to K.J. Joseph and D. Narayana for their valuable comments on an earlier draft. The author is also indebted to the anonymous referee and the editor of this Journal for their invaluable comments and suggestions. The comments of K.K. Subrhamanian and P.K.M. Tharakan are also gratefully acknowledged. Thanks are due to Dennis Rajkumar, Pinaki Chakraborty, Suresh Babu and Umakrishnan for useful discussions. The usual disclaimer applies.

with a brief discussion of the state of India's foreign trade in capital goods. Section III looks at the nature and quality of IIT in bilateral trade. Section IV concludes and draws some implications of the findings.

I. CONCEPTUAL FRAMEWORK AND METHODOLOGY

Theory

The IIT is essentially a conceptual formulation evolved by trade theorists to understand the simultaneous export and import of products, which are very close substitutes to each other in terms of factor inputs and consumption. It is generally held that the Ricardian and the Heckscher-Ohlin-Samualson (H-O-S) models cannot provide a proper understanding of IIT. This called for new theoretical formulations.[3] While the earlier attempts were aimed at explaining horizontal IIT (exchange of commodities differentiated by attributes excluding quality), analytical interest on vertical IIT (exchange of commodities differentiated by quality) is rather recent.[4]

Horizontal IIT is explained by economies of scale in the presence of product differentiation and imperfect competition. The essence of the argument is, that given the existence of demand for a large variety of a particular product in any two countries, each country can not produce all the varieties, if economies of scale in production are to be reaped. Under such circumstances, intra-industry specialisation and trade will develop between countries to meet the overlapping demand.

Vertical IIT is explained without recourse to economies of scale. Shaked and Sutton [1984] examine the effects of the opening of international trade in a situation where firms in two different countries produce different qualities of vertically differentiated goods. The precise effect of trade depends, in particular, on the distribution of incomes in the two trading economies and technological conditions. Differences in income distribution result in an equilibrium state, in which the higher income country specialises in a range of higher quality products and the lower income country specialises in lower quality products. With the assumption that a higher capital-labour ratio results in higher quality, Falvey and Kierzkowski [1987] establish that the capital abundant country exports relatively high quality products, whilst the labour-abundant country exports relatively low quality products. Similarly, Falm and Helpman [1987, Pp. 810-22], developed a model of North-South IIT, in which the North exports high quality and the South exports low quality industrial products.

Trade Liberalisation and IIT

Transition towards a market-based economy implies inter-sectoral resource reallocation guided by price signals. Conventional wisdom suggests inter-industry specialisation as a necessary outcome of this restructuring. However, this has been questioned on the ground that the product and factor markets are far from perfect; therefore a smooth inter-sectoral resource reallocation is unlikely. On the other hand, it has been argued that adjustment would be easier, and the associated cost of transition less when adjustment takes place within the industry [Balassa, 1966, Pp. 466-73; Aquino, 1978, Pp. 275-96]. This implies an increasingly fine division of labour within industries rather than the sectoral specialisation assumed in classical discussions of comparative advantage. Under such circumstances, trade expansion takes the form of an increase in intra-industry as opposed to inter-industry trade.

This apart, competitive pressures associated with trade liberalisation and the widening of markets due to opening of the economy leads to greater exploitation of scale economies. Also, competition is said to induce firms to differentiate

their products.[5] The interaction between these two forces - scale economies and product differentiation - in turn leads to IIT.

Another factor which causes an increase in IIT in a liberalised policy regime is the increases in foreign direct investment because a part of the IIT may be intra-firm trade. A multinational firm that specialises by concentrating on the production of a major product line for export may purchase minor lines from other specialised producers in the industry at home or abroad. This allows a specialising firm to continue offering a complete product range to its customers and give rise to IIT.

In short, trade liberalisation has an in-built tendency to promote IIT. Available evidences from many developed as well as developing countries also support the view that trade liberalisation promotes IIT.[6]

Measurement

In this study, the products grouped under the 4-digit level of the Indian Trade Classification (ITC) are considered an industry. And the well known index (GLi), developed by Grubel and Lloyd [1975, p. 21], is used to measure the level of IIT.

$$GLi = \frac{(Xi + Mi) - (Xi - Mi)}{(Xi + Mi)} \times 100$$

where, X = export, M = import, i = industry

The value of GLi ranges from 0 to 100. If there is no IIT (i.e. one of Xi or Mi is zero) GLi takes a value of 0. If all trade is IIT (i.e. Xi = Mi), GLi takes a value of 100. Grubel and Lloyd aggregated the GLi across industries, taking account of their different weights (proxied by the share of each industry's trade in the total value of trade), to get an average measure (GL). This measure is also used in the present study.[7]

$$GL = \frac{\Sigma\,|(Xi + Mi) - (Xi - Mi)|}{\Sigma(Xi + Mi)} \times 100$$

As regards the nature of IIT, relative unit values of industry exports and imports are commonly utilised to distinguish vertical and horizontal IIT,[8] as well as to judge the relative quality of exports of one country vis-a-vis another. Behind the use of relative unit values is the assumption that quality difference is captured in price.[9] Relative unit values are calculated in the following way:

$$UVi = UVXi / UVMi$$
$$UVXi(Mi) = Xi(Mi) / Qi$$

where, UVi is the relative unit value in industry i, UVXi is the unit value of export in industry i, UVMi is the unit value of import in industry i, and Qi is the physical units of trade.[10]

Abed-el-Rahman [1991, p. 88] and Greenaway, et al [1994, p. 82] defined horizontal IIT to occur when UVi lies in the range 0.85-1.15. Horizontal IIT could be measured using alternative measures wherein UVi lie in the range 0.75 - 1.25 or 0.65 - 1.35. When UVi is outside the defined range, any IIT is considered to be vertical in nature. Note that the narrower the range the smaller is the value of horizontal IIT. When UVi exceeds some critical point above unity (say 1.25), we will say that the country's exports are of a higher quality vis-a-vis its trading partner. The converse is the case when UVi is under some critical point below unity (say 0.75); that is, the country's exports are of a lower quality vis-a-vis its trading partner.

Coverage and Data

The study covers 171 capital goods industries in multilateral trade and 163 industries in bilateral trade.[11] An obvious question regarding the coverage of the study is: why capital goods industries?.

The capital goods sector has been given strategic importance in Indian industrialisation since the Second Five-Year Plan. This helped in building up a capital goods base for the economy and exports of capital goods gradually started to pick up.[12] At the same time, capital goods constitute a significant part of the total import bill of India. Moreover, these industries have got distinct significance in the recent trade policy package. Most of these industries are included in the list of industries for automatic approval of foreign technology agreements and for 51 per cent foreign equity approvals, and they account for a significant share of the total foreign direct investment in India.[13]

A separate analysis of India-USA, IIT is relevant for the following reasons. First, USA is the leading trade partner of India and accounts for the largest share of total foreign direct investment in India. Second, it provides a good case for North-South IIT,[14] the analytical interest on its various aspects is rather recent.[15]

Another aspect to be spelt out here relates to the data and period of the study. The present study makes use of the Monthly Statistics of the Foreign Trade of India (March issues), published by the Directorate General of Commercial Intelligence and Statistics (DGCI&S). A new commodity classification system, known as the Harmonised System (HS), has been adopted by DGCI&S from April 1987 which makes the selection of any year prior to 1987 difficult for the purpose. Apart from the constraint imposed by data, the selection of the time period for the analysis is also guided by the changes in the trade policy environment in India.[16] Keeping these factors in mind, and considering the suggestion that a judicial selection of the time point is important for a study of IIT [Greenaway and Milner, 1986], the period covered in this study includes the years 1988, 1995 and 1996. All are normal years, i.e., free from any major shocks.

II. TRENDS IN THE LEVEL OF IIT: MULTILATERAL AND BILATERAL

As a background, we start with a brief discussion of the state of India's multilateral and bilateral trade in capital goods (Table 1). Major observations from the table may be stated as

Table 1. State of India's Foreign Trade in Capital Goods

(in $ millions)

(1)	1988 (2)	1995 (3)	1996 (4)
a: Multilateral			
India's total exports of capital goods (to the rest of the world)	761.35	1,993.90 (161.9)	2,526.85 (26.7)
India's total imports of capital goods (from the rest of the world)	3,586.13	5,390.42 (50.3)	7,427.94 (37.8)
Ratio of export to import	0.21	0.37	0.34
b: Bilateral			
India's total exports of capital goods (to the USA)	41.34	240.10 (480.8)	390.00 (62.4)
India's total imports of capital goods (from the USA)	602.79	1,189.75 (97.4)	1,368.20 (15.0)
Ratio of export to import	0.07	0.20	0.29
Share of USA in India's total exports of capital goods (in per cent)	5.40	12.00	15.40
Share of USA in India's total imports of capital goods (in per cent)	16.80	22.10	18.40

Note: Figures in parentheses represent percentage growth over the specified preceding year.
Source: Director General of Commercial Intelligence and Statistics, *Monthly Statistics of Foreign Trade of India*, various issues.

follows: (i) a substantial increase in the dollar value of exports and imports (both multilateral and bilateral) during the period under consideration is evident; (ii) in both multilateral and bilateral cases the growth of export in 1995 (over 1988) was higher than that of import, and this was also the situation in 1996 over 1995 in the bilateral case, but not in the multilateral case;[17] (iii) with the exception of imports in 1996, growth was higher in the bilateral case; (iv) a substantial improvement in the ratio of export to import can be noted and this is faster in the bilateral case; and (v) a consistent and considerable increase in the share of USA in India's total exports of capital goods can be noted.

The fostered trade, as evident from the above observations, raises a question regarding the type of trade, that is, whether the trade expansion occurred between the industries (inter-industry trade) or within the industries (IIT). It is important to understand this, as the adjustment and welfare implications of the two types of trade are different. The values of the GL index are given in Table 2. Regarding IIT in multilateral trade, the GL index increased by about 5 percentage points in 1995 over 1988 and remained unchanged in 1996. In the bilateral trade, the increase in the GL index was 10 percentage points in 1995 and it increased by another 7 percentage points in 1996. It may also be noted that the increase in the values of the GL index are accompanied by a consistent decline in the coefficient of variations, indicating the narrowing down of differences in the values of GLi index across industries.

Table 2. Level of IIT in India's Capital Goods Industries (Weighted Average of 4-digit GLi indices)

Years (1)	Multilateral (2)	Bilateral (3)
1988	29 (1.0)	12 (1.8)
1995	34 (0.9)	22 (1.3)
1996	34 (0.8)	29 (1.0)

Note: Figures in parentheses are coefficients of variation.
Source: Estimated from DGCI&S data, cited in source to Table 1.

In order to place India's position in a comparative perspective, Table 3 reports the level of IIT in capital goods industries in selected countries. The values of the GL index provided in the table are compiled from different studies. The caveat is to be added that these values are not strictly comparable mainly because of the differences in the level of aggregation in measurement. Most studies employed 3-digit of Standard International Trade Classification (SITC), which is highly aggregated than the 4-digit of ITC. Thus, any positive margins in India's GL index over that of other countries should be considered robust, while meagre negative margin should not be emphasised. It is clear from the table that the level of India's IIT in multilateral trade (in 1995) is much higher than that for Australia in 1967, Ireland in 1972, Germany versus Developing countries in 1978, and among NICs in 1968.

Table 3. Level of IIT in Capital Goods Industries in Selected Countries: (Average of 3-digit GLi indices)

Author (1)	Country (2)	Year (3)	GL (4)
Grubel and Lloyd [1975]	Belgium-Luxembourg	1967	81
	France		81
	Canada		74
	Netherlands		72
	Italy		68
	US		62
	UK		57
	Germany		39
	Japan		36
	Australia		18
Bano [1991]	Canada	1980	47
	Canada vs India		7
Harylyshyn and Civan [1985]	Among NICs	1968	29
		1978	39
Schumacher [1983]	Germany vs Developing Countries	1978	18
Brulhart and Mc Aleese [1995]	Ireland	1967	17
		1972	24
		1990	48
	India	1995	34

Further, India's GL index is comparable with that of Germany in 1967, Japan in 1967, and among NICs in 1978. Therefore, it is evident that IIT is not a phenomenon restricted to trade among highly industrialised countries, and the observed value of India's GL index is comparable to that of many countries, though not for the same time point.

The growing empirical significance of India's IIT is further evident from Table 4 which provides the frequency distribution of the values of GLi index at 4-digit level (see Tables A1 and A2 in Appendix for the values of GLi index at 4-digit level). The proportion of industries falling in the higher classes of GLi (A, B, and C) registered a substantial increase in 1995 particularly in the bilateral case.

Table 4. Distribution of GLi Indices across Industries

(in per cent)

Class GLi Indices	Multilateral			Bilateral		
(1)	1988 (2)	1995 (3)	1996 (4)	1988 (5)	1995 (6)	1996 (7)
A. ≥ 80 ≥ 100	8.8	11.7	9.9	2.6	8.8	7.2
B. ≥ 60 ≥ 80	9.9	10.5	11.1	3.3	8.1	12.4
C. ≥ 40 ≥ 60	14.6	19.3	12.3	6.6	11.9	9.2
D. ≥ 20 ≥ 40	18.1	25.2	28.7	15.9	13.8	17.6
E. ≥ 0 ≥ 20	38.0	23.4	28.7	41.7	43.8	39.9
F. 0	10.5	9.9	9.4	29.8	13.8	13.7

Source: Same as for Table 2.

It is to be noted that most of the industries recorded a positive growth in trade in 1995 over 1988 (see Appendix). Thus, a proportionately higher growth in export (import), compared to import (export) in the trade deficit (surplus) industries can cause an increase in the GLi index. Most of the industries in our sample registered deficit throughout the study period. It follows that the increased intensity of IIT is predominantly export-led (i.e., caused by a faster growth in export than in import). This argument obtains further support from Table 5, which shows the Spearman's rank correlation coefficients between the growth of export/import and the growth of the values of GLi index across industries. While the correlation coefficients between the growth of export and growth of GLi are generally high and positive, that between the growth of import and growth of GLi are less and negative. This indicates a direct and strong relationship between the growth of export and GLi, and an inverse (but relatively weak) relationship between the growth of import and GLi. Moreover, when the exports and imports are ranked separately in terms of their value, the GLi indices are generally found higher in those industries with high export than in those with high import (see Table 6). This observation also suggests that industries exporting highly are generally import intensive. In the light of the above observations, the finding of Havrylyshyn and Civan [1985, p. 263] while analysing IIT among NICs is worth noting '.....successful export expansion brings in its train an increase in the amount of intra-industry trade'.

Table 5. Spearman's Rank Correlation coefficients between Growth of Export (Import) and Growth of GLi Index

Year	Growth of Export and GLi		Growth of Import and GLi	
(1)	Multilateral (2)	Bilateral (3)	Multilateral (4)	Bilateral (5)
1995	0.51	0.66	-0.30	-0.37
1996	0.45	0.71	-0.23	-0.26

Note: 1) Percentage growth are calculated for the respective years over 1988. Those industries which registered zero values of export (import) in the base or current year are excluded.

2) All correlation coefficients are significant at 1 per cent level.

Source: Same as for Table 2

Table 6. Value of Export (Import) and Intensity of IIT

Year	High Export and High GLi (Number of Industries)		High Import and High GLi (Number of Industries)	
	Multilateral	Bilateral	Multilateral	Bilateral
(1)	(2)	(3)	(4)	(5)
1988	25	9	10	3
1995	21	21	15	15
1996	20	21	10	15

Notes: 1) 40 largest export (import) industries are considered as high export (import) industries.
2) If the value of the GLi index is greater than or equal to 40 per cent, it is considered high.
Source: Same as for Table 2.

As regards the pattern of IIT at 2-digit level, the values of the GL index are generally found to be higher in the first four product groups listed in Table 7 (ITCs 84, 85 86 and 87), and lower in the last two product groups (ITCs 88 and 89). It should also be noted that the first four product groups together account for more than 80 percentage of the total value of trade (both multilateral and bilateral) in all years, and within this ITC 84 and 85 alone constitute about 75 per cent.

Table 7. Level of IIT Across 2-digit Groups (Weighted Average of 4-digit GLi indices)

Product Groups	Multilateral			Bilateral		
	1988	1995	1996	1988	1995	1996
(1)	(2)	(3)	(4)	(5)	(6)	(7)
84	29	38	33	11	31	30
85	29	38	43	20	37	47
86	10	22	13	21	14	51
87	58	35	37	13	38	28
88	4	2	3	6	25	27
89	2	23	25	0	0	0

Note: Descriptions of Codes are as follows:
84 = Nuclear reactors, boilers, machinery and mechanical appliances, parts thereof.
85 = Electrical machinery and equipments and parts, sound and TV recorders and reproducers and parts.
86 = Railway/tramway locomotives, trucks, equipments and parts.
87 = Road vehicles and parts.
88 = Aircraft, spacecraft and parts.
89 = Ship, boat and floating structure.
Source: Same as for Table 2.

III. NATURE AND QUALITY OF IIT: BILATERAL

An important aspect of the literature on North-South IIT is that it is related to vertical product differentiation. This is in contrast to the literature on IIT in general, wherein product differentiation is assumed to be horizontal rather than vertical in nature. It is appropriate to take up the case of India-USA bilateral trade to test the hypothesis on the nature of North-South IIT as the two countries are profoundly different in terms of factor endowments.

We have calculated UVi for those industries, where the values of the GLi index are greater than 40 per cent in 1988 and 1995.[18] In 1988, only 26 industries (i.e. 22 per cent of the total number of industries) registered the value of GLi index more than 40 per cent, whereas in 1995, it increased to 60 (i.e., 43 per cent of the total number of industries).

Table 8 provides straightforward support to the hypothesis on the nature of North-South IIT (i.e. vertical IIT), and also shows some changes in the pattern in 1995. Even if horizontal IIT is defined

at the widest range (F), more than 90 per cent of total industries in 1988, and more than 65 per cent of the industries in 1995 showed vertical IIT. In 1988, no single industry showed horizontal IIT when it is defined at the narrowest ranges of UVi (A and B), whereas, 5 per cent of the total number of industries at the range 'A' and 8.3 per cent of the total number of industries at the range 'B' showed horizontal IIT in 1995. While there were only 3.9 per cent of industries at the range 'C' in 1988, it was as high as 21.6 per cent in 1995. Despite these changes, and even if horizontal IIT is defined at the widest range 'F', vertical IIT remained predominant in 1995.

Table 8. Type and Quality of IIT

UVi	Per cent of Industries	
	1988	1995
(1)	(2)	(3)
A. $\geq 0.85 \geq 1.15$	0.0	5.0
B. $\geq 0.75 \geq 1.25$	0.0	8.3
C. $\geq 0.65 \geq 1.35$	3.9	21.6
D. $\geq 0.55 \geq 1.45$	3.9	23.3
E. $\geq 0.45 \geq 1.55$	3.9	30.0
F. $\geq 0.35 \geq 1.65$	7.7	33.3
G. $\geq 0.00 \geq 0.35$	80.8	60.0
H. ≥ 1.65	11.5	6.7
I. $\geq 0.00 \geq 0.75$	88.5	81.7
J. ≥ 1.25	11.5	10.0

Source: Same as for Table 2.

Turning now to the examination of the quality of IIT, it is evident that India largely exports cheap varieties to USA and imports the expensive varieties, confirming the hypothesis on the pattern of North-South vertical IIT. As mentioned earlier, if UVi is less than 0.75 (see 'I' in Table 8) India's export is considered to be inferior in quality vis-a-vis USA. On the other hand, if UVi exceeds 1.25 (see 'J') India has the qualitative edge. Following this criterion, in 88.5 per cent of the industries in 1988 and 81.7 per cent of the industries in 1995, India has qualitative disadvantage.

However, the differences between the quality of exports and the quality of imports seem to be coming down, in 1995, as evident from the following observations. First, the per cent of industries falling in the range 'G', which represents extremely low quality exports of India, has come down from 80.8 per cent in 1988 to 60 per cent in 1995. Second, even though the per cent of industries in which India has an absolute qualitative edge has come down marginally (as the range 'J' indicates), it should be noted that there was no single industry showing horizontal IIT defined by the range 'A' and 'B' in 1988. But in 1995, a considerable number of industries fall in these two ranges, which implies narrowing difference between the quality of exports and imports.

In sum, the observed pattern reveals that India-USA IIT is predominantly vertical in nature and India largely exports cheap varieties to, and imports the expensive varieties from, the USA.[19] These are in conformity with the general hypothesis. Nevertheless, horizontal IIT seems to be gaining importance in India-USA trade and the differences between the quality of exports and imports seem to be coming down.

IV. CONCLUSION AND IMPLICATIONS

The analysis in this paper highlighted the increasing significance of the phenomenon of IIT in both multilateral and bilateral trade in Indian capital goods industries. It also highlighted the following aspects of India's IIT: (a) IIT is largely export-led in most of the industries; (b) the level of IIT is generally high in the industries with high export than the ones with high import; and (c) highly exporting industries are generally more import intensive.

These findings have implications in forming export promotion strategies. In particular, the above findings suggest the feasibility of the strategy of raising exports by specialising in specific product lines of a broad product spectrum

which may enable the country to meet the import requirements of the other varieties belonging to the same product spectrum. This would mean that the export promotion strategies should aim at the exploitation of comparative advantages at the finer industry level rather than attempting to promote export in particular sectors. The study noticed, that despite being inferior in quality, India's exports of capital goods showed an impressive growth. Viewed in a long term perspective, this should not give much room for complacency for two reasons. First, the growth rate may not be sustainable in the long run since it might have been achieved mainly on account of a favourable exchange rate. Second, it has been generally argued, that as world income grows so does the demand for better quality products. These aspects substantiate the necessity of upgrading product quality and enhancing competitiveness to attain better gains from trade.

The observed growth of IIT has also implications on industrial restructuring costs (or adjustment cost). Cost of industrial restructuring has been one of the central subjects in the debate on the impact of structural adjustment policies. Appropriate policies have been often called for soothing the adjustment problems. These are mostly in the form of unemployment benefit programmes, removal and transfer allowances, adjustment assistance to firms, etc. However, the cost of industrial restructuring would be comparatively smaller if resource reallocation takes place within the industry (which results in IIT); in such sectors less adjustment assistance could be justified.

The analysis of the pattern of IIT in bilateral trade confirmed the hypothesis that the North-South IIT is largely vertical in nature, i.e. the exchange of commodities differentiated by quality. In nearly 90 per cent of the high IIT industries, India exports cheap varieties to, and imports the expensive varieties from, the USA. However, horizontal IIT seemed to be gaining importance in the bilateral trade. And the difference between the quality of exports and imports appeared to be coming down.

NOTES

1. A number of studies suggested that the inward looking policy framework led to resource mis-allocation and economic inefficiency and outward looking policies were seen as the panacea [Singh, 1964; Bhagwati and Desai, 1970; Bhagwati and Srinivasan, 1975; Wolf, 1982; Ahluwalia, 1985; and Panchamukhi, 1987].

2. Tharakan [1984, Pp. 213-27; 1986, Pp. 131-49]; Havrylyshyn and Civan [1985].

3. Grubel and Lloyd [1975]; Krugman [1979, Pp. 469-79; 1980, Pp. 950-59; 1981, Pp. 959-73]; Lancaster [1980, Pp. 151-75]; Helpman [1981, Pp. 304-40]; and Ethier [1982, Pp. 389-405].

4. Shaked and Sutton [1984]; Falm and Helpman [1987]; Falvey and Kierzkowski [1987] provide theoretical basis for the emergence of vertical IIT. Torstensson [1991]; Ballance et al [1992, Pp. 330-38]; Greenaway et al [1994]; and Tharakan and Kerstens [1995, Pp. 86-105] provide empirical support.

5. The 'variety hypothesis' [Barker, 1977, Pp. 153-72] states that as per capita income grows so does the demand for variety. Trade liberalisation could encourage product differentiation if it causes an increase in per capita income and hence the taste for variety.

6. See Balassa [1986] for evidence. However, as Globerman and Dean [1990, p. 27] pointed out, one must be cautious in generalising that trade liberalisation leads to higher IIT, for a convincing theoretical argument linking increased IIT to trade liberalisation per se has yet to be made.

7. Grubel and Lloyd [1975, p. 22], observed that GL is a biased downward measure of IIT if the country's total commodity trade is imbalanced or if the mean is an average of some subset of all industries for which exports are not equal to imports. They considered this an undesirable feature of a measure of average IIT and suggested the need for correction for trade imbalance. Of late, the correction argument has been subjected to criticism on various grounds (Greenaway and Milner [1986]; Kol and Mennes [1989, Pp. 703-17], Vona [1991, Pp. 678-700]. The present study uses the unadjusted measure (GL), following the conclusion of Vona [1991, p. 690) that '.....correction for trade balance raises more empirical problems than it solves.....the uncorrected GL measure is the best available one and on the whole, possesses desirable properties'.

8. Tharakan and Kerstens [1995], classify products into categories that are prone to vertical or horizontal product differentiation, based on expert information provided by industry spokesmen.

9. See Torstensson [1991] for a summary of the theoretical arguments for using price as a proxy for quality. The referee of this journal, rightly pointed out, that price may not reflect quality in those industries where multinationals indulge in intra-firm trade. It is beyond our scope to adjust for intra-firm trade, because a detailed industry wise information on the magnitude of such trade is not available.

10. The operationalisation of the measure, UVi, posed some difficulties in this study. First, at 4-digit level of ITC, parts and final commodities are grouped together in some cases. This makes the comparison of the unit values of exports and imports difficult. It is possible that in a particular 4-digit grouping, India is exporting the parts and components and importing the finished ones, which naturally results in a higher unit value for imports. Second, this problem becomes all the more serious when parts and final products are expressed in different units, say, final products in kilograms or tonnes and the parts in numbers. We solved the latter problem by calculating unit values separately in those cases where the units of measurement are different under a 4-digit category. As in many cases finished items and the parts are given in different units, the former problem is automatically solved to a certain extent.

11. This difference arises because the number of industries entering into the bilateral trade basket is less as compared to the number of industries entering into the multilateral trade basket.

12. The share of gross output of the capital goods sector in total manufacturing (factory) sector ranges from 16 to 18 per cent, the share of net value added ranges from 20 to 22 per cent, the share of input ranges from 15 to 17 per cent and the share of the number of factories ranges from 14 to 15 per cent during the 1980-91 period (Source: *Annual Survey of Industries*). The share of capital goods in India's total export increased from 1.22 per cent in 1965-66 to 8.09 per cent in 1981-82 (Sinharay [1991, p. 63]).

13. The capital goods industries together constitute nearly 38 per cent of total FDI actual inflow into India from 1.4.1991 to 31.3.1995 [Subrhamanian et al 1996, p. 93].

14. 7.1 per cent of the North's trade with the South in manufacture product was IIT in 1970. The similar figure for 1985 was 15.1 [Ballance et al, 1992, p. 330].

15 The analysis of North-South IIT has got particular significance in the context of India, as the country developed somewhat different IIT relation. This is clear from the study by Havrylyshyn and Civan [1985], which noted that, contrary to many other developing countries, India showed the highest IIT with the developed countries. Interestingly, while the inward looking Latin American NICs have higher IIT with other NICs than in total trade, India, which, '...perceived very much of an import-substitution case, belies this simple correlation....' [Ibid, p. 261].

16. It may be noted that significant changes in the trade policies were initiated with the declaration of the Long Term Export Import Policy in 1985.

17. It is beyond the scope of the present paper to analyse the factors behind the observed growth pattern. The higher growth in export, however, may be viewed in the light of the argument that the incentive to export increased from 1985 on account of exchange rate depreciation and various other export incentives (Joshi and Little [1994, p. 83]. On the import side, one may argue that the specific measures undertaken to enhance the accessibility of exporters to imported capital goods might have led to the high growth. Such measures include: (a) widening of the coverage of the products under Open General License (OGL) to include a number of capital goods, (b) the announcement in 1991 that the new units and units undergoing substantial expansion would automatically be granted licenses for import of capital goods without requiring any clearance from the indigenous availability angle, (c) permission granted to import second hand capital goods, (d) the introduction of Export Promotion Capital Goods (EPCG) Scheme in 1992 to enhance the accessibility of exporters to imported capital goods. It may also be noted that the import weighted average tariff rate for capital goods was reduced from 97 per cent in 1990-91 to 38 per cent in 1994-95 and further to 30 per cent in 1995-96 (World Bank, 1995, p. 31).

18. This threshold level is fixed arbitrarily. The time consuming and difficult procedure of calculating the unit values from the official data source compels us to limit the analysis in this section to a few industries where the level of IIT is high. There is, however, no reason to expect a significant change in the result if the analysis is extended to all industries.

19. In this context a question may arise, that despite being inferior in quality, why should the Indian exports display a high export growth rate between 1988 and 1995 ?. As already pointed out, the exchange rate policy played a crucial role. It may be noted that during this period India achieved the highest exchange rate depreciation as compared to other Asian countries (all or some of them are presumed to be the suppliers of more or less the same quality products). Between 1988 and 1995, Indian rupee depreciated against dollar by 142.09 per cent. During the same period, the changes (in per cent) in the exchange rate of the currencies of other Asian countries against dollar are: China (125.81), Bangladesh (27.01), Pakistan (75.58), Sri Lanka (61.29), Hong Kong (-1.36), Korea (5.45), Singapore (-30.42), Malaysia (-4.54), and Thailand (-1.56). (Source: Asian Development Bank, 1991, p. 302 and 1999, p. 261).

APPENDIX

Table A1. Intensity of Intra Industry Trade Across Capital Goods Industries: Multilateral

(Figures in Rs Lakh)

	1988			1995			1996		
CODE (1)	Export (2)	Import (3)	GLi (4)	Export (5)	Import (6)	GLi (7)	Export (8)	Import (9)	GLi (10)
8401	33.6	265.3	22.5	0.0	88.5	0.0	0.0	102.9	0.0
8402	975.1	2,647.6	53.8	3,126.8	529.7	29.0	2,927.5	877.1	46.1
8403	69.8	2,659.0	5.1	741.8	196.0	41.8	1,148.4	836.3	84.3
8404	44.2	945.5	8.9	256.5	800.8	48.5	57.5	1,219.6	9.0
8405	2.2	865.2	0.5	158.2	485.3	49.2	294.9	1,527.0	32.4
8406	30.9	5,600.7	1.1	142.0	9,887.2	2.8	1,339.1	13,289.3	18.3
8407	495.8	190.7	55.6	2,472.6	3,085.4	89.0	1,857.4	4,891.6	55.0
8408	1,067.6	1,954.4	70.7	11,740.1	9,199.9	87.9	14,430.6	18,563.6	87.5
8409	5,089.3	5,851.0	93.0	19,371.0	25,923.7	85.5	23,241.7	36,417.5	77.9
8410	4.1	224.5	3.6	17.5	588.0	5.8	61.7	1,883.3	6.3
8411	110.1	4,997.7	4.3	1,465.1	40,044.3	7.1	988.7	33,188.6	5.8
8412	49.6	1,109.9	8.57	520.3	9,410.7	10.5	1,086.8	12,489.7	16.0
8413	2,008.9	7,835.0	40.8	9,539.4	23,557.1	57.6	11,069.8	35,411.2	47.6
8414	3,418.6	11,199.3	46.8	10,630.4	26,676.0	57.0	11,392.8	41,616.3	43.0
8415	44.2	1,753.7	4.9	1,248.6	3,388.9	53.8	2,226.1	6,041.7	53.9
8416	9.8	616.2	3.1	150.8	1,332.7	20.3	236.4	3,486.6	12.7
8417	43.6	2,098.7	4.1	997.6	2,959.0	50.4	711.7	12,070.8	11.1
8418	135.4	842.1	27.7	1,702.7	5,892.1	44.8	2,438.4	13,170.0	31.2
8419	854.8	7,501.1	20.5	4,546.9	18,607.0	39.3	4,383.8	36,323.7	21.5
8420	2.8	241.9	2.3	535.7	906.8	74.3	457.2	2,351.6	32.6
8421	139.9	2,970.0	9.0	1,927.7	11,909.3	27.9	3,168.2	24,606.4	22.8
8422	573.1	2,177.7	41.7	3,889.2	13,640.3	44.4	3,176.2	21,082.0	26.2
8423	123.8	311.5	56.9	653.8	794.9	90.3	607.7	1,087.4	71.7
8424	259.5	1,110.5	37.9	756.0	3,583.3	34.8	803.4	6,330.4	22.5
8425	192.1	253.5	86.2	177.7	1,088.4	28.1	198.5	1,662.4	21.3
8426	114.8	1,746.9	12.3	1,942.3	7,827.6	39.8	1,392.2	17,187.3	15.0
8427	7.1	482.1	2.9	136.7	395.9	51.3	415.2	1,390.3	46.0
8428	1,127.2	1,175.4	97.9	1,342.0	6,254.2	35.3	1,311.9	12,000.6	19.7
8429	34.0	734.5	8.8	2,116.6	3,329.5	77.7	1,411.1	6,372.9	36.3
8430	368.2	7,219.2	9.7	1,342.1	5,105.2	41.6	759.3	3,818.6	33.2
8431	755.0	29,997.1	4.9	1,410.9	46,838.4	5.8	2,207.7	49,326.1	8.6
8432	472.8	120.1	40.5	1,770.9	623.9	52.1	2,248.3	1,272.4	72.3
8433	38.5	166.9	37.5	222.2	1,451.7	26.5	503.0	1,159.4	60.5
8434	51.1	766.9	12.5	64.8	3,105.9	4.1	141.7	1,432.0	18.0
8435	66.8	17.0	40.7	148.4	255.9	73.4	110.9	887.1	22.2
8436	148.1	424.1	51.8	94.9	2,047.1	8.9	635.4	2,248.8	44.1
8437	552.5	1,153.9	64.8	1,246.9	1,650.7	86.1	2,109.3	2,569.9	90.2
8438	237.9	909.1	41.5	3,082.3	5,747.9	69.8	5,117.8	9,996.2	67.7
8439	69.5	1,453.7	9.1	377.4	5,074.5	13.8	812.8	19,924.3	7.8
8440	29.5	256.7	20.6	79.4	409.4	32.5	151.9	1,453.5	18.9
8441	183.8	574.4	48.5	1,661.9	4,479.9	54.1	1,704.8	9,854.6	29.5

(contd.)

Table A1. (Contd.)

	1988			1995			1996		
CODE (1)	Export (2)	Import (3)	GLi (4)	Export (5)	Import (6)	GLi (7)	Export (8)	Import (9)	GLi (10)
8442	95.7	1,226.5	14.5	634.4	2,119.5	46.1	477.9	3,036.3	27.2
8443	914.4	8,285.3	19.9	3,613.4	24,048.8	26.1	5,771.4	47,638.4	21.6
8444	143.0	301.9	64.3	759.3	5,039.3	26.2	49.5	3,097.1	3.1
8445	2,152.8	2,754.1	87.7	10,695.5	86,286.4	22.1	7,463.9	99,263.8	14.0
8446	375.7	2,072.9	30.7	398.1	21,778.6	3.6	201.5	35,254.8	1.1
8447	241.1	586.9	58.2	665.0	9,952.1	12.5	1,066.6	28,868.5	7.1
8448	2,478.2	10,140.6	39.3	5,890.8	41,397.3	24.9	10,840.3	49,018.3	36.2
8449	24.6	120.9	33.8	72.4	385.3	31.6	45.3	688.7	12.3
8450	2.0	231.9	1.7	229.1	317.1	83.9	400.4	736.2	70.4
8451	352.6	856.9	58.3	2,181.7	17,622.2	22.0	1,987.8	18,252.8	19.6
8452	387.8	2,581.5	26.1	2,318.7	18,091.1	22.7	1,775.8	20,517.4	15.9
8453	47.8	2,260.8	4.1	101.4	9,819.3	2.0	232.5	11,376.2	4.0
8454	49.1	1,286.4	7.4	1,539.5	5,152.9	46.0	719.7	6,426.9	20.1
8455	154.4	3,805.0	7.8	1,515.7	10,777.1	24.7	3,512.0	17,017.5	34.2
8456	88.4	148.3	74.7	164.0	1,748.2	17.2	378.1	3,434.1	19.8
8457	12.8	304.3	8.1	21.1	4,170.9	1.0	55.9	13,343.4	0.8
8458	1,612.7	691.2	60.0	2,012.4	3,069.0	79.2	2,248.1	7,486.2	46.2
8459	971.4	3,682.8	41.7	1,421.7	8,512.0	28.6	1,415.7	17,954.4	14.6
8460	1,014.3	2,409.0	59.3	897.6	7,987.9	20.2	997.4	14,795.3	12.6
8461	314.6	1,346.7	37.9	1,967.4	4,243.4	63.4	1,142.8	12,755.8	16.4
8462	661.2	1,738.4	55.1	1,270.6	17,721.5	13.4	1,888.5	20,181.2	17.1
8463	501.7	265.9	69.3	929.3	971.6	97.8	1,827.0	4,160.2	61.0
8464	15.5	318.5	9.3	256.3	5,662.7	8.7	197.9	9,892.1	3.9
8465	132.4	321.5	58.3	1,363.0	1,285.7	97.1	862.1	2,751.1	47.7
8466	2,234.0	9,937.9	36.7	4,347.0	11,688.7	54.2	5,264.2	17,662.1	45.9
8467	128.0	271.5	64.1	2,305.8	810.0	52.0	2,843.0	1,231.2	60.4
8468	37.8	379.4	18.1	196.3	932.6	34.8	229.0	2,417.0	17.3
8469	79.9	8.9	20.0	681.1	325.7	64.7	762.7	449.9	74.2
8470	35.3	17.3	65.7	619.2	297.7	64.9	581.4	431.7	85.2
8471	4,570.5	7,344.2	76.7	26,158.0	39,925.6	79.2	31,507.3	65,048.7	65.3
8472	15.9	122.8	23.0	296.8	1,540.1	32.3	269.5	2,468.4	19.7
8473	800.3	14,087.6	10.8	20,885.4	42,132.6	66.3	40,718.6	59,505.3	81.3
8474	221.2	4,817.7	8.8	935.1	8,401.9	20.0	659.3	12,975.9	9.7
8475	5.4	579.8	1.8	168.4	3,111.7	10.3	741.0	8,113.9	16.7
8476	2.8	141.7	3.9	14.1	141.5	18.1	12.6	244.4	9.8
8477	2,121.6	3,943.0	70.0	6,803.4	29,548.9	37.4	5,520.0	62,503.5	16.2
8478	41.5	118.3	52.0	83.3	3,357.1	4.8	89.7	1,552.7	10.9
8479	2,654.4	19,948.5	23.5	13,185.2	51,145.7	41.0	20,192.6	83,372.1	39.0
8480	159.1	3,718.0	8.2	1,302.7	13,548.4	17.5	1,299.4	19,339.2	12.6
8481	448.1	12,832.4	6.7	7,633.8	24,926.5	46.9	8,862.9	36,631.2	39.0
8482	135.7	9,709.8	2.8	2,571.7	28,362.2	16.6	5,376.8	47,214.6	20.4
8483	304.5	15,023.8	4.0	2,954.1	39,568.4	13.9	3,898.1	53,995.5	13.5
8484	36.0	491.6	13.7	765.2	2,177.8	52.0	1,093.0	5,985.5	30.9
8485	171.4	2,101.5	15.1	1,439.9	12,430.6	20.8	1,750.7	12,904.9	23.9
8501	454.9	3,287.6	24.3	4,578.1	12,840.5	52.6	4,935.2	24,998.2	33.0
8502	172.6	2,642.6	12.3	2,203.3	16,453.6	23.6	5,482.2	36,577.0	26.1

(contd...)

Table A1. (Contd.)

	1988			1995			1996		
CODE (1)	Export (2)	Import (3)	GLi (4)	Export (5)	Import (6)	GLi (7)	Export (8)	Import (9)	GLi (10)
8503	304.2	6,473.4	9.0	744.5	39,943.2	3.7	1,237.4	78,729.8	3.1
8504	1,306.3	4,601.7	44.2	10,736.9	13,872.7	87.3	14,806.1	25,305.3	73.8
8505	178.1	797.9	36.5	2,617.0	3,882.0	80.5	2,872.4	5,068.1	72.3
8506	1,104.3	615.9	71.6	656.5	2,206.2	45.9	1,075.4	3,619.8	45.8
8507	4,926.0	1,989.0	57.5	2,907.6	2,355.3	89.5	3,217.5	3,831.9	91.3
8508	331.7	324.4	98.9	96.5	1,160.8	15.3	275.1	2,076.3	23.4
8509	95.9	169.1	72.4	1,052.2	235.2	36.5	1,158.6	421.5	53.3
8510	53.7	1.7	6.2	4.3	28.9	26.0	12.8	116.8	19.8
8511	146.6	744.6	32.9	762.5	2,613.6	45.2	762.3	4,052.3	31.7
8512	129.5	146.6	93.8	2,748.5	452.1	28.3	3,389.3	3,060.5	94.9
8513	11.2	12.5	94.7	164.5	167.4	99.1	131.6	732.1	30.5
8514	60.5	1,409.4	8.2	474.0	4,792.2	18.0	445.3	6,684.4	12.5
8515	160.3	1,982.7	15.0	334.1	4,657.8	13.4	555.0	8,650.0	12.1
8516	55.1	497.8	19.9	1,360.8	1,512.1	94.7	1,786.1	2,925.2	75.8
8517	194.4	6,596.4	5.7	2,196.8	30,368.0	13.5	4,705.5	28,732.0	28.1
8518	166.7	716.9	37.7	2,890.6	3,356.0	92.5	4,096.8	5,053.0	89.5
8519	517.9	160.7	47.4	196.5	369.1	69.5	114.0	1,002.5	20.4
8520	147.4	139.3	97.2	356.7	235.6	79.6	436.1	730.2	74.8
8521	42.4	284.2	26.0	1,290.6	1,031.9	88.9	1,329.1	1,980.4	80.3
8522	30.5	4,007.9	1.5	619.1	6,910.3	16.4	82.7	13,400.2	1.2
8523	103.7	1,260.9	15.2	10,192.6	1,557.9	26.5	9,545.6	4,308.5	62.2
8524	1,210.8	636.0	68.9	27,565.3	17,181.3	76.8	42,415.5	49,337.9	92.5
8525	30.8	2,656.0	2.3	1,756.8	9,056.9	32.5	5,020.1	21,021.4	38.6
8526	173.4	1,903.4	16.7	37.5	4,924.4	1.5	198.1	4,052.1	9.3
8527	101.4	62.7	76.5	1,145.1	377.6	49.6	15,478.7	1,534.2	18.0
8528	92.7	43.6	63.9	8,689.3	1,578.0	30.7	12,761.2	4,066.6	48.3
8529	424.5	13,837.3	6.0	2,703.3	23,695.1	20.5	1,902.0	36,492.2	9.9
8530	8.1	206.2	7.6	91.4	1,136.2	14.9	38.8	339.7	20.5
8531	25.9	237.0	19.7	241.5	684.5	52.2	432.2	2,421.8	30.3
8532	507.9	3,379.7	26.1	2,566.7	15,192.2	28.9	3,059.8	15,920.7	32.2
8533	133.6	2,045.7	12.3	1,524.8	9,231.6	28.4	1,989.6	8,534.6	37.8
8534	139.6	1,069.1	23.1	3,864.3	6,048.8	78.0	7,677.3	11,549.0	79.9
8535	820.2	647.7	88.2	5,966.4	1,313.6	36.1	7,348.1	6,870.2	96.6
8536	513.2	5,738.4	16.4	6,169.6	23,364.5	41.8	10,414.6	29,550.7	52.1
8537	132.4	742.2	30.3	1,474.6	6,743.0	35.9	1,245.2	8,309.8	26.1
8538	420.6	5,535.9	14.1	1,086.6	7,424.6	25.5	2,067.2	10,552.5	32.8
8539	133.9	839.9	27.5	2,816.9	4,648.1	75.5	4,441.9	6,564.1	80.7
8540	3,488.7	12,699.7	43.1	5,789.0	19,103.3	46.5	7,836.4	40,146.9	32.7
8541	371.9	5,597.5	12.5	2,631.1	24,455.1	19.4	4,853.5	31,593.8	26.6
8542	739.7	9,379.1	14.6	2,396.1	40,987.4	11.0	21,479.5	75,799.9	44.2
8543	266.2	2,105.9	22.4	361.3	7,341.5	9.4	1,189.7	10,507.0	20.3
8544	3,552.5	4,737.4	85.7	5,345.5	14,197.4	54.7	4,895.6	23,868.9	34.0
8545	662.5	466.1	82.6	11,231.7	4,433.2	56.6	17,720.8	5,646.4	48.3
8546	406.8	794.7	67.7	2,978.8	1,730.5	73.5	3,426.1	5,602.6	75.9
8547	211.7	229.1	96.1	7,790.8	1,593.7	34.0	7,621.9	2,331.8	46.9
8548	1,188.8	7,896.0	26.2	671.8	13,555.3	9.4	1,150.4	23,870.9	9.2

(contd...)

Table A1. (Concld.)

CODE (1)	1988 Export (2)	1988 Import (3)	1988 GLi (4)	1995 Export (5)	1995 Import (6)	1995 GLi (7)	1996 Export (8)	1996 Import (9)	1996 GLi (10)
8601	0.0	1.9	0.0	0.0	18.2	0.0	0.0	12,696.2	0.0
8602	0.0	659.0	0.0	3,520.0	0.0	0.0	0.0	46.3	0.0
8603	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0	0.0
8604	0.0	369.6	0.0	1.8	1,805.3	0.2	0.0	0.0	0.0
8605	163.3	0.0	0.0	330.2	0.0	0.0	1,161.9	0.0	0.0
8606	11.7	0.0	0.0	733.9	0.0	0.0	351.5	33.9	17.6
8607	401.5	6,746.4	11.2	1,086.7	3,014.6	53.0	1,061.8	3,355.2	48.1
8608	152.2	119.9	88.1	678.7	79.6	21.0	882.8	8.1	1.8
8609	1,583.3	0.4	0.0	1,465.2	257.0	29.8	264.4	647.6	58.0
8701	98.5	25.3	40.8	3,955.9	233.6	11.1	6,405.6	778.9	21.7
8702	1,048.6	7.1	1.4	14,160.2	42.4	0.6	18,027.4	114.8	1.3
8703	889.7	584.6	79.3	45,456.2	5,875.3	22.9	60,876.5	15,954.4	41.5
8704	623.4	40.0	12.1	10,982.2	1,934.8	30.0	12,090.6	86.4	1.4
8705	92.8	583.6	27.4	1,473.4	141.9	17.6	593.5	588.4	99.6
8706	2,671.1	19.5	1.5	37,524.1	503.2	2.6	36,347.2	115.6	0.6
8707	701.5	482.8	81.5	1,472.7	999.1	80.8	1,871.5	3,577.5	68.7
8708	5,708.4	17,027.0	50.2	39,931.2	75,143.0	69.4	54,569.0	124,438.5	61.0
8709	90.1	357.3	40.3	766.8	341.5	61.6	2,914.3	2,651.8	95.3
8710	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
8711	889.2	3.5	0.8	22,349.4	23.9	0.2	30,703.2	41.3	0.3
8712	1,377.7	0.0	0.0	14,649.7	0.4	0.0	14,217.9	1.0	0.0
8713	22.5	0.2	1.7	0.0	6.1	0.0	7.8	16.4	64.5
8714	7,373.2	6,824.9	96.1	35,021.9	6,247.3	30.3	63,424 9	6,740.8	19.2
8715	1.4	0.0	0.0	51.6	0.0	0.0	38.4	7.6	33.1
8716	608.0	122.2	33.5	402.0	558.2	83.7	592.0	665.7	94.1
8801	0.4	19.1	3.9	28.2	51.9	70.4	6.1	0.0	0.0
8802	0.0	12,907.9	0.0	0.0	133,685.3	0.0	0.0	72,499.7	0.0
8803	667.0	14,037.3	9.1	2,122.7	96,160.5	4.3	2,204.0	90,493.1	4.8
8804	0.0	0.0	0.0	0.0	2.0	0.0	0.0	4.1	0.0
8805	13.8	1,004.3	2.7	360.9	148.4	58.3	34.4	168.4	34.0
8901	93.4	3,005.0	6.0	3,120.1	2,749.6	93.7	12.5	559.6	4.4
8902	12.7	1,532.7	1.6	0.0	4,479.1	0.0	0.0	8,324.0	0.0
8903	16.7	0.0	0.0	62.3	202.2	47.1	87.1	115.9	85.8
8904	0.0	25.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0
8905	0.0	3,757.2	0.0	59.9	5,276.6	2.2	0.0	17,275.2	0.0
8906	0.0	0.0	0.0	0.0	21.9	0.0	3.1	7.8	57.1
8907	0.0	1.0	0.0	22.9	24.0	97.6	21.1	136.9	26.8
8908	0.0	5,752.4	0.0	123.0	9,842.2	2.5	20.1	8,308.4	0.5

Source: Same as for Table 1.

Table A2. Intensity of Intra Industry Trade Across Capital Goods Industries: Bilateral

(Figures in Rs Thousands)

	1988			1995			1996		
CODE (1)	X (2)	M (3)	GLi (4)	X (5)	M (6)	GLi (7)	X (8)	M (9)	GLi (10)
8401	183.5	87.0	0.64	0.0	0.0	0.00	0.0	0.0	0.00
8402	13.5	46,149.4	0.00	3,227.8	3,194.8	0.99	1,501.7	16,392.6	0.17
8403	235.9	99,301.7	0.00	2.8	198.2	0.03	651.9	15,172.9	0.08
8404	0.0	34,366.6	0.00	21.9	1,567.4	0.03	101.3	8,810.3	0.02
8405	77.3	26,805.6	0.01	28.5	11,221.4	0.01	2,869.9	17,795.5	0.28
8406	170.5	159,378.9	0.00	5,233.2	93,603.9	0.11	31,350.5	302,231.1	0.19
8407	1,553.8	1,605.0	0.98	14,870.7	105,258.3	0.25	34,776.0	56,989.8	0.76
8408	10,128.7	40,621.6	0.40	384,504.7	161,677.5	0.59	308,261.8	610,963.2	0.67
8409	17,020.6	130,233.8	0.23	139,714.9	537,427.5	0.41	171,850.3	610,503.0	0.44
8410	0.0	4,417.6	0.00	1,056.8	3,252.9	0.49	0.0	22,833.3	0.00
8411	6,969.4	383,101.7	0.04	57,116.2	1212,232.1	0.09	4,830.8	1230,691.0	0.01
8412	34.6	15,795.8	0.00	6,386.5	127,847.9	0.10	11,984.1	127,292.1	0.17
8413	9,058.0	148,884.4	0.11	160,845.7	451,355.2	0.53	149,376.2	681,931.2	0.36
8414	123,048.1	226,013.7	0.71	333,158.7	581,929.8	0.73	331,018.4	934,406.2	0.52
8415	0.0	7,769.8	0.00	1,460.8	43,467.6	0.07	3,009.5	78,833.7	0.07
8416	0.0	8,598.7	0.00	0.0	14,304.5	0.00	31.9	93,286.6	0.00
8417	8.3	18,156.5	0.00	1,818.0	72,584.3	0.05	2,590.0	107,462.4	0.05
8418	58.0	15,355.0	0.01	6,850.4	113,499.4	0.11	3,876.6	346,509.4	0.02
8419	1,236.9	58,413.7	0.04	10,204.3	169,803.7	0.11	16,759.5	469,728.0	0.07
8420	0.0	3,602.1	0.00	239.4	18,439.7	0.03	2,456.2	28,408.6	0.16
8421	718.4	73,791.8	0.02	4,428.9	271,216.5	0.03	41,767.5	597,779.1	0.13
8422	939.2	13,081.0	0.13	8,152.6	73,330.0	0.20	22,020.2	232,110.0	0.17
8423	0.0	1,716.0	0.00	14,114.5	10,275.6	0.84	5,495.0	9,637.4	0.73
8424	792.7	23,922.2	0.06	8,859.9	71,282.6	0.22	7,970.9	142,888.7	0.11
8425	2.6	1,213.5	0.00	78.2	18,339.7	0.01	2,581.2	25,135.7	0.19
8426	0.0	65,958.2	0.00	0.0	193,023.6	0.00	0.0	269,732.5	0.00
8427	0.0	25,535.5	0.00	0.0	620.7	0.00	2,174.6	5,552.6	0.56
8428	194.1	14,202.9	0.03	6,143.6	152,955.8	0.08	12,090.7	169,711.9	0.13
8429	0.0	8,117.4	0.00	3,598.6	146,429.6	0.05	0.0	77,839.3	0.00
8430	1,146.1	363,865.9	0.01	18,743.6	180,781.9	0.19	30,524.0	221,933.1	0.24
8431	1,198.2	654,160.6	0.00	21,821.4	1584,417.0	0.03	21,355.7	1137,234.1	0.04
8432	1,862.1	154.2	0.15	25,090.6	2,453.4	0.18	27,003.5	15,642.5	0.73
8433	0.0	2,782.2	0.00	1,613.1	56,138.6	0.06	22,428.9	12,351.0	0.71
8434	0.0	198.9	0.00	436.4	38,833.4	0.02	0.0	56,993.4	0.00
8435	53.4	63.3	0.92	531.0	5,244.3	0.18	49.2	3,436.7	0.03
8436	0.0	582.5	0.00	0.0	72,582.4	0.00	3,311.0	57,715.1	0.11
8437	587.2	29,554.2	0.04	2,736.1	22,866.5	0.21	6,653.9	56,113.8	0.21
8438	873.1	15,056.7	0.11	1,206.4	51,621.8	0.05	23,461.5	153,484.4	0.27
8439	0.0	7,419.9	0.00	1,436.7	41,317.1	0.07	3,395.0	28,328.2	0.21
8440	0.0	341.7	0.00	306.7	1,762.5	0.30	5,527.7	1,209.5	0.36
8441	81.8	8,161.9	0.02	3,417.9	46,910.3	0.14	4,292.5	60,481.6	0.13
8442	162.0	42,146.9	0.01	13,925.3	67,176.7	0.34	1,586.4	90,680.3	0.03
8443	100.4	66,159.1	0.00	31,684.5	373,789.2	0.16	83,381.7	232,786.7	0.53

(Contd.)

Table A2. (Contd.)

	1988			1995			1996		
CODE (1)	X (2)	M (3)	GLi (4)	X (5)	M (6)	GLi (7)	X (8)	M (9)	GLi (10)
8444	0.0	324.4	0.00	317.6	2,829.6	0.20	412.4	58,874.7	0.01
8445	1,638.2	10,900.6	0.26	23,578.2	296,321.7	0.15	19,849.6	259,062.0	0.14
8446	4,888.7	805.4	0.28	0.0	9,901.7	0.00	0.0	94,832.3	0.00
8447	4.9	986.7	0.01	3,522.4	19,163.6	0.31	2,184.7	198,773.7	0.02
8448	7,702.7	44,469.8	0.30	21,193.6	131,835.2	0.28	51,270.6	232,764.5	0.36
8449	80.8	546.8	0.26	14.2	105.0	0.24	0.0	4,229.8	0.00
8450	0.0	2,090.5	0.00	7.4	103.5	0.13	341.6	12,554.1	0.05
8451	1,356.4	3,912.7	0.51	5,844.2	139,490.7	0.08	16,985.4	148,596.7	0.21
8452	1,205.3	4,125.4	0.45	19,103.3	30,701.5	0.77	28,536.6	50,967.3	0.72
8453	0.0	5,270.6	0.00	2.0	11,580.9	0.00	2,747.8	12,699.3	0.36
8454	6.7	3,684.3	0.00	1,959.6	118,635.9	0.03	2,366.5	37,773.2	0.12
8455	326.7	4,587.8	0.13	18,924.7	227,628.0	0.15	32,731.9	772,330.0	0.08
8456	43.9	269.8	0.28	148.8	27,811.4	0.01	0.0	31,138.7	0.00
8457	46.6	0.0	0.00	0.0	45.7	0.00	0.0	80,395.0	0.00
8458	1,959.1	316.6	0.28	21,247.0	12,178.9	0.73	11,805.3	50,403.0	0.38
8459	1,762.4	14,492.3	0.22	6,041.9	14,541.3	0.59	10,038.7	139,222.9	0.13
8460	216.3	17,803.4	0.02	3,282.6	42,097.9	0.14	8,745.9	145,886.8	0.11
8461	2,018.6	22,371.3	0.17	4,043.4	84,639.0	0.09	19,073.9	142,953.0	0.24
8462	178.8	8,906.1	0.04	2,204.1	126,278.8	0.03	13,083.8	114,703.1	0.20
8463	517.1	1,350.7	0.55	4,526.7	6,761.8	0.80	3,205.7	64,116.2	0.10
8464	90.6	7,166.5	0.02	229.7	3,507.1	0.12	2,938.0	35,945.2	0.15
8465	182.4	7,613.8	0.05	2,917.6	4,301.7	0.81	12,018.6	42,926.5	0.44
8466	10,185.3	58,422.4	0.30	128,280.8	87,642.6	0.81	135,225.8	116,626.9	0.93
8467	365.8	5,509.6	0.12	156,242.7	23,348.2	0.26	1741,858.2	50,599.4	0.06
8468	4.3	4,702.1	0.00	2,684.9	18,518.0	0.25	3,574.9	52,944.7	0.13
8469	0.0	382.7	0.00	1,294.8	2,644.7	0.66	312.3	14,053.9	0.04
8470	0.0	0.0	0.00	9,713.7	1,453.0	0.26	3,190.3	1,806.1	0.72
8471	48,907.3	360,592.8	0.24	684,825.3	1363,146.7	0.67	933,655.1	2539,770.8	0.54
8472	629.8	2,855.5	0.36	1,344.3	15,968.2	0.16	1,286.0	69,311.5	0.04
8473	10,208.7	541,740.0	0.04	243,303.7	1040,323.3	0.38	750,570.0	1527,438.8	0.66
8474	2,946.6	69,287.9	0.08	1,859.2	182,413.6	0.02	8,683.2	196,376.0	0.08
8475	0.0	4,773.1	0.00	1,037.8	44,889.6	0.05	10,843.8	157,180.4	0.13
8476	0.0	2,338.9	0.00	290.9	8,662.0	0.06	362.2	3,896.1	0.17
8477	473.3	38,825.1	0.02	14,927.0	135,493.0	0.20	32,518.9	560,635.7	0.11
8478	0.0	513.6	0.00	1,095.5	10,107.0	0.20	106.9	20,876.5	0.01
8479	8,327.1	267,266.5	0.06	50,064.6	776,262.9	0.12	66,348.8	1228,672.7	0.10
8480	556.0	28,559.1	0.04	1,981.0	128,978.7	0.03	5,427.1	182,221.2	0.06
8481	2,922.2	182,006.7	0.03	119,975.8	418,493.7	0.45	146,376.3	692,095.7	0.35
8482	3,607.1	192,068.1	0.04	134,164.1	386,238.0	0.52	254,660.9	683,489.1	0.54
8483	2,129.4	242,507.4	0.02	39,492.8	516,822.1	0.14	47,459.2	867,179.4	0.10
8484	109.9	7,175.2	0.03	3,379.5	39,135.3	0.16	6,799.1	47,415.2	0.25
8485	1,775.7	29,153.7	0.11	21,056.0	178,217.2	0.21	12,394.9	149,672.0	0.15
8501	160.2	18,485.0	0.02	24,716.8	138,132.7	0.30	44,013.4	310,924.0	0.25
8502	18.3	12,910.7	0.00	4,546.8	14,182.2	0.49	216,157.5	268,602.7	0.89
8504	44,992.7	53,590.7	0.91	90,253.8	195,968.6	0.63	76,307.1	283,921.7	0.42

(Contd...)

Table A2. (Contd.)

	1988			1995			1996		
CODE (1)	X (2)	M (3)	GLi (4)	X (5)	M (6)	GLi (7)	X (8)	M (9)	GLi (10)
8505	1,490.6	6,096.8	0.39	8,392.7	48,959.4	0.29	32,085.3	72,207.5	0.62
8506	17.7	3,758.1	0.01	7,167.5	37,490.2	0.32	267.3	61,639.6	0.01
8503	212.6	27,996.6	0.02	3,975.8	859,045.2	0.01	9,560.7	735,489.3	0.03
8507	0.0	2,427.0	0.00	14,029.1	18,057.4	0.87	9,672.4	37,850.2	0.41
8508	14,125.1	2,497.2	0.30	4,748.2	9,656.1	0.66	1,848.7	18,364.3	0.18
8509	81.7	1,740.6	0.09	2,062.5	1,311.2	0.78	7,045.5	3,626.0	0.68
8510	13.5	0.0	0.00	0.0	0.0	0.00	34.5	1,232.6	0.05
8511	3,330.2	8,454.3	0.57	18,697.3	46,683.8	0.57	19,244.1	80,287.3	0.39
8512	44.5	1,814.9	0.05	17,948.3	1,309.4	0.14	19,795.1	12,651.2	0.78
8513	64.4	363.6	0.30	39.2	1,955.3	0.04	812.9	4,936.4	0.28
8514	292.9	21,245.7	0.03	8,012.7	118,612.4	0.13	7,834.2	130,484.6	0.11
8515	4,813.1	20,091.3	0.39	3,394.2	168,287.3	0.04	1,247.1	216,781.6	0.01
8516	237.3	4,337.7	0.10	24,060.0	20,725.6	0.93	40,493.4	34,883.3	0.93
8517	978.8	53,464.0	0.04	68,261.7	711,424.8	0.18	166,734.5	572,172.1	0.45
8518	750.1	23,095.0	0.06	53,154.0	50,029.6	0.97	83,832.5	85,691.0	0.99
8519	162.5	44.6	0.43	224.7	8,793.1	0.05	924.1	5,121.6	0.31
8520	52.1	3,340.5	0.03	9,236.1	2,875.1	0.47	8,920.5	20,372.0	0.61
8521	197.8	16,379.7	0.02	1,083.5	19,545.9	0.11	0.0	25,579.2	0.00
8522	76.3	25,897.1	0.01	1,083.5	46,427.6	0.05	1,078.9	19,829.4	0.10
8523	1,285.4	38,188.9	0.07	18,482.6	31,364.3	0.74	43,058.3	92,348.0	0.64
8524	6,875.9	39,097.3	0.30	584,234.2	657,485.0	0.94	1527,547.6	1745,282.0	0.93
8525	553.1	121,117.2	0.01	9,045.6	148,582.0	0.11	11,467.0	596,836.0	0.04
8526	113.4	8,145.5	0.03	1,160.8	238,930.7	0.01	12,672.8	221,725.3	0.11
8527	3,463.3	1,800.4	0.68	6,449.8	8,331.5	0.87	14,238.6	30,207.1	0.64
8528	13.9	416.5	0.06	24,979.6	20,764.2	0.91	89,644.6	21,499.1	0.39
8529	657.8	101,799.6	0.01	20,093.8	349,655.4	0.11	49,320.7	604,602.0	0.15
8530	554.4	1,028.9	0.70	647.8	70,526.4	0.02	0.0	13,924.2	0.00
8531	38.2	5,014.9	0.02	4,489.5	14,107.8	0.48	5,867.9	50,310.6	0.21
8532	11,015.2	68,751.6	0.28	195,252.8	177,541.2	0.95	194,369.2	206,421.2	0.97
8533	3,189.3	37,248.3	0.16	4,757.0	81,856.2	0.11	6,042.7	115,249.1	0.10
8534	567.2	16,921.6	0.06	231,580.1	80,802.2	0.52	311,711.2	257,271.7	0.90
8535	3,997.5	13,802.0	0.45	33,027.6	14,819.7	0.62	59,029.9	33,726.3	0.73
8536	2,659.7	123,245.0	0.04	113,104.3	390,928.6	0.45	218,011.7	467,375.5	0.64
8537	912.3	23,013.3	0.08	2,312.3	181,448.7	0.03	38,231.5	127,430.1	0.46
8538	5,883.9	68,603.2	0.16	14,013.7	171,004.3	0.15	41,217.9	191,600.5	0.35
8539	1,334.9	10,057.6	0.23	14,442.1	36,864.1	0.56	32,089.9	51,505.2	0.77
8540	8,452.5	18,856.3	0.62	78,542.4	166,220.3	0.64	243,080.7	271,353.8	0.95
8541	26,994.9	112,457.0	0.39	141,562.2	406,174.1	0.52	191,741.9	542,477.5	0.52
8542	6,416.3	226,040.7	0.06	92,399.6	883,273.9	0.19	52,597.6	2433,152.2	0.04
8543	1,282.9	28,016.8	0.09	9,816.8	182,109.7	0.10	58,172.4	269,648.4	0.35
8544	5,271.4	49,982.1	0.19	19,635.3	273,980.4	0.13	18,882.9	701,753.3	0.05
8545	264.2	2,170.0	0.22	172,364.7	10,175.0	0.11	161,650.5	129,590.5	0.89
8546	1,624.4	4,215.1	0.56	11,649.1	25,377.8	0.63	18,133.8	37,474.9	0.65
8547	600.1	1,935.3	0.47	223,882.1	7,829.4	0.07	202,784.7	11,141.3	0.10
8548	22,850.0	108,632.4	0.35	12,715.7	288,294.7	0.08	27,931.7	424,142.4	0.12
8603	0.0	0.0	0.00	1,531.0	0.0	0.00	0.0	0.0	0.00

(Contd...)

Table A2. (Concld.)

	1988			1995			1996		
CODE (1)	X (2)	M (3)	GLi (4)	X (5)	M (6)	GLi (7)	X (8)	M (9)	GLi (10)
8604	0.0	0.0	0.00	0.0	180,529.2	0.00	0.0	0.0	0.00
8607	1,143.7	7,511.6	0.26	12,935.7	7,070.4	0.71	15,199.4	17,718.4	0.92
8608	0.0	75.2	0.00	21,103.2	600.6	0.06	21,613.0	20.0	0.00
8609	2,213.4	31.0	0.03	36,675.4	11,840.3	0.49	4,708.3	19,734.4	0.39
8701	243.5	0.0	0.00	190,713.1	2,025.2	0.02	293,261.6	6,993.9	0.05
8702	0.0	0.0	0.00	81.3	400.0	0.34	0.0	0.0	0.00
8703	243.5	1,916.2	0.23	2,963.1	10,429.4	0.44	11,727.1	60,462.2	0.32
8704	0.0	2,724.2	0.00	24,130.1	2,174.8	0.17	0.0	0.0	0.00
8705	0.0	16,798.4	0.00	53,727.5	3,206.0	0.11	0.0	15,437.3	0.00
8706	0.0	0.0	0.00	0.0	50,323.3	0.00	11,165.8	3,187.0	0.44
8707	5,526.9	5,225.6	0.97	44,561.5	13,909.8	0.48	39,187.3	11,202.5	0.44
8708	0.0	75,498.5	0.00	1284,543.8	447,625.7	0.52	1671,456.9	399,924.5	0.39
8709	252.3	9,429.3	0.05	13,320.8	12,378.1	0.96	42,003.8	8,360.9	0.33
8711	96.8	0.0	0.00	222,997.4	240.8	0.00	319,122.2	699.6	0.00
8712	33.0	0.0	0.00	15,694.2	4.3	0.00	55,696.2	46.3	0.00
8713	0.0	0.0	0.00	0.0	34.5	0.00	0.0	127.1	0.00
8714	6,514.3	775.3	0.21	136,160.6	1,952.8	0.03	328,029.5	740.1	0.00
8715	0.0	0.0	0.00	0.0	0.0	0.00	31.3	0.0	0.00
8716	8,981.7	2,421.3	0.42	9,073.0	1,337.8	0.26	14,772.5	27,869.4	0.69
8802	0.0	606,930.3	0.00	0.0	7583,727.2	0.00	0.0	6012,914.7	0.00
8803	25,870.8	448,523.9	0.11	10,684.9	7615,305.0	0.00	22,169.6	4621,759.9	0.01
8804	0.0	0.0	0.00	0.0	59.8	0.00	0.0	0.0	0.00
8805	108.4	2,862.9	0.07	1,025.8	1,038.0	0.99	1,977.7	2,942.6	0.80
8901	64.4	0.0	0.00	0.0	199.2	0.00	0.0	0.0	0.00
8902	0.0	51,402.6	0.00	0.0	0.0	0.00	0.0	0.0	0.00
8903	0.0	0.0	0.00	0.0	5,035.3	0.00	0.0	9,596.7	0.00
8905	0.0	0.0	0.00	0.0	9,652.2	0.00	0.0	0.0	0.00
8907	0.0	0.0	0.00	335.1	0.0	0.00	0.0	0.0	0.00
8908	0.0	0.0	0.00	0.0	63,603.5	0.00	0.0	0.0	0.00

Source: Same as for Table 1.

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UNITARY ELEMENTS IN A FEDERAL CONSTITUTION*

V.M. Dandekar

The Indian constitution is in the words of Ambedkar, 'both unitary as well as federal according to the requirements of time and circumstances'. The unitary bias became gradually clear in the legislative provisions about the state and the concurrent lists. The creation of the Planning Commission and its control over and direction of funds for the state plan exacerbated these tendencies further. Whatever their justifications at the time the constitution was framed, they appear to have lost their relevance now. The plan models have been used to enforce discipline on the states as well as the Centre. This hegemony of model builders and sophisticated statisticians is not confined to the Planning Commission, but also appears in the reports of the Finance Commissions, as illustrated by the poverty exercise in the report of the Seventh Finance Commission and the normative approach in the report of the Ninth Finance Commission. It is necessary to be aware of the pitfalls and dangers of such exercises and rethink the basic approach.

The Indian constitution does not explicitly use the term 'federation'. Instead, Article 1 declares that India that is Bharat shall be a Union of states. B. R. Ambedkar explained that in this, the drafting committee had merely followed the usage in the preamble to the British North America Act, 1867. Of course, that does not make India a unitary state. The basic difference between a unitary system and a federal system is that, while in the former the demarcation of powers between the national and the sub-national governments is made by the national government, in the latter this demarcation is made by a written constitution which is the source of authority of the national and the sub-national governments both. This is true of the Indian constitution. In its Seventh Schedule, the constitution lays down in great detail, in three lists, namely, the union list, the state list, and the concurrent list, the distribution of legislative powers between the union and the states. Moreover, it recognises that the division of the legislative powers must be supported by a division of financial powers and demarcates the spheres of taxation into three lists, a union list and a state list, to be exploited independently and exclusively by the union and states.

Further, anticipating that the revenues of the states from taxes in the state list may fall short of the states' expenditure on functions assigned to them, the constitution provides a comprehensive arrangement for sharing between the union and the states the revenues from some of the taxes in the union list. For this purpose, it requires that an independent Finance Commission shall be appointed at the end of every fifth year or earlier if the president considers it necessary. Over the years, the transfer of revenue resources from the union to the states under the recommendations of the successive Finance Commissions has increased.

But the Constitution did not anticipate that the country would soon adopt the strategy of planned development and did not provide for the appointment of a Planning Commission with well defined powers and functions. The Planning Commissions subsequently appointed are not statutory bodies as are the Finance Commissions and, not being creation of the constitution, they do not suffer any constitutional limitations on their powers. They are appointed by the Union government and essentially are organs of that government. A Planning Commission by the nature of its functions and objectives is inherently

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V.M. Dandekar was Hon. Fellow and President of Indian School of Political Economy.

* Late Professor V.M. Dandekar was engaged in editing and to a certain extent updating his writings for publication when he died at the end of July 1995. A large part of his writings, thus completed, have been published in two volumes by Sage Publications, New Delhi. He had nearly completed only three chapters of the third and final volume when he died. This is one of these three chapters. It is being published here partly because of the current relevance of the issues discused in it. - Editor.

unitary and not federal in its intentions and operations and successive Planning Commissions, in the name of real or supposed needs of planned development, have tended to expand and extend the authority of the Union government often in total disregard of the federal intentions of the Constitution. The late C. N. Annadurai, then the chief minister of Tamil Nadu, had sensed this. While presenting the budget to the state legislature on June 17, 1967 he said, 'There has been considerable change in the matrix of Centre-State financial relations since the provisions of the Constitution in this regard were settled. There have been a number of new trends and developments which could not have been visualised when the Indian constitution was framed. The Constitution had already provided for considerable concentration of powers in the hands of the Central government. Through a new institution, which was beyond the ken of the architects of the constitution, the Centre has acquired still larger powers causing concern about the position of the states. This new development relates to economic planning. The powers which the central government has assumed in regard to mobilisation, allocation, and pattern of utilisation of resources for the plan have reduced the states to the status of supplicants for aid from the Centre' [*Madras Legislative Assembly Debate*, 1967, p. 138]. The protest has gone unheeded for over 28 years but it may not be possible any longer to do so and the states will have to be given an appropriate place in the process of planning.

Unitary Bias of the Constitution

It must be admitted that such unitary tendencies have been facilitated by a certain underlying theme of subordination of the states which runs right through the Constitution. For instance, after distributing the legislative powers in three lists, the union list, the state list, and the concurrent list, residual subjects, that is those not covered by the three lists, are unavoidably left with the Union. Even in matters in the concurrent list, the Constitution provides that the union government shall prevail. Commercial and industrial policy, production, supply and distribution of foodstuffs, price control, trade unions, industrial and labour disputes, employment and unemployment and above all economic and social planning are placed in the concurrent list and the Union has the final say in all these matters.

The state list is impressive: agriculture, irrigation, industries, labour, trade and commerce, production, distribution and supply of goods, education and public health all appear in the state list. But, in almost each case, there are provisos and exceptions. For instance, industries are in the state list but they are subject to the provisions of entry 52 of the Union list, namely, 'industries the control of which by the Union is declared by Parliament by law to be expedient in public interest'. Besides, Article 249 empowers the parliament to make laws with respect to any matter in the state list, if the Council of States (Rajya Sabha) declares by a resolution, supported by at least two-thirds of the members present and voting, that it is necessary or expedient in the national interest. Thus, in spite of its written character, the Constitution has imparted a great deal of flexibility to the division of powers between the Union and the states with a bias generally in favour of the Union enabling it to expand and extend its authority as and when it felt necessary. Perceptively, Ambedkar had said that 'the Indian constitution was both unitary as well as federal according to the requirements of time and circumstances' [*Constituent Assembly Debates*, VII, I, Pp. 33-34].

The historical circumstances in which the country became independent and accepted the strategy of planned economic development have also helped to emphasise the unitary rather than the federal elements in the constitution. Independent India inherited war-shattered and food-short economy and wartime food and price

controls stressed the need for central action. Foreign exchange and import control, distribution of scarce commodities such as coal, steel, and cement, and regulation of inter-state trade and commerce necessary for price control could all be entrusted only to the Union government. There prevailed and exists even today wide popular support for the concept of planned development so that not just the Planning Commission but also the National Development Council and even the states have all along supported enthusiastically an ambitious plan. Planned development requires licensing of industries to conserve capital resources, to prevent their diversion into wasteful channels, and to ensure industrial dispersal into all regions; only the Union government could administer the requisite licensing system. Socialist emphasis on the public sector increased immensely the powers of the union. Though the public sector was not confined to the Union, the bigger industrial corporations and even more so the financial institutions such as the Life Insurance Corporation, the commercial and the development banks, all came to be owned and controlled by the Union government. The concept that a certain minimum needs of the people must be satisfied all over the country gave the Union government a mandate to lay down national targets, including those in the state sector such as irrigation, roads, foodgrains production, education, public health, etc., and to freely exercise Union authority to achieve them. Occasional voicing of concern for the states' autonomy within the federal constitution was branded as parochial.

The Planning Commission

The Planning Commission was set up in March 1950 by a Resolution of the Government of India and has now grown into a large body with the Prime Minister as the Chairman, the Deputy Chairman, several full-time members and the Ministers of Human Resource Development, of Finance, and of Agriculture as ex-officio members. Besides, there is a Minister of State for Planning. The day to day work of the Commission is looked after by the Deputy Chairman. The Commission has a collective responsibility but, for convenience, each member has charge of a group of subjects. In short, it is a parallel mini cabinet under the Prime Minister. It has a large secretariat consisting of a number of divisions (presently as many as 30 in number) which may be classified into four types: (i) general divisions concerned with certain aspects of the entire economy, (ii) subject divisions concerned with specific subjects, (iii) service divisions concerned with administration, accounts, and general services, and (iv) area divisions, called the State Plan Divisions, where state plans are formulated and monitored. By end of March 1993, it had a total staff strength of 5,315. It is one of the very few government agencies which carry a large research staff, consisting of experts from all fields of development. Nevertheless, Dr. Gupta mentions, the composition of the staff is somewhat weighted towards civil servants and bureaucrats, and much of its work, in effect, is a duplication of the jobs of different ministries [(Gupta, 1989, p. 71). If so, it is advisable to avoid this duplication.

The setting up of the Planning Commission to look after plan finance and recommend plan assistance for the states necessitated a demarcation between non-plan and plan expenditure and it became customary to limit the terms of reference of the Finance Commissions to non-plan expenditure only. To see the effect of this change, we should note that the purpose of the grants which the Finance Commission gives under Article 275 is to cover the non-plan revenue deficits after the distribution of the states' shareable pool. Since the non-plan surplus is regarded as an item of plan resources, the Finance Commission's tax-sharing also comes indirectly within the purview of the Planning Commission. The Finance Commission strives to leave as many states as possible with a surplus in their non-plan

revenue accounts hoping that the states may then be free to use this surplus to finance planned development of their own conception. But the states have no freedom to use their non-plan revenue surpluses any more than they have to use the plan assistance from the Union. The two are put together along with any additional financial resources a state may be expected to raise and the expenditure of it all is subject to an overall plan approved by the Planning Commission. That is it. A state may have a non-plan surplus. It may be willing to raise additional resources. It will accept plan assistance of which a larger part is in the form of loans which must be repaid. But it has no freedom, no autonomy in deciding the pattern of its development. Such are the compulsions of a national plan.

Moreover, a large part of the states' plans is in the form of central and centrally sponsored schemes. The result is that the ministries and departments of the Union government, with their enthusiasm and capacity to get more funds from their government, and the corresponding departments of the state governments, with equal enthusiasm but less ability to get funds from their governments, have in collusion managed to unduly increase the number of such schemes. The issue was examined in the Fourth Plan and out of about 125 such schemes 36 were transferred to the states. The Study Team on Financial Administration [Report, 1967, Vol. I, Pp. 86-87] of the Administrative Reforms Commission felt that many more could be so transferred. In 1969, the National Development Council laid down guidelines for such schemes and put a ceiling of one-seventh to one-sixth, say about 15 per cent, of the total block plan assistance to the states. But all this was ignored. The central and centrally sponsored schemes continue to dominate the plan assistance to the states. In 1992-93, according to revised budget estimates the central and centrally sponsored schemes accounted for 30.95 per cent of the total plan assistance to the states amounting to Rs 22,589.12 crore. If we confine attention to plan grants only, the central and centrally sponsored schemes accounted for 45.02 per cent of the total plan grants amounting to Rs 15,155.73 crore. According to the budget estimates for 1993-94, the central and centrally sponsored schemes accounted for 35.49 per cent in total plan assistance and 48.91 per cent in plan grants.

One wonders how the Planning Commission handles this awesome burden. To appreciate how it functions, it will be useful to recapitulate, even if briefly, the planning process and how it moves through the labyrinth of the Planning Commission. The following account is taken from *Planning and Development in India* (in particular, its chapter 2) by S.P. Gupta, who himself was the Advisor and Head of the Perspective Planning Division of the Planning Commission during the Sixth and Seventh Plan formulations. Of course, the material is suitably abridged and edited, hopefully, without distortion.

Planning Process

The first step in Plan making is to prepare an 'Approach Paper' on the basis of estimates of likely long-term changes in the major parameters of growth as well as during the five-year plan period. These are based on the experience of the past, projected requirements in future and likely availability of resources for the next plan worked out by various working groups consisting of officials in the Planning Commission, Central ministries, other institutions, State governments, and experts in the field. As many as 126 working groups were set up in connection with the Seventh Plan.

While initiating work on the 'Approach' at the national level, state governments are also advised to take preliminary steps for formulating their 'Approach' and set up working groups wherever considered necessary. After the Approach Paper is approved by the National Development

Council, the Planning Commission addresses the Central ministries and State governments to formulate detailed proposals of their plans. When the States submit their plan proposals, these are discussed in different working groups.

In the case of Central plan, the concerned division prepares a Status Paper taking into account the recommendations of the concerned working groups, proposals of the relevant ministries, and its own assessment. The Status Paper constitutes the basis of discussion between the Planning Commission and the Secretary of the concerned Central ministry/department. In the light of the discussions with the ministries and the anticipated total resources for the Central plan, the Commission takes a view on the development programme of each ministry/department.

The recommendations of all the working groups on the proposals of a state are considered by the concerned State Plan Adviser. This report forms the basis of discussions between the Planning Commission and the State governments for finalising the plan for each State and its targets of additional resources mobilization.

The Project Appraisal Division makes an appraisal of Central Government projects costing more than Rs 2 crore before they are considered by the Public Investment Board or the Expenditure Finance Committee (EFC). In appraising a project, the Division examines the need for the project, its linkages with the plan, technical and organisational aspects as well as the economic and financial viability of the project. The Division also appraises revised cost estimates of major Central projects when these exceed 20 per cent of the sanctioned cost.

The projects, forwarded for appraisal, are broadly divided into three categories: (i) industrial and non-basic sectors; (ii) infrastructure projects; and (iii) social projects. The appraisal approach differs among them.

For the public sector projects covering non-basic sectors, like watches, drugs, certain chemicals, etc., the criteria for accepting or rejecting a project is mainly based on an assumed economic rate of return of 12 per cent per annum, and whether their production is within the targeted demand for the product. The anticipated output is valued at c.i.f. prices to determine the 'make it or buy it' decision.

For the infrastructure projects, the proposed investment project is recommended if it is found to be the least cost option available to meet the targeted demand. In practice, however, lever the alternatives are hardly available for appraisal. These projects are not constrained in their selection by the economic rates of return criteria of 12 per cent per annum but on the basis of social rates of return which are difficult to estimate both on conceptual and data considerations. Hence, in effect, they are mostly calculated in qualitative terms. The social projects aim mainly to benefit the poorest of the poor and reduce income disparity. The appraisal report in these cases makes an attempt to investigate their benefits in qualitative terms.

The weakest element in the present practice of appraisal of projects is that usually one project is submitted at a time for appraisal and selection, so that it is not possible to make a choice from alternative projects. This creates a special problem in the core sector. The rejection of a proposed project often becomes impossible since it might mean a shortage in the infrastructure facilities stipulated in the plan and preparation of another proposal from the Secretariat takes time. Moreover, quite often, the proposed location of many projects cannot be changed because it is decided mainly on political grounds. Often, the initial project reports are so bad and based on such scanty data that, while passing through the various bureaucratic stages of approval, they have to be reported back time and again causing delay in approval [Gupta, 1989, p. 73].

The identification and presentation of the projects are the prerogatives of implementing ministries and public sector undertakings. The appraisal is done mainly by the Planning Commission and emerges as recommendations. However, the final approval comes from the Public Investment Board (PIB). The PIB is the committee of secretaries entrusted with the investment decisions of public sector projects involving an investment outlay of above Rs 5 crore. Investments worth Rs. 1 to 5 crore go to the EFC. The cabinet generally accepts the recommendations and implementations as per approved project.

The states, as also the several working groups, prepare their plans within broad benchmarks supplied by the Planning Commission which are mostly in broad aggregates and usually at very general levels so that they can be differently interpreted by various working groups. As a result, the working groups often prepare their reports on the basis of mutually inconsistent assumptions. Moreover, the working groups' reports usually come so late that many of their views cannot get incorporated into the plan [Gupta, 1989, p. 72].

At this stage, the working groups, both in the Centre and the states, make their recommendations primarily on the basis of needs and feasibility of programmes and projects, since they do not have a clear idea of the resources likely to be available for development programmes in their respective areas. The total of the outlays recommended by them, therefore, often turn out to be far in excess of what can be accommodated within the total estimated resources. As a result, it becomes necessary to prune the recommendations of the working groups in the process of finalising the Central and State plans.

The estimates of resources of the Centre for the plan are prepared by the Working Group on Financial Resources, which includes, *inter alia*, the representatives of the Planning Commission, the Ministry of Finance, and the Reserve Bank of India. At the same time, the Financial Resources Division of the Planning Commission requests the state governments to furnish estimates of their resources for the plan. Detailed discussions are held with each state government to prepare mutually agreed upon estimates of resources. The five-year plan, after incorporating the Central and state plans, together with their financing schemes, as finally approved by the Planning Commission, is considered by the Union Cabinet. After its approval, the plan is placed before the National Development Council and, after the Council approves, it is placed before the two Houses of Parliament.

The procedures for the formulation of annual plans is broadly the same as that adopted for the five-year plan. However, in the case of the Centre, there is a slight variation. First, the estimates of Central resources are called for from the Ministry of Finance and finalised in consultation with them since there is no Resources Working Group on central resources for the annual plan. Secondly, discussions with Central Ministries are held on the plan proposals sent as drafts by them. All meetings for this purpose are convened by the Secretary, Planning Commission, with the secretary of the concerned ministry/department. Further, since the annual plan is formulated within the framework of a five-year plan, the discussions with outside organizations and experts are on a limited scale.

The annual plan exercises have been increasingly confined almost exclusively to resource-availability, and the adjustments in investment allocations between sectors are being done mostly on a *pro rata* basis which has no scientific base; rather it comes out as a 'compromise' formula between the contending recipients [Gupta, 1989, p. 72]. Worse still, physical targets are often not revised alongside. The mid-term appraisal comes

some time in the third year of the plan. A correction to 'plan priorities' presented in this appraisal document has sometimes proved to be very academic as it comes too late in the plan period. In any case, most of the public sector enterprises attach very little importance to post-evaluation studies.

State Plans

Let us next see the manner in which, the Planning Commission, in trying to impose a national plan on the state governments, is straining the federal structure envisaged in the Constitution. As mentioned above, the recommendations of all the working groups on the proposals of a state are considered by the concerned State Plan Adviser and his report forms the basis of discussions between the Planning Commission and the state governments for finalising the plan for each state and its targets of additional resources mobilization. It is simply preposterous that a single officer in the Planning Commission should sit in judgement on the plan proposals coming from the government of a state. It is surprising how this has been swallowed for four decades. The reasons are historical. They may no longer be valid.

Prior to the Fourth Plan, plan assistance was based on states' needs and ability to implement the plan as judged by the Planning Commission. Moreover, it was mainly schematic in nature and came in the form of a string of conditional grants. Beginning with the Fourth Plan, the Gadgil formula and later its subsequent modifications did not change the situation materially because the whole plan assistance depended on the approval by the Planning Commission of the state's plan as a whole. The assistance would be reduced in proportion to the shortage in the agreed plan outlay. On some items, the assistance was tied so that a shortfall in expenditure on these items would invite a cut in earmarked assistance. Besides, there was a detailed technical appraisal of all irrigation, power, and agricultural schemes costing more than Rs 5 crore and a proforma examination of all schemes costing Rs 1 to 5 crore by the Central Water Commission, the Central Electricity Authority, and the Indian Council of Agricultural Research.

The states in India have widely different resources and are at widely different stages of development as measured by their per capita incomes. For instance, in 1989-90, the per capita net domestic product was Rs 2,122 in Bihar and Rs 7,081 in Punjab [CSO, 1991, Statement 5]. The gap is widening. The Planning Commission prepares a national plan with sectoral allocations broken up into central plan and states' plans. The states fall in line because the centre holds the financial strings. But it is unlikely that the plans for different states are the most appropriate for their resources and the stages of their development. This is no reflection on the competence of the Planning Commission. The country is just too big and varied and no one need be offended by that fact. After forty years of planning experience, one should now adopt a more modest posture and allow the states greater freedom and autonomy in the planning of their development.

Clearly, there are sectors of which the development must be largely with the Centre, as for instance, large industry, rail and air transport, communications, and science and technology. Besides, as we suggest, reduction of disparities between states must also be the Centre's responsibility. But, there are sectors the development of which must largely rest with the states keeping the Centre's role to the minimal. These are agriculture, rural development, special area programmes, village and small industries, and many of the social services such as education and health. These sectors are essentially decentralized and the process of their development has to be decentralised. Nevertheless, in the Eighth Five-Year Plan (1992-97), the Centre's share in the public sector outlay in agriculture is 23.38 per

cent; in rural development 70.33 per cent; in village and small industry 39.96 per cent; in general education 42.86 per cent; in medical and public health 29.94 per cent; and in family welfare 100.00 per cent. If the ground for this is a presumption that the centre has greater competence even in these areas, it is simply not true any more if it ever was.

From the very beginning of planning in India, a distinction has been made between the public and the private sector. The plan targets are prescriptive for the public sector, the Planning Commission acting as a clearing house for many crucial economic decisions taken at different institutional and regional levels, for ensuring inter-sectoral and inter-temporal consistencies by the use of a formal 'economic model'. For the private sector, the plan targets are only indicative. Hence, the governments in India have little control over a large part of the economy. Even in the matter of investment, of the total estimated investment during the Seventh Five-Year Plan period (1985-90) amounting to Rs 3,48,148 crore, investment worth only Rs 1,80,000 crore, which is 51.70 per cent of the total, was planned to be made in the public sector. The remaining was expected to occur in the private corporate and household sectors. The investment in these sectors is, in general, in response to market expectations rather than the expectations of the Planning Commission. Even in the public sector, the plan succeeds at best in respect of investment but not so much in respect of output. There is, besides, the variable weather which affects agriculture producing one-third of the national product. Under the circumstance, what the Planning Commission can at best do is to promptly respond to what actually happens in the economy and annually revise and adjust its own sectoral plan allocations so as to regain and retain the sectoral balance in the economy. Presumably, this is what the Planning Commission does in its annual plan exercises. We have already commented upon the nature of this sectoral inter-consistency and, particularly, the manner in which it gets distorted in the annual plans.

Unhealthy Paternalism

What is involved is not the technicality of planning but the central attitude towards governance of India. In a paper presented to the National Convention on Union-State Relations held in New Delhi in April 1970, K. Santhanam made the point succinctly : 'I am emphatically of the opinion that by taking upon itself too many obligations in relation to the vast population spread over the length and breadth of India, the Centre will become incurably weak. It is only through concentration on essential all India matters and by refusing to share the responsibility in such matters with the states while giving complete autonomy to the states in the rest of the field of government, the parliament and the central government can be really strong. The tendency towards vague unhealthy paternalism which has come to envelop Indian Federalism as a result of the dominance of a single party during the first two decades of independence is as bad for the centre as it is unpleasant and provocative to the states' [Santhanam, 1972, Pp. 75-76]. Unfortunately, the tendency has continued unabated.

At the time the constitution was made, there was probably sufficient justification for including all the subjects that are included in these lists. Probably, there were not enough men with ability and experience in the states to handle some of these subjects. In the initial years, there was also a need to establish common norms, standards, and procedures. The functions were also limited in their overall scope and size. Over the years, these functions have grown enormously. Fortunately, common norms, standards, and procedures are now well established to permit some departure and variation. Above all, there are now in the

States, men with equal knowledge, ability, and experience to handle many of these subjects. The continuance of central jurisdiction over these subjects now results only in rigidity, delay and waste on the one hand and neglect and humiliation of able men in the states on the other. Agriculture, rural development, health, and family welfare are a case in point. Practically the entire establishments in these subjects at the centre could be dismantled with little harm.

The tendency towards vague unhealthy paternalism to which K. Santhanam refers prevails not only in the Union-States relations but also within the borders of large states. If the Union is burdened with too much power and authority, some of the states are burdened with too large a population and territory. Broadly speaking, the present non-Hindi states are organised on linguistic lines no matter how large. The Hindi states are mostly a legacy of the past. In consequence, some states are just too big for a chief minister to manage, howsoever competent he might be. A state with about 10 districts and a population of between 10 and 20 million is a good size to govern. The size of the state cabinets could and should be regulated by the constitution. Such smaller states will be managed better than the present large ones. The chief ministers will have fewer problems of balancing regional interests. Most importantly, central assistance will reach the more deserving and needy regions more directly. A second state's reorganisation commission should be appointed to look into the details.

There is much room and need for devolution of the power of the states to the panchayati raj institutions at the district level to begin with. These institutions have generally failed because genuine devolution of power has not been tried. Unfortunately, there is much resistance both from the political leadership and the bureaucracy in the states to any attempt at devolution of power and authority. This has frustrated the will, initiative, and self-reliance among the local people and the old habit of looking at the state capital and Delhi for every little local problem continues. The situation is the same as it prevails in the Centre-State relations.

There are semi-governmental authorities such as the university grants commission which need similar scrutiny. The commission has been presided over generally by able chairpersons. But the task is simply too big. One wonders how the commission oversees the functioning of a couple of hundred universities in the country and why one single body must do it. Below the commission, there are the universities managing several hundred colleges each. In the name of maintaining uniform standards, we have erected an enormously centralised apparatus for higher education. It grinds slowly and turns out, year after year, product of nondescript character in large numbers.

There are the Public Sector Corporations such as the Life Insurance Corporation which again have grown too big. Except for the vested interests of the present incumbents, which include the management and the union leadership both, there is no good reason for keeping them in one unit. There are the nationalised banks extending themselves across the country in the name of offering competitive service involving so much waste. It may be desirable to reorganise them on a regional basis. These are only illustrations of the centralising tendencies which pervade the Indian polity. It is obvious that each case will have to be examined on merits. In each case, the question to ask is: Must it remain centralised as at present or can some of its functions, powers, and authority be decentralised?

Let us remember that the country is large and diverse but that there is also enough political, administrative, and technical talent around. What is needed is an opportunity for greater participation of larger numbers in its affairs. Denial of such

opportunity is breeding widespread frustration and resentment causing so much waste of precious human material. That makes the country not stronger but weaker.

Hegemony of the Model Builders and Sophisticated Statisticians

The Planning Commission embodies the central attitude towards governance of India. Besides, the Planning Commission itself is dominated by model builders who have tried to put the whole plan in a strait-jacket. As mentioned above, underlying the planning in the public sector is a formal 'economic model' which is expected to ensure inter-sectoral and inter-temporal consistencies. For those not familiar with the mathematics of modelling and the statistical or factual foundations of these models, planning models are a great mystery and that is their strength. 'Like most economic models, the planning models are also abstractions of reality. They try to capture the objectives and efforts needed in planned development. Their usefulness lies in helping to understand the complex economic linkages in alternative policy decisions, and to help planners devise ways and means to lead the economy in the desired direction. However, it is well appreciated that there are many behavioural relations and institutional factors which are difficult to capture in a rigorous formal model frame, although they may be very important to the country's development. Therefore, any result based on formal modelling should be used with necessary caution. But a total absence of any formal model structure may result in inconsistencies and lopsided priorities in allocating resources. Indeed, formalized modelling is found to be an effective disciplining device in the exercise of choice of policy makers and users' [Gupta, 1989, p. 6]. Indeed, that is its purpose; the plan model is the device which the Planning Commission has used to enforce 'discipline' on the central and state governments, their ministries, departments, and undertakings. A brief description of the model used in the Seventh Plan may be useful.

ECONOMIC MODELS

Planning in India began with the First Five Year Plan (1951-56). The planning models in the First and Second Plans were focussed mainly on the growth potential determined by the savings potential of the economy and incremental capital/output ratio. They belonged to the Harrod-Domar and Feldman-Mahalanobis family comprising a single sector with no foreign trade. Hence, their demand and supply equations were the same. Since the Third Plan and until the end of the Fifth Plan, the input-output models basically belonging to the Leontief group were used in order to ensure inter-sectoral consistencies between the production targets. The production targets were mainly estimated from the demand side without taking into account the supply constraints except indirectly, for a few specific sectors, by the use of material balances. During the Fourth and the Fifth Plans, the input-output models were articulated by making them 'closed' first by endogenizing imports and then consumption in the final demand. The Sixth Plan tried to integrate the Harrod-Domar and the input-output approaches in a demand-supply frame. An investment planning model was developed and integrated with the input-output system and the demand-supply balances were checked over time, not only in the commodity and services market but also in the markets dealing with primary inputs like labour and capital and other important non-renewable resources [Planning Commission, 1980, p. 1].

In the Seventh Plan, the basic model remained the same as in the Sixth Plan. It comprised a 'core model' consisting of (i) a macroeconomic model, (ii) an input-output model, (iii) an investment model and seven major 'sub-models', namely, agriculture, industry, consumption, poverty,

export and import, financial resources, and demography and employment. The core model and all the sub-models have two distinctive parts (i) the model structure is presented in the form of a system of equations which involve a number of parameters and which postulate certain inter-relationships between all major variables, like consumption, investment, export, import, and different policy instruments of the Government; and (ii) appropriate estimation procedures to estimate the various parameters either based on observed behaviour or technology.

To begin with, estimates are made of the requirements of the economy (demand) in the light of certain basic objectives of growth, equity and self-reliance as recommended by the National Development Council (NDC). This is done in the 'core model'. The demand is decomposed into four main groups (i) consumption, both public and private, (ii) investment again separated into public and private, (iii) exports, and (iv) inter-mediate goods.

The macro economic model consists of a number of national income and expenditure identities and this, in combination with input-output model, determines investment in the terminal year endogenously. Given a target rate of growth and base year GDP, saving and consumption decisions of public and private sectors and certain other exogenous variables, macro-economic model determines resources available for investment. A crucial link between the macro-economic model and the input-output model is provided by the value of total imports. Iterative process between macro-economic model and input-output model ends when the value of investable resources in the terminal year converge to the same value in successive runs.

Investment model is then started. Investment model derives investment requirements at broad aggregate sector levels and converts investment by destination into that by origin. In case of a mismatch between available resources and required resources for investment, the latter is adjusted by moderating on the post-terminal rates of growth. At the end of a run of investment model, investment by type of assets (construction, machinery and equipment, and changes in stock) is obtained and this in turn is fed into the input-output model for a re-run. Iterative process for the core model concludes when investment level and its asset composition remains the same in successive iterations.

Sub-models are constructed to go into details of certain phenomena that are complementary to the core input-output model. Some of these sub-models are percussive to the main model, like demographic projections and assumptions of saving behaviour of different institutions in the economy. Certain other sub-models are recursive like the employment. By its very specification, the core model excludes certain variables like land and water, aggregates certain commodity production activities like in petrolatum sectors; assumes some variables as given exogenously, for example export vector. Sub-models are constructed to pay attention which is technically necessary but which is not at present integrated in the main input-output model.

The model system runs on the basis of a set of lagged endogenous variables, a set of relevant parameters and selected exogenous variables including the policy variables. The basic set of parameters in the core models are the input-output coefficient matrix and the capital output ratios. Besides, there are other parameters relating to different sub-models. They refer mainly to consumption propensities/ expenditure elasticities, all demography related parameters, functions relating to costs and use of natural resources, transport coefficients, etc. The basic parameters of the input-output (I/O) table are based on 1973-74 I/O table of 115 sectors prepared by the Central Statistical Organization (CSO) duly updated and revised. Import use coefficients are

estimated by using information obtained from the CSO regarding destination and imports and allocations in proportion to total input use, flows among identified destination sectors. Capital Coefficient Matrix and ICORs (incremental capital output ratios) are based on econometric estimation of the past data on capital output ratios worked out by the Working Group constituted for the purpose. [Planning Commission, 1985, Chapter I, p. 1.5, duly edited and abridged].

This is an imposing mathematical structure and its purpose is to ensure inter-sectoral consistency between production targets set by the plan. Without wanting to derogate the pursuit of the mathematical model builders to represent the economy as a mathematical system consisting of a large number of inter-related equations, we should note the following: (i) Inevitably, it is a highly aggregated model. The I/O table for 1973-74 originally prepared by the CSO conceived the economy as having 115 sectors, that is, 115 groups of commodities and services. Later, this was aggregated into only 60 sectors. The CSO has updated this table and published a 60-sector I/O table for 1978-79 and also for 1983-84. Presumably, for purposes of the Seventh Plan, the Planning Commission has used the last mentioned table but has further aggregated it into only 50 groups. For instance, one of the 50 sectors consists of sugarcane (including gur), groundnut, rubber, coconut, tobacco, and crops other than paddy (including rice milling), wheat (including flour milling), jawar, bajra, maize, gram, pulses (milled and unmilled), jute, cotton, tea, and coffee. Another sector consists of edible oils (hydrogenated or otherwise), tea and coffee processing, miscellaneous food products, beverages, and tobacco products. One more sector consists of heavy chemicals (organic and inorganic), paints, varnishes, and lacquers, drugs and medicines, soaps, cosmetics, glycerine, and other chemicals (excluding synthetic fibres and resins). Yet another sector consists of tractors and other agricultural implements, industrial machinery, machine tools, office computing and accounting machinery and other non-electrical machinery. With such aggregated sectors, I/O coefficients have little meaning and inter-sectoral consistency allows more of wheat compensated by less of tea; or more of hydrogenated oil compensated by less of processed tea; or more of tractors compensated by fewer machine tools.

Moreover, the data base of the Indian economy is probably adequate for estimating the Gross Domestic Product but quite unsatisfactory for estimating I/O coefficients, capital coefficient or incremental capital/output ratios. Further, many parameters of the mathematical models are pure guesswork or political pronouncements called policy variables. Finally, with no more than indicative planning for the private sector, one must ask what is the meaning of inter-sectoral consistency which the plan model is supposed to ensure.

Such hegemony of the Model Builders and Sophisticated Statisticians is not confined to the Planning Commissions. It appears even in the Reports of the Finance Commissions. This is due to some of the academic members and consultants, who through their statistical sophistication, bamboozle the members of the Finance Commissions into accepting their formula to determine the shares of the states in the divisible pool. For instance, as mentioned in the previous chapter, in determining the states' shares in the divisible pool of the excise, the Seventh Finance Commission had used, as one of the four factors, the percentage of the poor in each state measured by a method which Prof. Raj Krishna had evolved for the Commission. There was an elementary error in this method. The then Director of Economics and Statistics of the Government of Maharashtra brought this to my notice and suggested that I should write on the subject. In the following is the text of my paper published in the Economic and Political Weekly (February, 1979). Needless to say, no disrespect is intended to the late Prof. Raj Krishna, who was a close

friend of mine and for whom I had great respect and affection. Fortunately, he was still alive when the paper was published.

BELOW THE POVERTY LINE

In order to determine the shares of the states in the divisible pool of excise, the Seventh Finance Commission (1978) decided to give equal weight to (a) population, (b) inverse of the per capita State Domestic Product, (c) percentage of the poor, and (d) a formula of revenue equalisation. Direct cognizance of the poor is a particular innovation of the present Finance Commission. Reportedly, the Planning Commission also intends to incorporate it in its formula for distribution of block plan, assistance to states. Thus the estimates of the number of poor which have received so much academic attention since 1970, have suddenly become alive and operational. It is important therefore to examine a little carefully how the Finance Commission estimated the number of poor in different states. In this matter, the Finance Commission was advised by one of its members, Raj Krishna, who is also a member of the Planning Commission. The method evolved by him is given in Appendix IV. 9 of the Debate of the *Seventh Finance Commission's Report* (Pp. 209-221).

Partly because of differences in consumer behaviour and partly because of differences in the prices of essential consumer goods and services in different states, the poverty line, however defined, differs in different states. Hence, the starting point of the exercise is the determination of the state-specific poverty lines. Raj Krishna chooses to determine them for the year 1960-61 and then bring them up for 1970-71. Here, we shall primarily concern ourselves with the procedures by which Raj Krishna determines the state-specific poverty lines for 1960-61. Raj Krishna does this in two steps: (a) choosing an all-India poverty line; and (b) converting the all-India poverty line into state-specific poverty lines for different states. For (a) Raj Krishna adopts the Dandekar-Rath all-India norm of Rs 15 per capita per month for the rural areas and Rs 22.5 per capita per month for the urban areas at 1960-61 prices. We might note that Dandekar-Rath arrived at their national norms on an analysis of the consumer expenditure data from the 16th Round of the National Sample Survey (July 1960-August 1961) showing that it was at the per capita monthly consumer expenditure of about Rs 15 in rural areas and Rs 22.5 in urban areas that households, on an average, seemed to have a diet adequate in calories, namely, 2,250 calories per capita per day. On the basis of similar data from the 17th Round of the National Sample Survey (September 1961-July 1962) they had also indicated that corresponding levels of per capita monthly consumer expenditure were different in different states (Dandekar-Rath, *Poverty in India*, Tables 1.5 and 1.6). A little additional work on these results of Dandekar-Rath could have given Raj Krishna the state-specific rural and urban poverty lines for 1960-61 which he was seeking. He could have also applied similar methods to consumer expenditure data from the later rounds of the National Survey such as the 25th Round (1970-71), the 26th Round (1971-72), the 27th Round (1972-73), or the 28th Round (1973-74) and obtained directly the state-specific rural and urban poverty lines for these later years. But, for reasons which are not clear, Raj Krishna chose to adopt more round-about methods. He employed two different procedures, one for the rural areas and the other for the urban areas. We shall first examine his procedure for determining the state-specific rural poverty lines for the year 1960-61.

In order to convert the all-India rural norm of Rs 15 per capita per month at 1960-61 prices, Raj Krishna utilises the state index of rural consumer prices in 1960-61 prepared by Bardhan [Bardhan, 1974, Pp. 264-80] on the basis of a study by Chatterjee Bhattacharya [Chatterjee-Bhattacharya, *Sankhya*, 1974, Series C, Vol. 36, Pp. 275-279 and Pp. 337-367]. The latter is a study

in inter-state variation in consumer prices. It is based on the 18th Round of the National Sample Survey (February 1963-January 1964) rural household consumer expenditure data. Chatterjee-Bhattacharya utilise these data both for (i) estimating the average prices of 56 consumption items in different states, and (ii) for obtaining the corresponding weighting diagrams, that is, the commodity composition of the consumer expenditure in different states, and then proceed to construct, for each state, a consumer price Fisher index with all-India prices taken as base = 100. A special feature of the Chatterjee-Bhattacharya study is that they construct the index numbers for inter-state comparison of consumer prices not only for the entire rural population but for its quintiles, that is 20 per cent sections, when arranged in an ascending order of per capita consumer expenditure; thus the first quintile comprises the bottom 20 per cent rural population in each state. Bardhan in his 'Study on Incidence of Poverty in Rural India' [Bardhan, 1974] uses the Chatterjee-Bhattacharya indices for the two bottom quintiles that is the bottom 40 per cent of the rural population in each state. He averages the two index numbers for the two bottom quintiles as constructed by Chatterjee-Bhattacharya on the basis of the 18th Round of the NSS (February 1963-January 1964) and regards them as valid for 1960-61. Then taking 'Rs 15 at all-India rural prices and multiplying by the corresponding index for each state' Bardhan gets 'the cost in each state of the consumption basket represented by Rs 15 at 1960-61 all-India prices'. Bardhan raises them by the consumer price index numbers for agricultural labour (July 1960-June 1961 as base) for different states issued by the Labour Bureau.

Raj Krishna follows Bardhan. He borrows from Bardhan's study the 'costs of consumption basket represented by Rs 15 at all-India rural consumer prices in different states in 1960-61', adopts them as the state-specific rural poverty lines at 1960-61 prices, and raises them by the consumer price index numbers of agricultural labour for different states in 1970-71 to obtain the state-specific poverty lines at 1970-71 prices. The Chatterjee-Bhattacharya study is a careful piece of work and the authors are aware of the limitations of the index for inter-state comparison of consumer prices. For instance, they observe: 'Inter-regional comparisons such as those carried out here are of obvious interest, but there are well-known methodological problems which can hardly be overcome with satisfaction [Beckerman, 1966]. Thus, no attempt has been made in the present study to allow for variation in consumer preferences arising due to climatic and other environmental factors' [Chattarjee and Bhattacharya, 1974, para 1.4, p. 338]. Further: 'The first point to note....is the appreciable divergence between Laspeyres and Paasche indices in a large number of cases....the divergence tends to be wide when the budget pattern of the state considered is very different from the over-all pattern in rural India and fairly small when the state budget pattern is not so different from the pattern observed in rural India. Glaring instances of this effect are visible....This is, of course, understandable. While we may quote the Fisher indices for measuring inter-regional price differentials, the measurement is far from precise when the two regions have markedly different household budget patterns' [Chattarjee and Bhattacharya, 1974, para 3.2 p. 343].

This indeed is the essence of the index number problem, namely, the inherent difficulties of making a comparison between price differentials, whether temporal or spatial, when the consumer budget patterns are different. When index numbers are used for comparison over time, as is more commonly the case, the base period is periodically brought forward so that the difference between the consumption budget patterns in the base year and the 'current' year are not too large. This is not possible when the index numbers are used for inter-regional comparisons. It is neither possible to reduce the differences in the budget patterns of two regions, when they exist, nor is it possible to

allow for them in the index number. It is best to recognise, as Chatterjee-Bhattacharya do, that the inter-regional comparison by index number is not satisfactory when there are large differences in the consumption budget patterns of two regions.

Bardhan does not show equal awareness of these problems. Indeed, he seems to believe that 'taking Rs 15 at all-India rural prices and multiplying by the corresponding index for each state' derived from Chatterjee-Bhattacharya study, he gets 'the cost in each state of the consumption basket represented by Rs 15 at 1960-61 all-India rural prices'. Strictly speaking, the phrase 'the cost in each state of the consumption basket represented by Rs 15 at 1960-61 all-India rural prices' is not meaningful because 'Rs 15 at 1960-61 all-India rural prices can represent any number of consumption baskets many of them widely different in their commodity composition'. Presumably, what Bardhan means is 'consumption basket with a commodity composition as it obtained on an average in the 40 per cent bottom all-India rural population in 1963 (Feb 1963-Jan 1964) and valued at Rs 15 at 1960-61 all-India rural prices'. Thus interpreted, Bardhan is not quite right in his belief that what he has is the cost in each state of such a fixed consumption basket at 1960-61 rural prices. This would be true if he were using Laspeyres index number. With Fisher index, the consumption basket is not fixed. It is some kind of an average of the consumption basket as it obtained at the all-India average and in the respective state. The basket of comparison is thus not the same for all the states. Of course, it should not be the same. In determining poverty lines in different states, it is necessary to make due allowance for the differences in the consumption baskets in the different states. The Fisher index and for that matter any index, cannot do this. In short, by resorting to this roundabout method of determining the state-specific poverty lines, while one may display a great deal of statistical sophistication, one does not know what one is in fact doing.

Chatterjee-Bhattacharya also make a reference to an earlier study by Rath (1973, Pp. 337-352) which employed broadly similar data and similar method as their own. They make the following comments: 'Rath employed NSS 17th Round (September 1961-August 1962) budget results including estimates of average price and per capita consumption (quantity) of 44 items for the rural areas of different states [Rath, 1973, *Arthavijnana*, Pp. 337-352]. Laspeyres and Paasche indices were computed for comparing the price levels for the general population in every pair of states. The indices with different states as base were then averaged to get an overall picture... There are striking differences between these results of Rath and those obtained in the present study, although the two studies utilised data from two consecutive rounds of the NSS' [Chatterjee and Bhattacharya, 1974, para 6.3, p. 366].

It seems that, in the judgment of Chatterjee-Bhattacharya, the following circumstance was responsible for the differences in the results of Rath and their own results. They say: 'A crucial step taken by Rath was the treatment of each of the following groups of commodities as single items: (i) cereals and products, (ii) pulses and products, (iii) vegetable oils and vanaspati, (iv) meat, fish and egg, and (v) tea and coffee. (The number of items representing these groups in our calculations are, respectively, 8.5,5.5, and 3). Rath took this step primarily because some of the constituent items did not feature at all in the family budget of a number of states, so that all the 44 prices were not available for every state. To our mind, this problem is not as serious as made out by Rath; and our method of substitution was not applied too frequently to overcome this problem. On the whole, Rath seems to have exaggerated the relative price levels in the rice- and wheat-consuming states and understated the relative levels of average PCE (per capita consumer expenditure) in real terms in these states.

His picture of regional variation in the 'poverty line' also seems to be exaggerated' [Chatterjee and Bhattacharya, 1974].

It is not the intention here to go into a detailed enquiry into the differences between the results of Rath and Chatterjee-Bhattacharya. The important point to note is that competent analysts, such as Chatterjee-Bhattacharya and Rath, working on comparable sets of data and with methods basically not dissimilar and, in any case, methods which *prima facie* appear reasonable and which can be justified on one or the other analytical ground, come out with results with strikingly large differences. Evidently, the method is susceptible to minor changes in the choice of commodities, their groupings or substitutions.

We might make one final comment. Having obtained the state-specific poverty lines at 1960-61 prices, in order to bring them up to 1970-71 prices, Raj Krishna, following Bardhan, raises them by the consumer price index of agricultural labour issued by the Labour Bureau. We might note that, though this index has 1960-61 as base, its weighting diagram is derived from the family budget data of the Second Agricultural Labour Enquiry (August 1956 - August 1957).

To sum up, in spite of the impressive statistical sophistication borrowed from Burdhan, the state-specific rural poverty lines derived by Raj Krishna are devoid of any clear meaning and moreover are susceptible to minor changes in the method so that one could produce quite different results by adopting methods which are only slightly different and are equally justifiable. One wonders why he adopted this procedure when, following Dandekar-Rath, he could have derived the state-specific poverty lines for 1970-71 or even for a later year such as 1972-73 or 1973-74 directly from the corresponding data from the National Sample Survey.

But all this is excusable, or even permissible, when we compare it with the procedure Raj Krishna resorts to for determining the state-specific urban poverty lines. Chatterjee-Bhattacharya did not extend their study of interstate price differentials to urban consumer prices and hence Bardhan did not extend his study of the Incidence of Poverty to urban India. Consequently, when it came to determining the state-specific urban poverty lines, Raj Krishna had to rely on his own resources which, as the results show, proved inadequate.

Table A

State	Consumer Price Index for Working Classes (1960-61 = 100) Average for 1961-63	State-Relative Urban Price Index with All India Average = 100	State-Specific Poverty Line 1960-61 Urban
(1)	(2)	(3)	(4)
Madhya Pradesh	110.45	103.22	23.22
Maharashtra	103.62	96.84	21.79
All-India	107.00	100.00	22.50

Raj Krishna notes: 'For converting the urban all-India norm, no state-relative price index is available'. Hence, he proceeds to utilise 'the three year (1961-63) average of the working class consumer price index'. The data given in Table A illustrate the procedure. The implicit argument runs as follows: The Consumer Price Index for working classes shows that while the average all-India urban price level in 1961-63 was 107.00 per cent of 1960, the same in Maharashtra was 103.62 per cent and in Madhya Pradesh 110.45 per cent (col. 2). Hence, in 1961-63, the urban

consumer prices in Maharashtra were 3.16 per cent below the all-India prices and in Madhya Pradesh they were 3.22 per cent above the all-India prices (col. 3). Now, Bardhan had treated results based on the 18th Round of the National Sample Survey (Feb. 1963 - Jan. 1964) valid for 1960-61. Hence, the above results may certainly be regarded valid for the period 1961-63. It follows that, following Dandekar-Rath, if we place the all-India urban poverty line at Rs 22.5 in 1960-61 urban prices, the cost of the same consumer basket and hence the urban poverty line would be Rs 21.79 (3.16 per cent below the all-India norm) in Maharashtra and Rs 23.22 (3.22 per cent above the all-India norm) in Madhya Pradesh (col. 4).

Clearly, the second step in the above argument, leading from column (2) to column (3) is a bad slip. What we have in column (2) is a comparison over time of urban consumer prices in each state and all-India average of 1961-63 compared with average of 1960-61 in each state and all-India. Raj Krishna slips into believing that it also gives an inter-state comparison of urban consumer prices in 1961-63. In the next half-step, when he regards this inter-state comparison also valid for 1960-61, a moment's reflection would have suggested to him another equally valid procedure leading to quite another yet equally valid result; he could as well have made such an inter-state comparison of urban consumer prices in 1960-61 directly on the basis of the consumer price index in that year and come to the conclusion that the urban consumer prices in 1960-61 were the same in all the states. How? Because the consumer price index in that year was the same = 100 in all the states! Raj Krishna does not see that, this indeed is the implication of his second step.

If it were merely one of Raj Krishna's academic writings in which the error had entered, we would leave the matter there. Unfortunately, the matter is a little more serious. The error has entered the Report of the Finance Commission and reportedly may enter the plan allocation to states being made by the Planning Commission involving crores of rupees. We hope Raj Krishna will take immediate steps to rectify the error.

There is a larger question involved: how much academic sophistication to permit in operative decisions of government. On closer examination, it is found that most often neither the underlying concept such as poverty nor the data such as coming from the National Sample Survey can bear much of the academic sophistication in which academicians often indulge. Nevertheless, such sophistication is legitimate in academic exercises which in their nature are exploratory. But it is clearly dangerous when academicians enter the field of operative decision-making without realising the exploratory and speculative character of much of their past academic work on which their present reputation often rests. With increasing computer facility, the danger today is real. In the particular case, we should be grateful that the exercise was simple and the error could be easily seen. But suppose Raj Krishna had erected a simulation model of the Indian economy, which he is undoubtedly capable of, with v variables, p parameters, s sectors, l linear and m non-linear constraints, interfaced with an independent technological-choice model subject to certain environmental optima, dynamised to oscillate stochastically between a finite and an infinite horizon and, with inputs from the National Sample Survey and other relevant sources, had fed it into the computer that now rests in the Planning Commission, we would have been all awed by its output and surrendered to its decisions on distribution of the divisible pool of the excise and the block plan assistance to the states. If academicians are not to lose some of their reputation in the Finance Commission and the rest in the Planning Commission, they must wake up to this danger.

Another instance is available in the report of the Ninth Finance Commission. In the Presidential order appointing the Ninth Finance Commission, the Commission was specifically directed that, in making its recommendations, 'the Commission shall adopt a normative approach in assessing the receipts and expenditure on the revenue account of the States and the Centre and, in doing so, keep in view the special problems of each state, if any, and special requirements of the Centre for defence, security, debt servicing and other committed expenditure or liabilities' [Ninth Finance Commission, First Report, 1988, para 4(i) : 1].

The Normative Approach

The justification or need of a normative approach to assess the revenue receipts and expenditure of states is succinctly described by Justice A.S. Qureshi, who was a member of the Commission, in his Note of Dissent and General Observations:

> At the outset, I must make it clear that the Presidential Order requiring this Commission to adopt a normative approach in assessing the receipts and expenditure on the revenue account of the states and the Centre is a step in the right direction. It is indeed the need of the hour. The Centre, as well as the states, have been indulging in uncontrolled profligacy and are living beyond their respective means for quite sometime. Their performance on the revenue and the expenditure fronts is dismal. Neither the Centre nor the states practise any kind of financial discipline. In these circumstances, it is necessary that their performance should be judged on the basis of what it reasonably ought to be and not on the basis of what it actually is. In the prevailing conditions, pertaining to public finance, it is an imperative need to adopt the normative approach for both the Centre and the states. Anyone who has conceived this notion of normative approach has done a great service to the country in the prevailing financial chaos. ... Neither the Centre nor the states wanted the normative approach to be applied by the Finance Commission all of a sudden. They wanted this Commission to apply the normative approach gradually giving them chance to adapt themselves to the normative standards. In the circumstances, and on practical grounds, this Commission felt that the request was reasonable. We, therefore, decided to apply the normative approach gradually to enable the Centre and the states to trim their fiscal sails according to the needs of normative standards. In our First Report, we had applied normative standards to the states somewhat rigorously. Consequently, some states, especially the special category states suffered heavily. We have reversed our policy on this point and now have watered down normative standards considerably in our Second Report. Although the normative approach is in itself a very beneficial thing, there is a practical difficulty in its application. Normative standards can be applied to states easily and effectively, but they cannot be applied to the Centre with the same rigour. It is difficult to set normative standard to certain items, such as, defence expenditure, debts, etc. It would, therefore, always be the grouse of the states that the normative approach is applied only to the states and not to the Centre. Such an objection is justified in the prevailing situation. However, ways and means have to be devised to lay down normative standards for the Centre also (*Ninth Finance Commission Second Report*, 1989, para 6.1, p. 54).

Normative Assessment of the Revenue Receipts

Normative assessment of the revenue receipts involves the estimation of revenue capacity, which in turn requires the estimation of taxable and non-tax revenue capacities. While the non-tax revenue capacity was assessed normatively even in the past, tax revenues were generally assessed by the previous Commissions on the basis of

historical trends or some assumed growth rates over the base year. In this process, the levels of relative under-taxation and over-taxation by the different states was not taken into account.

There are two main approaches to estimating the relative taxable capacities of the states. The 'Representative Tax System' (RTS) approach estimates the taxable capacity by applying a 'standard tax system' to the tax bases in the different states. The standard (or representative) tax system is built up by working out the average effective tax rates which are ratios of the sums of the actual revenue from the different taxes levied by the states to the sums of their respective estimated bases. By aggregating the capacities in respect of individual taxes levied by a state, the total taxable capacity of that state is derived. However, estimating taxable capacities on the basis of RTS requires compilation of voluminous data on tax bases and their proxies. Hence, the Commission entrusted this study to the National Institute of Public Finance and Policy (NIPFP). But, because of the complexity in the tax systems prevailing in different states and the non-availability of data on tax bases at the required level of disaggregation, the NIPFP was obliged to give up the exercise in RTS.

An alternative method of estimating taxable capacity is the regression approach (RA). Given that differences in tax revenues among the states are attributable to differences in factors affecting taxable capacity on the one hand, and differences in tax effort on the other, taxable capacity is estimated by regressing per capita tax revenues or tax/SDP ratios of different States on taxable capacity variables. By substituting the actual values of the capacity variables in the equation, the estimate of taxable capacity is obtained. The Commission estimated taxable capacity for 14 major states by using the regression approach with some modifications.

A major problem with this approach is that variation in tax revenue on account of tax effort factors cannot be separated from the variance due to random errors. To overcome this problem, the cross- section observations were pooled with time series from 1980-81 to 1984-85, and endogenized the effort factors by specifying dummy variables for each of the states. In order to standardise the dummy variables specified for the states, their coefficients were restricted to sum up to unity. The shifts in the tax function over time were quantified by specifying time dummy variables.

The states, being at different levels of development, are not all structurally homogeneous. Hence, the 14 major states were grouped into three categories, namely, high income, middle income, and low income, on the basis of their average per capita SDP during the three years 1982-83 to 1984-85. After experimenting with a number of taxable capacity variables, the following variables were finally included in the regression equations: the per capita SDP, the proportion of non-primary sectoral SDP to total SDP and the Lorenz Ratios of consumer expenditure distribution, computed on the basis of NSS consumer expenditure data for the 32nd Round (1977-78) and 38th Round (1983-84), interpolated for the relevant years in the equations. Of the various specifications, the log-linear form provided the best fit for all the three categories of the states. Also, the regression coefficients had the expected signs, and there was no significant serial correlation. Therefore, the normative projections of tax revenues were based on these equations.

By substituting the actual values of the explanatory variables for the year 1984-85 and the average values of the states' dummies (1/n), where n is the total number of states in the group, an estimate of taxable capacity was derived for the year 1984-85. Taking this as the base, projections were made for 1989-90. For this purpose, the growth rate of tax revenues for each of the

states was derived by multiplying the income elasticity of tax revenues computed for the relevant group of states with the rate of growth of SDP in the state concerned. Elasticities estimated for the period from 1974-75 to 1984-85 were 1.10 for high income and middle income states and 0.92 for the low income states. For the period 1990-95, state tax revenues were normatively projected to grow at 11.5 per cent keeping in view the targeted SDP growth rate of 6 per cent and allowing for a price rise of 5 per cent per annum. The rate of increase in the yield of different taxes was derived from the above projection of aggregate tax revenues, using as a base their respective growth rates in the past which were *pro rata* adjusted.

Normative Assessment of the Revenue Expenditure

The principles of estimating non-plan and plan expenditure have to be different. The normative assessment was confined to non-plan expenditure only. The non-plan expenditure again has to be distinguished into two categories, namely, developmental and non-developmental. Expenditure needs under administrative services are to be assessed on the basis of justifiable costs of providing the average standards of these services. Expenditure on social and economic services are to be determined on the basis of the justifiable costs of provision of the physical standards of services already attained in the states; probably what is meant is provision of the physical standards of services already attained in the respective states; otherwise, it is difficult to see the distinction being made between the two categories of services.

For the purpose of assessment, the non-plan revenue expenditures are further classified into three categories: (i) regular and recurring items of revenue expenditure in which interdependence between capital and revenue expenditure is weak; these form a substantial proportion of the total expenditure; (ii) items of revenue expenditure which depend primarily upon the existing stock, physical and financial; (iii) items of expenditure which cannot be assessed on the basis of statistical analysis or engineering norms but have to be reckoned on actual basis or broad judgment. Hence, normative expenditure can be determined on the basis of cost functions only for the first category. This is what was done.

There is a short section, titled *Conceptual Issues*, explaining the basis of the cost functions. It uses some mathematical notation which we shall try to deliver in simple prose. Total expenditure on given services in a state, is the number of units of services provided, multiplied by the unit cost of the services. The unit cost depends on many factors which may be classified into two categories: (i) those within the control and (ii) those beyond the control of the state government. Then, the normative expenditure on general services in a state is defined as all states' average standard of the service *multiplied* by (all states' average cost within the control of the states *plus* unit cost beyond the control of the particular state). On the other hand, the normative expenditure on social and economic services in a state is defined as the particular state's standard of the service *multiplied* by (all states' average cost within the control of the states *plus* unit cost beyond the control of the particular state). We suspect that there are some printing errors in the notation used in the original text. However, we hope that the above account is reasonably correct.

For fear that this might be all too clear to the Finance Commission, the following was added: 'However, ... the measurement of quantity of public services has to be through the reckoning of inputs required for their provision. Similarly, the several cost factors have to be represented by various proxies' [*Second Report*, 1989, Appendix 5, para B.5.7, p. 113]; consequently, the normative expenditure on social and economic services

in different states depends upon a *stochastic* relation involving vectors of proxies of units or quantities of services provided, unit costs within and beyond the control of the state governments. For the uninitiated, we may add that, all that it means is that all the proxies are liable to random errors.

We have extracted the above in a summary form from the First and Second Reports of the Ninth Finance Commission and we hope that our summary is sufficiently accurate. However, those with greater interest should refer to Appendix 5 of the Second Report of the Commission.

Evidently, a majority of the members of the Commission were not quite satisfied with the estimates arrived at by the normative approach and hence estimates were got worked out through an alternative method and compared with the normative estimates. As there was divergence between the two estimates, 'moderation' was carried out in the normative estimates to bring them closer to the alternative estimates. But, one member, Justice A.S. Qureshi thought it necessary to register his objections in a minute of dissent. As already mentioned, he showed appreciation of the normative approach and gave good reasons for the same. But, he had an objection 'to the results arrived at by adopting the normative approach in assessing the receipts and expenditures on the revenue account of the states and the Centre' :

> 6.3 I have an objection to the results arrived at by adopting the normative approach in assessing the receipts and expenditure on the revenue account of the states and the Centre. It is on the ground that they have been worked out on the basis of econometric models relying on proxies, dummies, variables, etc., in the absence of accurate or reliable data. Moreover, certain considerations have been built in to arrive at the desired results. I am really doubtful about the efficacy of such a mechanical approach towards normative assessment of receipts and expenditures of states in such a vast country with widely varying social and economic conditions and historical background. After all, life is not all law or logic. It is not susceptible to algebraic equations, econometric models, or any other theoretical formula. Life is full of contradictions, conflicts and compulsions. Hence, things have to be seen realistically and not theoretically. Though efforts have been made to impart some realism to the econometric normative estimates by 'moderating' them considerably with reference to the figures arrived at by the alternative traditional method, this, in my view, is not a very happy state of affairs.
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> 6.4 Relying on the normative approach, as a means of assessment of receipts and expenditures of states, the Commission did not call upon the states to furnish their forecasts, as was done in the past, until nearly the end of the Commission's work. The forecasts when received were not in proper form. The dialogue thereon with some of the state representatives at that late stage was a mere formality. This was quite wrong in my opinion. A proper forecast and detailed discussions with the state representatives could have provided a lot of information useful for the formulation of realistic estimates for the sake of comparison with the normative assessment.
>
> 6.5 The normative estimates derived from the econometric models remain more or less a mystery. How these have been formulated, what factors have gone into them, what weights have been assigned to various factors, and what are the disabilities taken into account and provided for in the case of different states, are not known. On my enquiry, I was told that there were too many details involved in the process and it was difficult to explain or check them. I was also told that only some kind of random sample check could be done. As it was

now too late to check them, or work out the estimates through an alternative method, I had no choice but to accept the estimates as arrived at through the so-called econometric models. However, I am doing so with considerable mental reservations. Even my other esteemed colleagues do not appear to have been satisfied with these estimates arrived at through the econometric models. That is why the estimates were got worked out through an alternative method and compared with the normative estimates. As there was divergence between the two estimates, 'moderation' was carried out in the estimates derived from the econometric models to bring them closer to the alternative estimates.

6.6 Let me in the end repeat that I am all for normative approach in assessing the revenue receipts and expenditures of the Centre and the states. What I am really doubtful is about the reliability of the data used and the mechanical manner in which the normative assessment has been done. In such a vast country as ours, with widely varying social and economic conditions and historical background, no theoretical model would work. Hence, things have to be seen realistically. The 'moderation' done in the normative estimates to impart some realism is not a very satisfactory solution. I wish that more thorough study of the subject had been done and more broad-based and accurate data/information collected before this approach was put to practical application. It would have been immensely useful if the state governments and the subject specialists had been more actively involved in evolving normative approach towards different items of receipts and expenditures. [*Ninth Finance Commission, Second Report,* 1989, Pp. 54-55].

Evidently, there have been second thoughts. The Presidential order appointing the Tenth Finance Commission does not direct the Commission to adopt a normative approach in assessing the receipts and expenditure on the revenue account of the states and the Centre.

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Seventh Finance Commission Report, 1976.

DOCUMENTATION

The purpose of this section is to make available to the readers official documents such as reports of committees, commissions, working groups, task forces, etc., appointed by various ministries, departments, and agencies of central and state governments which are not readily accessible either because they are old, or because of the usual problems of acquiring governmental publications, or because they were printed but not published, or because they were not printed and remained in mimeographed form. It will be difficult and probably not worthwhile to publish the documents entirely. We shall publish only such parts of them as we think will interest our readers. The readers are requested to send their suggestions regarding official documents or parts thereof for inclusion in this section.

In the present section we publish:

I. Industrial Policy Resolutions of the Government of India, from 1956 to 1999.
   1. Industrial Policy Resolution, April 30, 1956.
   2. Statement on Industrial Policy, July 24, 1991.
   3. Press Note No. 2 (1997 Series) Expansion of List of Industries for Automatic Approval for Foreign Equity.
   4. Annexures I, II, III from the Industrial Policy Manual, Eighth Edition, Ministry of Industry, Government of India, May, 1999.

II. Report of the Study Group on Corporate Taxation, Government of India, Planning Commission, 1984 (Not published till now).

INDUSTRIAL POLICY RESOLUTION
New Delhi, 30 April, 1956

The Government of India set out in their Resolution dated the 6th April, 1948, the policy which they proposed to pursue in the industrial field. The Resolution emphasised the importance to the economy of securing a continuous increase in production and its equitable distribution, and pointed out that the State must play of progressively active role in the development of industries. It laid down that besides arms and ammunition, atomic energy and railway transport, which would be the monopoly of the Central Government, the State would be exclusively responsible for the establishment of new undertakings in six basic industries-except where, in the national interest, the State itself found it necessary to secure the co-operation of private enterprise. The rest of the industrial field was left open to private enterprise though it was made clear that the State would also progressively participate in this field.

2. Eight years have passed since this declaration on industry policy. These eight years have witnessed many important changes and developments in India. The Constitution of India has been enacted, guaranteeing certain Fundamental Rights and enunciating Directive Principles of State Policy. Planning has proceeded on an organised basis, and the first Five Year Plan has recently been completed. Parliament has accepted the socialist pattern of society as the objective of social and economic policy. These important developments necessitate a fresh statement of industrial policy, more particularly as the second Five Year Plan will soon be placed before the country. This policy must be governed by the principles laid down in the Constitution, the objective of socialism, and the experience gained during these years.

3. The Constitution of India, in its preamble, has declared that it aims at securing for all its citizens-

'JUSTICE, Social, economic and political;
LIBERTY of thought, expression, belief, faith and worship;
EQUALITY of status and of opportunity; and to promote among them all;
FRATERNITY assuring the dignity of the individual and the unity of the Nation',

In its Directive Principles of State Policy, it is stated that -

'The State shall strive to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of the national life'.

Further that -

'The State shall, in particular, direct its policy towards securing -

(a) that the citizens, men and women equally, have the right to an adequate means of livelihood;
(b) that the ownership and control of the material resources of the community are so distributed as best to subserve the common good;
(c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment;
(d) that there is equal pay for equal work for both men and women;
(e) that the health and strength of workers, men and women, and the tender age of children are not abused and the citizens are not forced by economic necessity to enter vocations unsuited to their age or strength;
(f) that childhood and youth are protected against exploitation and against moral and material abandonment'.

4. These basic and general principles were given a more precise direction when Parliament accepted in December, 1954, the socialist pattern of society as the objective of social and economic

policy. Industrial Policy, as other policies, must therefore be governed by these principles and directions.

5. In order to realise this objective, it is essential to accelerate the rate of economic growth and to speed up industrialisation and, in particular, to develop heavy industries and machine making industries, to expand the public sector, and to build up a large and growing cooperative sector. These provide the economic foundations for increasing opportunities for gainful employment and improving living standards and working conditions for the mass of the people. Equally, it is urgent, to reduce disparities in income and wealth which exist today, to prevent private monopolies and the concentration of economic power in different fields in the hands of small numbers of individuals. Accordingly, the State will progressively assume a predominant and direct responsibility for setting up new industrial undertakings and for developing transport facilities. It will also undertake State Trading on an increasing scale. At the same time, as an agency for planned national development, in the context of the country's expanding economy, the private sector will have the opportunity to develop and expand. The principle of co-operation should be applied wherever possible and a steadily increasing proportion of the activities of the private sector developed along co-operative lines.

6. The adoption of the socialist pattern of society as the national objective, as well as the need for planned and rapid development, require that all industries of basic and strategic importance, or in the nature of public utility services, should be in the public sector. Other industries which are essential and require investment on a scale which only the State, in present circumstances, could provide, have also to be in the public sector. The State has therefore to assume direct responsibility for the future development of industries over a wider area. Nevertheless, there are limiting factors which make it necessary at this stage for the State to define the field in which it will undertake sole responsibility for further development, and to make a selection of industries in the development of which it will play a dominant role. After considering all aspects of the problem, in consultation with the Planning Commission, the Government of India have decided to classify industries into three categories, having regard to the part which the State would play in each of them. These categories will inevitably overlap to some extent and too great a rigidity might defeat the purpose in view. But the basic principles and objectives have always to be kept in view and the general directions hereafter referred to be followed. It should also be remembered that it is always open to the State to undertake any type of industrial production.

7. In the first category will be industries the future development of which will be the exclusive responsibility of the State. The second category will consist of industries, which will be progressively State-owned and in which the State will therefore generally take the initiative in establishing new undertakings, but in which private enterprise will also be expected to supplement the effort of the State. The third category will include all the remaining industries, and their future development will, in general, be left to the initiative and enterprise of the private sector.

8. Industries in the first category have been listed in Schedule A of this Resolution. All new units in these industries, save where their establishment in the private sector has already been approved, will be set up only by the State. This does not preclude the expansion of the existing privately owned units, or the possibility of the State securing the co-operation of private enterprise in the establishment of new units when the national interests so require. Railways and air transport, arms and ammunition and atomic energy will, however, be developed as Central Government monopolies. Whenever co-operation with private enterprise is necessary, the

State will ensure, either through majority participation in the capital or otherwise, that it has the requisite powers to guide the policy and control the operations of the undertakings.

9. Industries in the second category will be those listed in Schedule B. With a view to accelerating their future development, the State will increasingly establish new undertakings in these industries. At the same time private enterprise will also have the opportunity to develop in this field, either on its own or with State participation.

10. All the remaining industries will fall in the third category; and it is expected that their development will be undertaken ordinarily through the initiative and enterprise of the private sector, though it will be open to the State to start any industry even in this category. It will be the policy of the State to facilitate and encourage the development of these industries in the private sector in accordance with the programmes formulated in successive Five Year Plans, by ensuing the development of transport, power and other services, and by appropriate fiscal and other measures. The State will continue to foster institutions to provide financial aid to these industries, and special assistance will be given to enterprises organised on co-operative lines for industrial and agricultural purposes. In suitable cases, the State may also grant financial assistance to the private sector. Such assistance, especially when the amount involved is substantial, will preferably be in the form of participation in equity capital, though it may also be in part in the form of debenture capital.

11. Industrial undertakings in the private sector have necessarily to fit into the framework of the social and economic policy of the State and will be subject to control and regulation in terms of the Industries (Development and Regulation) Act and other relevant legislation. The Government of India, however, recognise that it would, in general, be desirable to allow such undertakings to develop with as much freedom as possible, consistent with the targets and objectives of the national plan. When there exist in the same industry both privately and publicly owned units, it would continue to be the policy of the State to give fair and non-discriminatory treatment to both of them.

12. The division of industries into separate categories does not imply that they are being placed in water-tight compartments. Inevitably, there will not only be an area of overlapping but also a great deal of dove-tailing between industries in the private and the public sectors. It will be open to the State to start any industry not included in Schedule A and Schedule B when the needs of planning so require or there are other important reasons for it. In appropriate cases, privately owned units may be permitted to produce an item falling within Schedule A for meeting their own requirements or as by-products. There will be ordinarily no bar to small privately owned units undertaking production, such as the making of launches and other light- craft, generation of power for local needs and small scale mining. Further, heavy industries in the public sector may obtain some of their requirements of lighter components from the private sector, while the private sector in turn would rely for many of its needs on the public sector. The same principle would apply with even greater force to the relationship between large scale and small scale industries.

13. The Government of India would, in this context, stress the role of cottage and village and small scale industries in the development, of the national economy. In relation to some of the problems that need urgent solutions, they offer some distinct advantages. They provide immediate large scale employment; they offer a method of ensuring a more equitable distribution of the national income and they facilitate an effective mobilisation of resources of capital and skill which might otherwise remain unutilised. Some of the problems that unplanned urbanisation tends to create will be avoided by the establishment of small centres of industrial production all over the country.

14. The State has been following a policy of supporting cottage and village and small scale industries by restricting the volume of production in the large scale sector, by differential taxation, or by direct subsidies. While such measures will continue to be taken, whenever necessary, the aim of the State policy will to ensure that the decentralised sector acquires sufficient vitality to be self-supporting and its development is integrated with that of large scale industry. The State will, therefore, concentrate on measures designed to improve the competitive strength of the small scale producer. For this it is essential that the technique of production should be constantly improved and modernised, the pace of transformation being regulated so as to avoid, as far as possible, technological unemployment. Lack of technical and financial assistance, of suitable working accommodation and inadequacy of facilities for repair and maintenance are among the serious handicaps of small scale producers. A start has been made with the establishment of industrial estates and rural community workshops to make good these deficiencies. The extension of rural electrification and the availability of power at prices which the workers can afford will also be of considerable help. Many of the activities relating to small scale production will be greatly helped by the organisation of industrial co-operatives. Such co-operatives should be encouraged in every way and the State should give constant attention to the development of cottage and village and small scale industry.

15. In order that industrialisation may benefit the economy of the country as a whole, it is important that disparities in levels of development between different regions should be progressively reduced. The lack of industries in different parts of the country is very often determined by factors such as the availability of the necessary raw materials or other natural resources. A concentration of industries in certain areas has also been due to the ready availability of power, water supply and transport facilities which has been developed there. It is one of the aims of national planning to ensure that these facilities are steadily made available to areas which are at present lagging behind industrially or where there is greater need for providing opportunities for employment, provided the location is otherwise suitable. Only by securing a balanced and co-ordinated development of the industrial and the agricultural economy in each region, can the entire country attain higher standards of living.

16. This programme of industrial development will make large demands on the country's resources of technical and managerial personnel. To meet these rapidly growing needs for the expansion of the public sector and for the development of village and small scale industries, proper managerial and technical cadres in the public services are being established. Steps are also being taken to meet shortages at supervisory levels, to organise apprenticeship schemes of training on a large scale both in public and in private enterprises, and to extend training facilities in business management in universities and other institutions.

17. It is necessary that proper amenities and incentives should be provided for all those engaged in industry. The living and working conditions of workers should be improved and their standard of efficiency raised. The maintenance of industrial peace is one of the prime requisites of industrial progress. In a socialist democracy labour is a partner in the common task of development and should participate in it with enthusiasm. Some laws governing industrial relations have been enacted and a broad common approach has developed with the growing recognition of the obligations of both management and labour. There should be joint consultation and workers and technicians should, wherever possible be associated progressively in management. Enterprises in the public sector have to set an example in this respect.

18. With the growing participation of the State in industry and trade, the manner in which these activities should be conducted and managed assumes considerable importance. Speedy decisions and a willingness to assume responsibility are essential if these enterprises are to succeed. For this, wherever possible, there should be

decentralisation of authority and their management should be along business lines. It is to be expected that public enterprises will augment the revenues of the State and provide resources for further development in fresh fields. But such enterprises may sometimes incur losses. Public enterprises have to be judged by their total results and in their working they should have the largest possible measure of freedom.

19. The Industrial Policy Resolution of 1948 dealt with a number of other subjects which have since been covered by suitable legislation or by authoritative statements of policy. The division of responsibility between the Central Government and the State Governments in regard to industries has been set out in the Industries (Development and Regulation) Act. The Prime Minister, in his statement in Parliament on the 6th April 1949, has enunciated the policy of the State in regard to foreign capital. It is, therefore, not necessary to deal with these subjects in this resolution.

20. The Government of India trust that this restatement of their Industrial Policy will receive the support of all sections of the people and promote the rapid industrialisation of the country.

SCHEDULE A

1. Arms and ammunition and allied items of defence equipment.
2. Atomic energy.
3. Iron and Steel.
4. Heavy castings and forgings of iron and steel.
5. Heavy plant and machinery required for, iron and steel production, for mining, for machine tool manufacture and for such other basic industries as may be specified by the Central Government.
6. Heavy electrical plant including large hydraulic and steam turbines.
7. Coal and lignite.
   Mineral oils.
9. Mining of iron ore, manganese ore, chrome ore, gypsum, sulphur, gold and diamond.
10. Mining and processing of copper, lead, zinc, tin, molybdenum and wolfram.
11. Minerals specified in the Schedule to the Atomic Energy (Control of Production and Use) Order, 1953.
12. Aircraft
13. Air transport.
14. Railway transport.
15. Shipbuilding.
16. Telephones and telephone cables, telegraph and wireless apparatus (excluding radio receiving sets).
17. Generation and distribution of electricity.

SCHEDULE B

1. All other minerals except 'minor minerals' as defined in Section 3 of the Minerals Concession Rules, 1949.
2. Aluminium and other non-ferrous metals not included in Schedule 'A'.
3. Machine tools.
4. Ferro alloys and tool steels.
5. Basic and intermediate products required by chemical industries such as the manufacture of drugs, dyestuffs and plastics.
6. Antibiotics and other essential drugs.
7. Fertilizers.
8. Synthetic rubber.
9. Carbonisation of coal.
10. Chemical pulp.
11. Road transport.
12. 12. Sea transport.

STATEMENT ON INDUSTRIAL POLICY, JULY 24, 1991

Policy Objectives

Pandit Jawaharlal Nehru laid the foundations of modem India. His vision and determination have left a lasting impression on every facet of national endeavour since Independence. It is due to his initiative that India now has a strong and diversified industrial base and is a major industrial nation of the world. The goals and objectives set out for the nation by Pandit Nehru on the eve of Independence, namely, the rapid agricultural and industrial development of our country, rapid expansion of opportunities for gainful employment, progressive reduction of social and economic disparities, removal of poverty and attainment of self-reliance remain as valid today as at the time Pandit Nehru first set them out before the nation. Any industrial policy must contribute to the realisation of these goals and objectives at an accelerated pace. The present statement of industrial policy is inspired by these very concerns, and represents a renewed initiative towards consolidating the gains of national reconstruction at this crucial stage.

2. In 1948, immediately after Independence, Government introduced the Industrial Policy Resolution. This outlined the approach to industrial growth and development. It emphasised the importance to the economy of securing a continuous increase in production and ensuring its equitable distribution. After the adoption of the Constitution and the socio-economic goals, the Industrial Policy was comprehensively revised and adopted in 1956. To meet new challenges, from time to time, it was modified through statements in 1973, 1977 and 1980.

3. The Industrial Policy Resolution of 1948 was followed by the Industrial Policy Resolution of 1956 which had as its objective the acceleration of the rate of economic growth and the speeding up of industrialisation as a means of achieving a socialist pattern of society. In 1956, capital was scarce and the base of entrepreneurship not strong enough. Hence, the 1956 Industrial Policy Resolution gave primacy to the role of the State to assume a predominant and direct responsibility for industrial development.

4. The Industrial Policy Statement of 1973, *inter alia,* identified high-priority industries where investment from large industrial houses and foreign companies would be permitted.

5. The Industrial Policy Statement of 1977 laid emphasis on decentralisation and on the role of small-scale, tiny and cottage industries.

6. The Industrial Policy Statement of 1980 focussed attention on the need for promoting competition in the domestic market, technological upgradation and modernisation. The policy laid the foundation for an increasingly competitive export base and for encouraging foreign investment in high-technology areas. This found expression in the Sixth Five Year Plan which bore the distinct stamp of Smt. Indira Gandhi. It was Smt. Indira Gandhi who emphasised the need for productivity to be the central concern in all economic and production activities.

7. These policies created a climate for rapid industrial growth in the country. Thus on the eve of the Seventh Five Year Plan, a broad-based infrastructure had been built up. Basic industries had been established. A high degree of self-reliance in a large number of items raw materials, intermediates, finished goods had been achieved. New growth centres of industrial activity had emerged, as had a new generation of entrepreneurs. A large number of engineers, technicians and skilled workers had also been trained.

8. The Seventh Plan recognised the need to consolidate on these strengths and to take initiatives to prepare Indian industry to respond effectively to the emerging challenges. A number of policy and procedural changes were introduced in 1985 and 1986 under the leadership of Shri Rajiv Gandhi aimed at increasing productivity, reducing costs and improving quality. The accent

was on opening the domestic market to increased competition and readying our industry to stand on its own in the face of international competition. The public sector was freed from a number of constraints and given a larger measure of autonomy. The technological and managerial modernisation of industry was pursued as the key instrument for increasing productivity and improving our competitiveness in the world. The net result of all these changes was that Indian industry grew by an impressive average annual growth rate of 8.5 per cent in the Seventh Plan period.

9. Government is pledged to launching a reinvigorated struggle for social and economic justice, to end poverty and unemployment and to build a modern, democratic, socialist, prosperous and forward-looking India. Such a society can be built if India grows as part of the world economy and not in isolation.

10. While Government will continue to follow the policy of self-reliance, there would be greater emphasis placed on building up our ability to pay for imports through our own foreign exchange earnings. Government is also committed to development and utilization of indigenous capabilities in technology and manufacturing as well as its upgradation to world standards.

11. Government will continue to pursue a sound policy framework encompassing encouragement of entrepreneurship, development of indigenous technology through investment in research and development, bringing in new technology, dismantling of the regulatory system, development of the capital markets and increasing competitiveness for the benefit of the common man. The spread of industrialisation to backward areas of the country will be actively promoted through appropriate incentives, institutions and infrastructure investments.

12. Government will provide enhanced support to the small-scale sector so that it flourishes in an environment of economic efficiency and continuous technological upgradation.

13. Foreign investment and technology collaboration will be welcomed to obtain higher technology, to increase exports and to expand the production base.

14. Government will endeavour to abolish the monopoly of any sector or any individual enterprise in any field of manufacture, except on strategic or military considerations and open all manufacturing activity to competition.

15. The Government will ensure that the public sector plays its rightful role in the evolving socio-economic scenario of the country. Government will ensure that the public sector is run on business lines as envisaged in the Industrial Policy Resolution of 1956 and would continue to innovate and lead in strategic areas of national importance. In the 1950s and 1960s, the principal instrument for controlling the commanding heights of the economy was investment in the capital of key industries. Today, the State has other instruments of intervention, particularly fiscal and monetary instruments. The State also commands the bulk of the nation's savings. Banks and financial institutions are under State control. Where State intervention is necessary, these instruments will prove more effective and decisive.

16. Government will fully protect the interests of labour, enhance their welfare and equip them in all respects to deal with the inevitability of technological change. Government believes that no small section of society can corner the gains of growth, leaving workers to bear its pains. Labour will be made an equal partner in progress and prosperity. Workers' participation in management will be promoted. Workers cooperatives will be encouraged to participate in packages

designed to turn around sick companies. Intensive training, skill development and upgradation programmes will be launched.

17. Government will continue to visualise new horizons. The major objectives of the new industrial policy package will be to build on the gains already made, correct the distortions or weaknesses that may have crept in, maintain a sustained growth in productivity and gainful employment and attain international competitiveness. The pursuit of these objectives will be tempered by the need to preserve the environment and ensure the efficient use of available resources. All sectors of industry whether small, medium or large, belonging to the public, private or cooperative sector will be encouraged to grow and improve on their past performance.

18. Government's policy will be continuity with change.

19. In pursuit of the above objectives, Government have decided to take a series of initiatives in respect of the policies relating to the following areas.

A. Industrial Licensing
B. Foreign Investment
C. Foreign Technology Agreements
D. Public Sector Policy
E. MRTP Act.

A package for the Small and Tiny Sectors of industry is being announced separately.

A. Industrial Licensing Policy

20. Industrial Licensing is governed by the Industries (Development & Regulation) Act, 1951. The Industrial Policy Resolution of 1956 identified the following three categories of industries: those that would be reserved for development in the public sector, those that would be permitted for development through private enterprise with or without State participation, and those in which investment initiatives would ordinarily emanate from private entrepreneurs. Over the years, keeping in view the changing industrial scene in the country, the policy has undergone modifications. Industrial licensing policy and procedures have also been liberalised from time to time. A full realisation of the industrial potential of the country calls for a continuation of this process of change.

21. In order to achieve the objectives of the strategy for the industrial sector for the 1990s and beyond it is necessary to make a number of changes in the system of industrial approvals. Major policy initiatives and procedural reforms are called for in order to actively encourage and assist Indian entrepreneurs to exploit and meet the emerging domestic and global opportunities and challenges. The bedrock of any such package of measures must be to let the entrepreneurs make investment decisions on the basis of their own commercial judgement. The attainment of technological dynamism and international competitiveness requires that enterprises must be enabled to swiftly respond to fast changing external conditions that have become characteristic of today's industrial world. Government policy and procedures must be geared to assisting entrepreneurs in their efforts. This can be done only if the role played by the Government were to be changed from that of only exercising control to one of providing help and guidance by making essential procedures fully transparent and by eliminating delays.

22. The winds of change have been with us for some time. The industrial licensing system has been gradually moving away from the concept of capacity licensing. The system of reservations for public sector undertakings has been evolving towards an ethos of greater flexibility and private sector enterprise has been gradually allowed to enter into many of these areas on a case by case basis. Further impetus must be provided to these changes which alone can push this country

towards the attainment of its entrepreneurial and industrial potential. This calls for bold and imaginative decisions designed to remove restraints on capacity creation, while at the same time, ensuring that over-riding national interests are not jeopardised.

23. In the above context, industrial licensing will henceforth be abolished for all industries except those specified, irrespective of levels of investment. These specified industries (Annex-II), will continue to be subject to compulsory licensing for reasons related to security and strategic concerns, social reasons, problems related to safety and over-riding environmental issues, manufacture of products of hazardous nature and articles of elitist consumption. The exemption from licensing will be particularly helpful to the many dynamic small and medium entrepreneurs who have been unnecessarily hampered by the licensing system. As a whole the Indian economy will benefit by becoming more competitive, more efficient and modern and will take its rightful place in the world of industrial progress.

B. Foreign Investment

24. While freeing Indian industry from official controls, opportunities for promoting foreign investments in India should also be fully exploited. In view of the significant development of India's industrial economy in the last 40 years, the general resilience, size and level of sophistication achieved, and the significant changes that have also taken place in the world industrial economy, the relationship between domestic and foreign industry needs to be much more dynamic than it has been in the past in terms of both technology and investment. Foreign investment would bring attendant advantages of technology transfer, marketing expertise, introduction of modern managerial techniques and new possibilities for promotion of exports. This is particularly necessary in the changing global scenario of industrial and economic cooperation marked by mobility of capital. The government will therefore welcome foreign investment which is in the interest of the country's industrial development.

25. In order to invite foreign investment in high priority industries requiring large investments and advanced technology, it has been decided to provide approval for direct foreign investment upto 51 per cent foreign equity in such industries. There shall be no bottlenecks of any kind in this process. This group of industries has generally been known as the 'Appendix I industries' and are areas in which FERA companies have already been allowed to invest on a discretionary basis. This change will go a long way in making Indian policy on foreign investment transparent. Such a framework will make it attractive for companies abroad to invest in India.

26. Promotion of exports of Indian products calls for a systematic exploration of world markets possible only through intensive and highly professional marketing activities. To the extent that expertise of this nature is not well developed so far in India, Government will encourage foreign trading companies to assist us in our export activities. Attraction of substantial investment and access to high technology, often closely held, and to world markets, involves interaction with some of the world's largest international manufacturing and marketing firms. The Government will appoint a special board to negotiate with such firms so that we can engage in purposive negotiation with such large firms, and provide the avenues for large investments in the development of industries and technology in the national interest.

C. Foreign Technology Agreements

27. There is a great need for promoting an industrial environment where the acquisition of technological capability receives priority. In the

fast changing world of technology the relationship between the suppliers and users of technology must be a continuous one. Such a relationship becomes difficult to achieve when the approval process includes unnecessary governmental interference on a case to case basis involving endemic delays and fostering uncertainty. The Indian entrepreneur has now come of age so that he no longer needs such bureaucratic clearances of his commercial technology relationships with foreign technology suppliers. Indian industry can scarcely be competitive with the rest of the world if it is to operate within such a regulatory environment.

28. With a view to injecting the desired level of technological dynamism in Indian industry, Government will provide automatic approval for technology agreements related to high priority industries within specified parameters. Similar facilities will be available for other industries as well if such agreements do not require the expenditure of free foreign exchange. Indian companies will be free to negotiate the terms of technology transfer with their foreign counterparts according to their own commercial judgement. The predictability and independence of action that this measure is providing to Indian industry will induce them to develop indigenous competence for the efficient absorption of foreign technology. Greater competitive pressure will also induce our industry to invest much more in research and development than they have been doing in the past. In order to help this process, the hiring of foreign technicians and foreign testing of indigenously developed technologies, will also not require prior clearance as prescribed so far, individually or as a part of industrial or investment approvals.

D. Public Sector Policy

29. The public sector has been central to our philosophy of development. In the pursuit of our development objectives, public ownership and control in critical sectors of the economy has played an important role in preventing the concentration of economic power, reducing regional disparities and ensuring that planned development serves the common good.

30. The Industrial Policy Resolution of 1956 gave the public sector a strategic role in the economy. Massive investments have been made over the past four decades to build a public sector which has a commanding role in the economy. Today key sectors of the economy are dominated by mature public enterprises that have successfully expanded production, opened up new areas of technology and built up a reserve of technical competence in a number of areas.

31. After the initial exuberance of the public sector entering new areas of industrial and technical competence, a number of problems have begun to manifest themselves in many of the public enterprises. Serious problems are observed in the insufficient growth in productivity, poor project management, over-manning, lack of continuous technological upgradation, and inadequate attention to R&D and human resource development. In addition, public enterprises have shown a very low rate of return on the capital invested. This has inhibited their ability to regenerate themselves in terms of new investments as well as in technology development. The result is that many of the public enterprises have become a burden rather than being an asset to the Government. The original concept of the public sector has also undergone considerable dilution. The most striking example is the take over of sick units from the private sector. This category of public sector units accounts for almost one third of the total losses of central public enterprises. Another category of public enterprises, which does not fit into the original idea of the public sector being at the commanding heights of the economy, is the plethora of public enterprises which are in the consumer goods and services sectors.

32. It is time therefore that the Government adopt a new approach to public enterprises. There must be a greater commitment to the support of public enterprises which are essential for the operation of the industrial economy. Measures must be taken to make these enterprises more growth oriented and technically dynamic. Units which may be faltering at present but are potentially viable must be restructured and given a new lease of life. The priority areas for growth of public enterprises in the future will be the following:

* Essential infrastructure goods and services.
* Exploration and exploitation of oil and mineral resources.
* Technology development and building of manufacturing capabilities in areas which are crucial in the long term development of the economy and where private sector investment is inadequate.
* Manufacture of products where strategic considerations predominate such as defence equipment. At the same time the public sector will not be barred from entering areas not specifically reserved for it.

33. In view of these considerations, Government will review the existing portfolio of public investments with greater realism. This review will be in respect of industries based on low technology small scale and non-strategic areas, inefficient and unproductive areas, areas with low or nil social considerations or public purpose, and areas where the private sector has developed sufficient expertise and resources.

34. Government will strengthen those public enterprises which fall in the reserved areas of operation or are in high priority areas or are generating good or reasonable profits. Such enterprises will be provided a much greater degree of management autonomy through the system of memoranda of understanding. Competition will also be induced in these areas by inviting private sector participation. In the case of selected enterprises, part of Government holdings in the equity share capital of these enterprises will be disinvested in order to provide further market discipline to the performance of public enterprises. There are a large number of chronically sick public enterprises incurring heavy losses, operating in a competitive market and serve little or no public purpose. These need to be attended to. The country must be proud of the public sector that it owns and it must operate in the public interest.

E. Monopolies and Restrictive Trade Practices Act (MRTP ACT)

35. The principal objectives sought to be achieved through the MRTP Act are as follows:-

(i) Prevention of concentration of economic power to the common detriment, control of monopolies, and
(ii) Prohibition of monopolistic and restrictive and unfair trade practices.

36. The MRTP Act became effective in June 1970. With the emphasis placed on productivity In the Sixth Plan, major amendments to the MRTP Act were carried out in 1982 and 1984 in order to remove impediments to industrial growth and expansion. This process of change was given a new momentum in 1985 by an increase of threshold limit of assets.

37. With the growing complexity of industrial structure and the need for achieving economies of scale for ensuring higher productivity and competitive advantage in the international market, the interference of the Government through the MRTP Act in investment decisions of large companies has become deleterious in its effects on Indian industrial growth. The pre-entry scrutiny of investment decisions by so called MRTP companies will no longer be required. Instead, emphasis will be on controlling and regulating monopolistic, restrictive and unfair trade practices rather than making it necessary for the

monopoly houses to obtain prior approval of Central Government for expansion, establishment of new undertakings, merger, amalgamation and takeover and appointment of certain directors. The thrust of policy will be more on controlling unfair or restrictive business practices. The MRTP Act will be restructured by eliminating the legal requirement for prior governmental approval for expansion of present undertakings and establishment of new undertakings. The provisions relating to merger, amalgamation and takeover will also be repealed. Similarly, the provisions regarding restrictions on acquisition of and transfer of shares will be appropriately incorporated in the Companies Act.

38. Simultaneously, provisions of the MRTP Act will be strengthened in order to enable the MRTP Commission to take appropriate action in respect of the monopolistic, restrictive and unfair trade practices. The newly empowered MRTP Commission will be encouraged to require investigation suo moto or on complaints received from individual consumers or classes of consumers.

F. Decisions of Government

39. In view of the considerations outlined above Government have decided to take a series of measures to unshackle the Indian industrial economy from the cobwebs of unnecessary bureaucratic control. These measures complement the other series of measures being taken by Government in the areas of trade policy, exchange rate management, fiscal policy, financial sector reform and overall macro economic management.

a. Industrial Licensing Policy

i) Industrial Licensing will be abolished for all projects except for a short list of industries related to security and strategic concerns, social reasons, hazardous chemicals and overriding environmental reasons, and items of elitist consumption (list attached as Annex II). Industries reserved for the small scale sector will continue to be so reserved.

ii) Areas where security and strategic concerns predominate, will continue to be reserved for the public sector (list attached as Annex I).

iii) In projects where imported capital goods are required, automatic clearance will be given.

a) in cases where foreign exchange availability is ensured through foreign equity, or

b) if the CIF value of imported capital goods required is less than 25 per cent of total value (net of taxes) of plant and equipment, upto a maximum value of Rs 2 crore. In view of the current difficult foreign exchange situation, this scheme (i.e., (iii) b) will come into force from April, 1992.

In other cases, imports of capital goods will require clearance from the Secretariat of Industrial Approvals (SIA) in the Department of Industrial Development according to availability of foreign exchange resources.

iv) In locations other than cities of more than 1 million population, there will be no requirement of obtaining industrial approvals from the Central Government except for industries subject to compulsory licensing. In respect of cities with population greater than 1 million, industries other than those of a non-polluting nature such as electronics, computer software and printing will be located outside 25 Kms. of the periphery, except in prior designated industrial areas.

A flexible location policy would be adopted in respect of such cities (with population greater than 1 million) which require industrial re-generation.

Zoning and Land Use Regulation and

Environmental Legislation will continue to regulate industrial locations.

Appropriate incentives and the design of investments in infrastructure development will be used to promote the dispersal of industry particularly to rural and backward areas and to reduce congestion in cities.

v) The system of phased manufacturing programmes run on an administrative case by case basis will not be applicable to new projects. Existing projects with such programmes will continue to be governed by them.

vi) Existing units will be provided a new broad banding facility to enable them to produce any article without additional investment.

vii) The exemption from licensing will apply to all substantial expansions of existing units.

viii) The mandatory convertibility clause will no longer be applicable for term loans from the financial institutions for new projects.

Procedural Consequences

ix) All existing registration schemes (Delicenced Registration, Exempted Industries Registration, DGTD registration) will be abolished.

x) Entrepreneurs will henceforth only be required to file an information memorandum on new projects and substantial expansions.

xi) The lists at Annex II and Annex III will be notified in the Indian Trade Classification (Harmonised System).

b. Foreign Investment

i) Approval will be given for direct foreign investment upto 51 per cent foreign equity in high priority industries (Annex III). There shall be no bottlenecks of any kind in this process. Such clearance will be available if foreign equity covers the foreign exchange requirement for imported capital goods. Consequential amendments to the Foreign Exchange Regulation Act (1973) shall be carried out.

ii) While the import of components, raw materials and intermediate goods, and payment of knowhow fees and royalties will be governed by the general policy applicable to other domestic units, the payment of dividends would be monitored through the Reserve Bank of India so as to ensure that outflows on account of dividend payments are balanced by export earnings over a period of time.

iii) Other foreign equity proposals, including proposals involving 51 per cent foreign equity which do not meet the criteria under (i) above, will continue to need prior clearance. Foreign equity proposals need not necessarily be accompanied by foreign technology agreements.

iv) To provide access to international markets, majority foreign equity holding upto 51 per cent equity will be allowed for trading companies primarily engaged in export activities. While the thrust would be on export activities, such trading houses shall be at par with domestic trading and export houses in accordance with the Import-Export Policy.

v) A Special Empowered Board would be constituted to negotiate with a number of large international firms and approve direct foreign investment in select areas. This would be a special programme to attract substantial investment that would provide access to high technology and world markets. The Investment programmes of such firms would be considered in totality, free from predetermined parameters or procedures.

c. Foreign Technology Agreements

i) Automatic permission will be given for foreign technology agreements in high priority industries (Annex III) upto a lumpsum payment of Rs 1 crore, 5 per cent royalty for domestic sales and 8 per cent for exports, subject to total payments of 8 per cent of sales over a 10 year period from date of agreement or 7 years from commencement of production. The prescribed royalty rates are net of taxes and will be calculated according to standard procedures.

ii) In respect of industries other than those in Annex III, automatic permission will be given subject to the same guidelines as above if no free foreign exchange is required for any payments.

iii) All other proposals will need specific approval under the general procedures in force.

iv) No permission will be necessary for hiring of foreign technicians, foreign testing of indigenously developed technologies. Payment may be made from blanket permits or free foreign exchange according to RBI guidelines.

d. Public Sector

i) Portfolio of public sector investments will be reviewed with a view to focus the public sector on strategic, high-tech and essential infrastructure. Whereas some reservation for the public sector is being retained there would be no bar for areas of exclusivity to be opened up to the private sector selectively. Similarly the public sector will also be allowed entry in areas not reserved for it.

ii) Public enterprises which are chronically sick and which are unlikely to be turned around will, for the formulation of revival/rehabilitation schemes, be referred to the Board for Industrial and Financial Reconstruction (BIFR), or other similar high level institutions created for the purpose. A social security mechanism will be created to protect the interests of workers likely to be affected by such rehabilitation packages.

iii) In order to raise resources and encourage wider public participation, a part of the government's shareholding in the public sector would be offered to mutual funds, financial institutions, general public and workers.

iv) Boards of public sector companies would be made more professional and given greater powers.

v) There will be a greater thrust on performance improvement through the Memoranda of Understanding (MOU) system through which managements would be granted greater autonomy and will be held accountable. Technical expertise on the part of the Government would be upgraded to make the MOU negotiations and implementation more effective.

vi) To facilitate a fuller discussion on performance, the MOU signed between Government and the public enterprise would be placed in Parliament. While focussing on major management issues, this would also help place matters on day to day operations of public enterprises in their correct perspective.

e. MRTP Act

i) The MRTP Act will be amended to remove the threshold limits of assets in respect of MRTP companies and dominant undertakings. This eliminates the requirement of prior approval of Central Government for establishment of new undertakings, expansion of undertakings, merger, amalgamation and takeover and appointment of Directors under certain circumstances.

ii) Emphasis will be placed on controlling and regulating monopolistic, restrictive and unfair trade practices. Simultaneously, the newly empowered MRTP Commission will be authorised to initiate investigations suo moto or on complaints received from individual consumers or classes of consumers in regard to monopolistic, restrictive and unfair trade practices.

iii) Necessary comprehensive amendments will be made in the MRTP Act in this regard and for enabling the MRTP Commission to exercise punitive and compensatory powers.

Annex I. Proposed List of Industries To be Reserved for The Public Sector

1. Arms and ammunition and allied items of defence equipment, Defence aircraft and warships.
2. Atomic Energy.
3. Coal and lignite.
4. Mineral oils.
5. Mining of iron ore, manganese ore, chrome ore, gypsum, sulphur, gold and diamond.
6. Mining of copper, lead, zinc, tin, molybdenum and wolfram.
7. Minerals specified in the Schedule to the Atomic Energy (Control of Production and Use) Order, 1953.
8. Railway transport.

Annex II. List of Industries in Respect of Which Industrial Licensing will be Compulsory

1. Coal and Lignite.
2. Petroleum (other than crude) and its distillation products.
3. Distillation and brewing of alcoholic drinks.
4. Sugar.
5. Animal fats and oils.
6. Cigars and cigarettes of tobacco and manufactured tobacco substitutes.
7. Asbestos and asbestos-based products.
8. Plywood, decorative veneers, and other wood based products such as particle board, medium density fibre board, block board.
9. Raw hides and skins, leather, chamois leather and patent leather.
10. Tanned or dressed furskins.
11. Motor cars.
12. Paper and Newsprint except bagasse-based units.
13. Electronic aerospace and defence equipment: All types.
14. Industrial explosives, including detonating fuse, safety fuse, gun powder, nitrocellulose and matches.
15. Hazardous chemicals.
16. Drugs and Pharmaceuticals (according to Drug Policy).
17. Entertainment Electronics (VCRs, Colour 'TVs. C.D. players, Tape Recorders).
18. White Goods (Domestic Refrigerators, Domestic Dishwashing machines, Programmable Domestic Washing Machines, Microwave ovens, Airconditioners).

Note: The compulsory licensing provisions would not apply in respect of the small-scale units taking up the manufacture of any of the above items reserved for exclusive manufacture in small-scale sector.

Annex III. List of Industries for Automatic Approval of Foreign Technology Agreements and for 51 Per cent Foreign Equity Approvals

1. Metallurgical Industries
   - (i) Ferro alloys.
   - (ii) Castings and forgings.
   - (iii) Non-ferrous metals and their alloys.
   - (iv) Sponge iron and pelletisation.
   - (v) Large diameter steel welded pipes of over 300 mm diameter and stainless steel pipes.
   - (vi) Pig iron.

2. Boilers and Steam Generating Plants.

3. Prime Movers (other than electrical generators)
   - (i) Industrial turbines.
   - (ii) Internal combustion engines.
   - (iii) Alternate energy systems like solar wind, etc., and equipment therefor.
   - (iv) Gas/hydro/steam turbines upto 60 MW.

4. Electrical Equipment
   - (i) Equipment for transmission and distribution of electricity including power and distribution transformers, power relays, HT-switch gear synchronous condensers.
   - (ii) Electrical motors.
   - (iii) Electrical furnaces, industrial furnaces and induction heating equipment.
   - (iv) X-ray equipment.
   - (v) Electronic equipment, components including subscribers' end telecommunication equipments.
   - (vi) Component wires for manufacture of lead-in wires.
   - (vii) Hydro/steam/gas generating sets upto 60 MW.
   - (viii) Generating sets and pumping sets based on internal combustion engines.
   - (ix) Jelly-filled telecommunication cables.
   - (x) Optic fibre.
   - (xi) Energy efficient lamps and
   - (xii) Midget carbon electrodes.

5. Transportation
   - (i) Mechanised sailing vessels upto 10,000 DWT including fishing trawlers.
   - (ii) Ship ancillaries.
   - (iii) (a) Commercial vehicles, public transport vehicles, including automotive commercial three wheeler, jeep type vehicles, industrial locomotives.
     - (b) Automotive two wheelers and three wheelers.
     - (c) Automotive components/spares and ancillaries.
   - (iv) Shock absorbers for railway equipment: and
   - (v) Brake system for railway stock and locomotives.

(Contd.)

Annex III. (Contd.)

6. Industrial Machinery
   (i) Industrial machinery and equipment.

7. (i) Machine tools and industrial robots and their controls and accessories.
   (ii) Jigs, fixtures, tools and dies of specialised types and cross land tooling, and
   (iii) Engineering production aids such as cutting and forming tools, patterns and dies and tools.

8. Agricultural Machinery
   (i) Tractors.
   (ii) Self-propelled Harvestor Combines.
   (iii) Rice transplanters.

9. Earth Moving Machinery
   (i) Earth moving machinery and construction machinery and components thereof.

10. Industrial Instruments
   (i) Indicating, recording and regulating devices for pressure, temperature, rate of flow weights levels and the like.

11. Scientific and Electromedical Instruments and Laboratory Equipment.

12. Nitrogenous & Phosphatic Fertilizers falling under
   (i) Inorganic fertilizers under '18-Fertilisers' in the First Schedule to IDR Act, 1951.

13. Chemicals (other than fertilizers)
   (i) Heavy organic chemicals including petrochemicals.
   (ii) Heavy inorganic chemicals.
   (iii) Organic fine chemicals.
   (iv) Synthetic resins and plastics.
   (v) Man made fibres.
   (vi) Synthetic rubber.
   (vii) Industrial, explosives.
   (viii) Technical grade insecticides, fungicides, weedicides, and the like.
   (ix) Synthetics detergents.
   (x) Miscellaneous chemicals (for industrial use only)
      (a) Catalysts and catalyst supports.
      (b) Photographic chemicals.
      (c) Rubber chemicals.
      (d) Polyols.
      (e) Isocyanates, urethanes, etc.
      (f) Speciality chemicals for enhanced oil recovery.
      (g) Heating fluids.

(Contd.)

Annex III. (Contd.)

(h) Coal tar distillation and products therefrom.
(i) Tonnage plants for the manufacture of industrial gases.
(j) High altitude breathing oxygen/medical oxygen.
(k) Nitrous oxide.
(l) Refrigerant gases like liquid nitrogen, carbondioxide, etc., in large volumes.
(m) Argon and other rare gases.
(n) Alkali/acid resisting cement compound.
(o) Leather chemicals and auxiliaries.

14. Drugs and Pharmaceuticals According to Drug Policy.

15. (i) Paper and pulp including paper products.
(ii) Industrial laminates.

16. (i) Automobile tyres and tubes.
(ii) Rubberised heavy duty industrial beltings of all types.
(iii) Rubberised conveyor beltings.
(iv) Rubber reinforced and lined fire fighting hose pipes.
(v) High pressure braided hoses.
(vi) Engineering and industrial plastic products.

17. Plate Glass
(i) Glass shells for television tubes.
(ii) Float glass and plate glass.
(iii) H.T. insulators.
(iv) Glass fibres of all types.

18. Ceramics
(i) Ceramics for industrial uses.

19. Cement Products
(i) Portland cement.
(ii) Gypsum boards, wall boards and the like.

20. High Technology Reproduction and Multiplication Equipment.

21. Carbon and Carbon Products
(i) Graphite electrodes and anodes.
(ii) Impervious graphite blocks and sheets.

(Contd.)

Annex III. (Concld.)

22. Pretensioned High Pressure RCC Pipes.

23. Rubber Machinery.

24. Printing Machinery
    (i) Web-fed high speed off-set rotary printing machine having output of 30,000 or more impressions per hour.
    (ii) Photo composing/type setting machines.
    (iii) Multi-colour sheet-fed off-set printing machines of sizes of 18" x 25" and above.
    (iv) High speed rotograture printing machines having output of 30,000 or more impressions per hour.

25. Welding Electrodes other than those for Welding Mild Steel.

26. Industrial Synthetic Diamonds.

27. (i) Photosynthesis improvers.
    (ii) Genetically modified free living symbiotics nitrogen fixer.
    (iii) Pheromones.
    (iv) Bio-insecticides.

28. Extraction and Upgrading of Minor Oils.

29. Pre-fabricated Building Material.

30. Soya Products
    (i) Soya texture proteins.
    (ii) Soya protein isolates.
    (iii) Soya protein concentrates.
    (iv) Other specialised products of soyabean.
    (v) Winterised and deodourised refined soyabean oil.

31. (a) Certified high yielding hybrid seeds and synthetic seed, and
    (b) Certified high yielding plantlets developed through plant tissue culture.

32. All food processing industries other than milk food, malted foods, and flour, but excluding the items reserved for small scale sector.

33. All items of packaging for food processing industries excluding the items reserved for small-scale sector.

34. Hotels and tourism-related industry.

PRESS NOTE NO. 2 (1997 Series)
Expansion of List of Industries for Automatic Approval for Foreign Equity

17th January, 1997

Under the liberalised polices and procedures governing foreign investment and foreign technology and transfer agreements as per the Statement of Industrial Policy, 1991, the list of 35 industries eligible for Automatic Approval by Reserve Bank of India (RBI) for foreign equity up to 51 per cent was published as ANNEX- III to this Ministry's Press Note No. 10 (1992 Series) dated 24.6.1992.

2. On a review of the policy on foreign direct investment, it has been decided to include 3 categories of industries/items relating to mining activities for foreign equity up to 50 per cent, 13 additional categories of industries/items for foreign equity upto 51 per cent and 9 categories of industries equity upto 74 per cent in the list of industries/items eligible for automatic approval by the Reserve Bank of India. These industries are listed under the heading 'Part 'A', Part 'B' and Part 'C' of ANNEXURE-III' appended to this Press Note. These lists would be a supplement to the existing list of 35 industries (presently listed under Annex-III of the Industrial Policy) which qualify for automatic approval for foreign direct investment. In case any specific item now shown in Part B or Part C of Annex-III, already features in the 35 sectors included in the existing Annexure-III of Press Note No. 10 (1992 Series) dated 24.6.92, the status of that item for eligibility for automatic approval foreign equity up to 51 per cent OR 74 per cent would be determined in terms of the instant Press Note.

3. No automatic approval shall be granted by the RBI for any item reserved for the small scale sector or for any other item which requires industrial licence under the existing policy. The applicant shall have to necessarily state in his/her application to RBI whether he/she proposes to manufacture any item reserved for the small scale sector or not.

4. The foreign equity limits for automatic approval as per the attached lists would also be applicable to all proposals for Units in the Electronics Hardware Technology Park Schemes (EHTPs) and units under the Software Technology Park Schemes (STPs), wherever such proposals contain request for approval for foreign direct investment as well. The other parameters of eligibility with respect to these specific schemes (EHTPs, STPs) would be applicable in the same manner as they are applicable for proposals not containing any element of foreign investment under these schemes.

5. The attached lists are based on the National Industrial Classification of all Economic Activities (NIC), 1987. The entrepreneurs/investors should henceforth give description of their activities in this classification system while submitting their application to the RBI/ Government for various industrial approvals.

[Annexure III appended to this Press Note is not reproduced here - Editor]

Note: Besides the changes in Annexure III appended to the above Press note, the following changes in Annexures I, II and III have taken place so far:

1. *The list of items reserved for the public sector (Annexure I) were pruned, vide Press Note no. 3 of March 26, 1993, when mining of iron ore, copper ore, etc., were deleted from this list.*
2. *The list of items reserved for the public sector were further pruned, vide Press Note 1 of June 8, 1998, when coal, lignite, petroleum, etc., were deleted from this list (Annexure I)*
3. *Following the changes in Annexure III, vide Press Note 2 of January 17, 1997 (given above), the Annexure was further revised in October 1997, vide Press Note 14 dated*

October 8, 1997 (not reproduced here). A Part D of Annexure III was created by deleting certain items from Part C of Annexure III, and putting those in Part D, vide Press Note no. 2 of June 13, 1998 (not reproduced here). A further delition from Part C and addition of it to Part D was made, vide Press Note no. 1 at 1999, dated January 4, 1999 (not reproduced here).

4. *The following Annexures I, II and III are the latest position incorporated in the Eighth Edition of the Industrial Policy Manual, incorporating all changes upto May 1999, which is the latest position.*
5. *(a) The items starred (*) in the following Annexure III, did not feature in the Annexure III appended to the January 17, 1997 Press Note (reproduced above)*
   (b) The items with two stars (**) are items which were taken out of the Part C of Annexure III of January 17, 1997, and constituted into a Part D of this Annexure, vide Press Note no. 2 of June 8, 1998.
   (c) The item with triple stars (***) was added to Part D of Annexure III, vide Press Note no. 1, dated January 4, 1999, by shifting 'Ports and Harbours' from C-6 in Annexure III, appended to Press Note no. 2 of January 17, 1997, and adding 'roads highways, vehicular bridges, toll roads, vehicular tunnels' to it.

From this, it should be easy to deduce the Annexure III appended to Press Note no. 2 of January 17, 1997, and therefore it is not reproduced here.

- Editor

ANNEXURE-I

LIST OF INDUSTRIES RESERVED FOR THE PUBLIC SECTOR

1. Arms and ammunition and allied items of defence equipment, defence aircraft and war-ships.
2. Atomic Energy
3. Substances specified in the schedule to the Department of Atomic Energy.
4. Railway transport.

ANNEXURE-II

LIST OF INDUSTRIES FOR WHICH INDUSTRIAL LICENSING IS COMPULSORY

1. Distillation and brewing of alcoholic drinks.
2. Cigars and cigarettes of tobacco and manufactured tobacco substitutes.
3. Electronic Aerospace and defence equipment: all types.
4. Industrial explosives including detonating fuses, safety fuses, gun powder, nitrocellulose and matches.
5. Hazardous chemicals.
6. Drugs and Pharmaceuticals (according to modified Drug Policy issued in September, 1994).

Note: The compulsory licensing provisions would not apply in respect of the small scale units taking up the manufacture of any of the above items reserved for exclusive manufacture in small-scale sector.

ANNEXURE-III
CONSOLIDATED LIST OF INDUSTRIES FOR AUTOMATIC APPROVAL FOR FOREIGN EQUITY AND FOREIGN TECHNOLOGY AGREEMENT

Notes: 1. This is based on NIC Code, 1987.

2. Wherever the description in the attached list varies from the description against its assigned NIC code, the description as given in the list shall be treated as authentic and shall prevail over the standard description for the given NIC code. Where the description relates to a group of articles, all sub-classifications under this Group shall be taken as inclusive unless specifically mentioned otherwise.

PART 'A'

List of Industries/Items for Automatic Approval for Foreign Equity up to 50 per cent

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
A-1	12			MINING OF IRON ORE
		120		Mining of iron ore.
A-2	13			MINING OF METAL ORES OTHER THAN IRON ORE (Mining of Uranium Group ores is not covered)
		130		Mining of Manganese ore.
		131		Chromite.
		132		Bauxite.
		134		Copper Ore.
		135		Mining of Lead and Zinc Ores.
A-3	15			MINING OF NON-METALLIC MINERALS NOT ELSEWHERE CLASSIFIED
		150		Mining and quarrying of rock aggregates, sand and clays.
		151		Mining/quarrying of minerals for construction other than rock aggregates, sand and clays.
		152		Mining of fertilizer and chemical minerals.
		153		Mining of ceramic, refractory and glass minerals.
		154		Salt mining and quarrying including crushing, screening and evaporating in pans.
		155		Mining of mica.
		159		Mining of other non-metallic minerals.

PART 'B'
List of Additional Industries/Items for Automatic Approval for Foreign Equity up to 51 per cent

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
B-1		00*		AGRICULTURAL PRODUCTION
			009	Agricultural production n.e.c.
				009.9 Certified high yielding hybrid seeds and synthetic seeds.
B-2		01*		PLANTATIONS
			019	Plantations, n.e.c. 019.9 Certified high yielding plantations developed through plant tissue culture.
B-3	20,21			MANUFACTURE OF FOOD PRODUCTS
		200		
			200.5	Preservation of meats except by canning.
			200.6	Processing and canning of meat.
		201		Manufacture of dairy products.
			201.1	Manufacture of milk powder, ice-cream powder and condensed milk except baby milk foods.
			201.2	Manufacture of baby milk foods.
			201.3	Manufacture of butter, cream, ghee, cheese and khoya, etc.
			201.4	Manufacture of Pasteurised milk whether or not in bottles/polythene packs etc. (Plain or flavoured).
			201.9	Manufacture of other dairy products n.e.c.
		202		Canning and preservation of fruits and vegetables.
			202.1	Sun-drying of fruits and vegetables.
			202.2	Artificial dehydration of fruits and vegetables.
			202.3	Radiation preservation of fruits and vegetables.
			202.4	Manufacture of fruit/vegetable juices and their concentrates, squashes and powders.
			202.5	Manufacture of sauces, jams, jellies, and marmalades etc.

(Contd.)

PART 'B' (Contd.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
			202.7	Canning of fruits and vegetables.
			202.9	Fruit and vegetable preservation n.e.c.
		203		Processing, canning, and preserving of fish, crustacea and similar foods.
		204		Grain milling.
			204.1	Flour milling by power machine.
			204.9	Other grain milling and processing activities n.e.c.
		208		Production of common salt.
		209		Manufacture of cocoa products and sugar confectionery (including sweetmeats).
			209.1	Manufacture of cocoa products.
		218		Manufacture of starch and its derivatives.
		219*		Manufacture of food products n.e.c.
			219.9	Soya texture proteins, soya protein isolates, soya protein concentrates, other specified products of soya bean, winterised and deodorised refined soyabean oil.
B-4	23			MANUFACTURE OF COTTON TEXTILES
		235		Cotton spinning, weaving and processing in integrated mills.
B-5	24			MANUFACTURE OF WOOL, SILK & MAN-MADE FIBRE TEXTILES
		242		Wool spinning, weaving & processing in integrated mills.
		245		Spinning, weaving & processing of silk (textile) in integrated mills.
		247		Spinning, weaving & processing of man-made textiles fibres in integrated mills.
			247.1	Spinning of staple fibres in mills.
			247.2	Spinning of staple fibres and weaving of artificial/synthetic textile fabrics in mills.
			247.3	Weaving and processing (bleaching, dying and printing) of artificial/synthetic textile fabrics in mills.
			247.4	Composite artificial textile fibre mills (spinning, weaving, and processing).
B-6	26			MANUFACTURE OF TEXTILE PRODUCTS
		268		Manufacture of water-proof textile fabrics.

(Contd.)

PART 'B' (Contd.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
B-7	28*			MANUFACTURE OF PAPER AND PAPER PRODUCTS AND PRINTING, PUBLISHING & ALLIED INDUSTRIES
		280		Manufacture of pulp, paper and paper board including manufacture of newsprint.
B-8	30			MANUFACTURE OF BASIC CHEMICALS & CHEMICALS PRODUCTS (EXCEPT PRODUCTS OF PETROLEUM & COAL)
		300		Manufacture of industrial organic & inorganic chemicals.
		301		Manufacture of fertilizers and pesticides.
		302		Manufacture of plastics in primary forms; manufacture of synthetic rubber.
		303		Manufacture of paints, varnishes, and related products; artists' colours and ink.
		304		Manufacture of drugs, medicines and allied products.
		306		Manufacture of man-made fibres.
		309		Manufacture of chemical products n.e.c.
B-9	31			MANUFACTURE OF RUBBER, PLASTIC, PETROLEUM AND COAL PRODUCTS
		310		Tyre and tube industries.
		312		Manufacture of rubber products n.e.c.
		313		Manufacture of plastic products n.e.c.
		318		Manufacture of coke oven products.
		319		Manufacture of other coal and coal-tar products n.e.c
B-10	32*			MANUFACTURE OF NON-METALLIC MINERAL PRODUCTS
			320.7	Manufacture of non-refractory ceramic pipes. conduits, guttering and pipe fittings.
			320.8	Manufacture of non-refractory flooring blocks, support or filler tiles and roofing tiles.
		321		Manufacture of glass and glass products.
			321.1	Manufacture of glass in primary or Semi-manufactured forms (such as sheet and plate glass) including mirror sheets.
			321.2	Manufacture of glass fibre (including glass wool) and products therefrom.
			321.9	Manufacture of glass shells for television picture tubes.

(Contd.)

PART 'B' (Contd.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
		323		Manufacture of non-structural ceramic ware.
			323.3	Manufacture of ceramic insulators and insulating fittings for electrical machines, appliances and equipment.
		324		Manufacture of cement, lime and plaster.
			324.2	Manufacture of portland cement, aluminous cement slag cement and similar hydraulic cements, except in the form of clinkers.
		329		Manufacture of miscellaneous non-metallic mineral products n.e.c.
			329.3	Manufacture of hume pipes and other pre-fabricated structural components of cement.
			329.4	Manufacture of gypsum boards.
			329.7	Midget carbon electrodes, graphite electrodes and anodes and impervious graphite blocks and sheets.
			329.9	Manufacture of industrial synthetic diamonds.
B-11	34			MANUFACTURE OF METAL PRODUCTS & PARTS, EXCEPT MACHINERY AND EQUIPMENT
		341		Manufacture of fabricated metal products.
			341.1	Manufacture of railway and ship containers used in container-traffic.
			341.2	Manufacture of gas-cylinders (industrial or house-hold).
			341.3	Manufacture of tanks, reservoirs and containers of metals n.e.c.
			341.4	Manufacture of reinforced safes, vaults, strongroom doors and gates and the likes (manufacture of almirahs and filling cabinets etc. is classified in Group 342).
			341.5	Manufacture of steel trunks.
			341.6	Manufacture of sanitary and plumbing fixtures and fitting of metals.
			341.9	Manufacture of other fabricated metal products n.e.c.
		344		Forgings, pressings, stampings and roll- forming of metal, power metallurgy.
		349*		Manufacture of metal products (except machinery and equipment) n.e.c.
			349.9	Iron and steel pipes/tubes and fittings; welding electrodes other than those for welding mild steel.
B-12	35 & 36			MANUFACTURE OF MACHINERY AND EQUIPMENT OTHER THAN TRANSPORT EQUIPMENT
		350		Manufacture of agricultural machinery and equipment and parts thereof.

(Contd.)

PART 'B' (Contd.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
		351		Manufacture of machinery and equipment used by construction and mining industries.
		352		Manufacture of prime movers, boilers.
		353		Manufacture of industrial machinery for food and textile industries (including bottling and filling machinery).
		354		Manufacture of industrial machinery for other than food and textile industries.
		355		Manufacture of refrigerators, air-conditioners and fire-fighting equipment and their parts and accessories.
		356		Manufacture of general purpose non- electrical machinery equipment, their components and accessories n.e.c.
		357		Manufacture of machine tools, their parts and accessories.
		358		Manufacture of office, computing and accounting machinery and parts.
		359		Manufacture of special purpose machinery/ equipment; their components and accessories n.e.c.
			359.1	Manufacture of sewing and knitting machines.
			359.2	Manufacture of weighing machinery.
			359.3	Manufacture of washing and laundrying machines (including centrifugal clothes driers).
			359.5	Manufacture of filtering and purifying machinery for liquids and gases.
			359.6	Manufacture of distilling and rectifying plants (including heat exchangers).
			359.8	Manufacture of parts and accessories n.e.c. for special purpose non-electrical machinery/equipment n.e.c.
			359.9	Manufacture of other special purpose non- electrical machinery/equipment n.e.c.
		360		Manufacture of electrical industrial machinery apparatus and parts thereof.
		361		Manufacture of insulated wires and cables, including manufacture of optical fibre cables.
		362		Manufacture of accumulators, primary cells and primary batteries.
		363		Manufacture of electric lamps.
			363.2	Manufacture of ultra-violet or infra-red lamps.

(Contd.)

PART 'B' (Contd.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
			363.3	Manufacture of discharge lamps, fluorescent, hot-cathode or other discharge lamps.
			363.4	Manufacture of arc lamps.
			363.5	Manufacture of flash bulbs used in photography.
		368*		Manufacture of electronic valves and tubes and other electronic components n.e.c.
		369*		Manufacture of radiographic X-ray apparatus, X-ray tubes and parts and manufacture of electrical equipment n.e.c.
B-13	37*			MANUFACTURE OF TRANSPORT EQUIPMENT AND PARTS
		370		Ship and boat building.
			370.1	Making of ships and other vessels drawn by power upto 10,000 DWT.
			370.8	Manufacture of parts and accessories n.e.c. for ships and boats.
		371		Manufacture of industrial locomotives and parts.
			371.1	Manufacture of industrial diesel locomotives.
			371.8	Manufacture of parts and accessories n.e.c. for locomotives.
		372		Manufacture of railway or tramway wagons and coaches and other railroad equipment n.e.c.
			372.3	Manufacture of railway or tramway rolling stock, not self-propelled, other than passenger coaches.
			372.5	Manufacture of mechanical and electro-mechanical signalling, safety or traffic control equipment for railways, tramways, etc.
			372.8	Manufacture of parts of railway rolling stock.
		373		Manufacture of heavy motor vehicles, coach work.
		374		Manufacture of motor cars and other motor vehicles principally designed for the transport of less than 10 persons.
			374.2	Manufacture of jeeps and station wagons.
			374.8	Manufacture of internal combustion piston engines and other parts and accessories n.e.c. for motor vehicles classified in this group excluding for 374.1.
		375		Manufacture of motor-cycles and scooters and parts (including three wheelers).
			375.1	Manufacture of motor-cycles.
			375.2	Manufacture of scooters and scooterettes.

(Contd.)

PART 'B' (Contd.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
			375.3	Manufacture of three-wheelers.
			375.8	Manufacture of internal combustion piston engines and other parts and accessories n.e.c. for motor cycles, scooters and three-wheelers.
B-14	69*			RESTAURANTS AND HOTELS
		691		Hotels, rooming houses, camps and other lodging places.
B-15	70			LAND TRANSPORT (SUPPORT SERVICES)
		708		Supporting services to land transport, like operation of highway bridges, toll roads, vehicular tunnels.
B-16	71			WATER TRANSPORT (SUPPORT SERVICES)
		712		Support services to water-transport like operation and maintenance of piers, loading & discharging of vessels.
B-17	73			SERVICES INCIDENTAL TO TRANSPORT NOT ELSEWHERE CLASSIFIED
		730		Cargo handling incidental to land transport.
		731		Cargo handling incidental to water transport.
		732		Cargo handling incidental to air transport.
		733		Renting and leasing (except financial leasing) of motor vehicles, without operator, for passenger transport.
		734		Renting and leasing (except financial leasing) of motor vehicles, without operator, for freight transport.
		739		Renting & leasing of refrigerated/cold transport.
B-18	85			RENTING AND LEASING NOT ELSEWHERE CLASSIFIED
		850		Renting of transport equipment without operator.
			850.9	Renting of other transport equipment n.e.c.
		852		Renting of office accounting and computing machinery and equipment, without operator.
		853		Renting of other industrial machinery and equipment.
B-19	89			BUSINESS SERVICES NOT ELSEWHERE CLASSIFIED
		892*		Data Processing, software development and computer consultancy services.
			892.2	Software supply services.

(Contd.)

PART 'B' (Concld.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
		893		Business and management consultancy activities.
			893.2	Market research services.
		895		Technical testing & analysis services.
		899		Research & Development Services (excluding basic research and setting up of R&D/academic institutions which would award degrees/diplomas/ certificates).
B-20	93			HEALTH AND MEDICAL SERVICES
B-21	99*			SERVICES NOT ELSEWHERE CLASSIFIED
		990		Tourism related industry.

PART 'C'
List of Industries/Items for Automatic Approval for Foreign Equity up to 74 per cent.

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
C-1	19			MINING SERVICES
		190		Oil & Gas field services, except Exploration and production services.
		191		Services incidental to mining viz. drilling, shafting, reclamation of mines, surveys/mapping - excluding services related to gold, silver and precious/semi precious stones.
C-2	33			BASIC METALS & ALLOYS INDUSTRIES
		330		Manufacture of Iron ore pellets, pig iron, sponge iron and steel in Primary/semi- finished/finished forms.
		331		Manufacture of semi-finished Iron & Steel products in re-rolling mills, cold-rolling mills and wire drawing mills.
		332		Manufacture of ferro-alloys.
		333		Copper manufacturing.
		334		Brass manufacturing.
		335		Aluminium manufacturing.
		336		Zinc manufacturing.

(Contd.)

PART 'C' (Contd.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
		337		Casting of metal.
		339		Other non-ferrous metal industries, excluding Gold, Silver & Platinum.
C-3	38			OTHER MANUFACTURING INDUSTRIES
		380		Manufacture of medical, surgical, scientific and measuring equipment except optical equipment.
			380.1	Manufacture of medical/surgical equipment and orthopaedic appliances (manufacture of apparatus based on the use of X-Ray or other radiators is classified in Class 369.1).
			380.2	Manufacture of industrial process control equipment (this class includes manufacture of apparatus used for continuous measurement and control or variable such as temperature, pressure, viscosity etc. of materials and products as they are being manufactured or otherwise processed).
			380.3	Manufacture of regulating or controlling instruments and apparatus, except industrial process control equipment.
			380.4	Manufacture of supply meters for electricity, water or gas.
			380.5	Manufacture of sensitive balance and mathematical calculating instruments.
			380.6	Manufacture of laboratory and scientific instruments n.e.c. (includes manufacture of non-optical microscopes, diffraction equipments; apparatus for measuring or checking electrical quantities, e.g., oscilloscopes, spectrum analysers, voltmeters, with or without recording device; apparatus for measuring non-electrical quantities e.g., radiation detectors and counters, cross-talk meters and other instruments specially designed for telecommunications; apparatus for testing the physical properties of materials, e.g., apparatus for testing hardness and other properties of metals, for testing the wear and tear and other properties of textiles and for testing the physical properties of paper, linoleum, plastic, rubber, wood, concrete and so forth; apparatus for carrying out physical or chemical analysis, e.g., polarimeters, refractometers, calorimeters, Orsob's apparatus, Ph-meters, viscometers, surface tension instruments and so forth and instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases, manometers, heatmeters, and so forth, except industrial process control equipment).
			380.8	Manufacture of parts and accessories n.e.c. for instruments and apparatus included in this group.

(Contd.)

PART 'C' (Contd.)

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
			380.9	Manufacture of other medical surgical, scientific and measuring equipment n.e.c. (includes manufacture of hydrometers, thermometers, pedometer, tachometers, balancing machines, test benches, comparators (include optical comparators and other optical type measuring and checking appliances and instruments); instruments for checking watches or watch parts and so forth).
		381		Manufacture of photographic, cinematographic and optical goods and equipment (excluding photo chemicals, sensitised paper and film).
		388		Manufacture of items based on solar energy like solar cells, cookers, air and water heating systems and other related items.
C-4				DELETED
C-5	43			NON-CONVENTIONAL ENERGY GENERATION AND DISTRIBUTION
C-6	50			CONSTRUCTION
		501		Construction and maintenance of rail beds, non-vehicular bridges, non-vehicular tunnels, ropeways, ports, harbours, and runways.
		503		Construction & Maintenance of waterways and water reservoirs.
		504		Construction & Maintenance of hydroelectric projects.
		505		Construction & Maintenance of power plants.
		506*		Construction & Maintenance of industrial plants.
C-7	70			LAND TRANSPORT
		707		Pipeline transport excluding Crude Oil, petroleum products and natural gas pipelines.
C-8	71			WATER TRANSPORT
		710		Ocean and water transport.
		711		Inland water transport.
C-9	74			STORAGE AND WAREHOUSING SERVICES
		741		Warehousing of agricultural products with refrigeration (cold storages).

PART 'D'
List of Industries/Items for Automatic Approval for Foreign Equity up to 100 per cent

Sl. No.	NIC CODE			DESCRIPTION
	Division	Group	Class	
(1)	(2)	(3)	(4)	(5)
D-1	40			ELECTRIC GENERATION AND TRANSMISSION
		400**		Generation and transmission of electric energy.
			400.1	Generation and transmission of electric energy produced in hydro-electric power plants.
			400.2	Generation and transmission of electric energy produced in coal based thermal power plants.
			400.3	Generation and transmission of electric energy produced in oil based thermal power plants.
			400.4	Generation and transmission of electric energy produced in gas based thermal power plants.
		401*		Distribution of electric energy to households, industrial, commercial and other users.
D-2	50			CONSTRUCTION
		501		Construction and maintenance of roads, highways, vehicular bridges, toll roads, vehicular tunnels, ports and harbours.

NOTES:
1. Foreign equity in projects under this category should not exceed Rs 15 billion.
2. Proposals involving generation, transmission and distribution of electric energy produced in atomic reactor power plants are not eligible for automatic approval.

Editor's Footnotes

* These are Items that did not feature in Annexure III attached to Press Note No. 2 of January 17, 1997, and have been added to Annexure III now.
** These Items that Featured in Part C of Annexure III in the Press Note No. 2 of January 17, 1997, and are now transferred to Part D of Annexure III.
3. The following notes were given below Annexure III to the Press Note No. 2, of January 17, 1997 and don't feature in that Annexure now.
Items for which approval for foreign investment and/or foreign technology agreements is not covered by automatic approval are:

(i) Items reserved for the small scale sector;
(ii) Items which require licence under existing policy;
(iii) All items of aerospace and defence equipment whether specially mentioned or not; and
(iv) All items related to production or use of atomic energy including carrying out of any process preparatory or ancillary to such production or use, under the Atomic Energy Act, 1962.

REPORT OF THE STUDY GROUP ON CORPORATE TAXATION
Government of India, Planning Commission, 1984

FOREWORD

The Study Group on Corporate Taxation was set up by the Planning Commission in July 1983 with the following membership:

1. Dr. I.S. Gulati, Chairman
2. Shri M.P. Chitale, Member
3. Dr, Amaresh Bagchi, Convenor

The terms of reference of the Group were as under:

(i) To examine the present system of taxation of business profits particularly with regard to:

(a) the computation of profits for taxation, and

(b) the various deductions and allowances provided in the existing law in arriving at the tax base,

(ii) To evaluate alternative bases and structures for taxation of business profits and their suitability in the Indian context.

(iii) To suggest appropriate lines of reform.

A copy of the Notification dated the 23rd July, 1983 constituting the Group is appended below.

2. The Study Group was originally required to submit its report within a period of 4 months. The life of the Study Group has been subsequently extended.

3. Dr. Nitin Desai, Secretary to the Economic Advisory Council, was closely associated with the deliberations of the Study Group and participated in most of the meetings. The Study Group is extremely grateful to him for his valuable contributions.

4. The chairman of the Central Board of Direct Taxes was kind enough to nominate Shri V.U. Eradi, Commissioner of Income Tax, Delhi, who also participated in the discussions of the Group. The Group wishes to place on record its gratitude to Shri Eradi for his contributions to its deliberations. The Group also wishes to thank the chairman, Central Board.

5. Some of the meetings of the Group were held in Bombay. The Group received valuable assistance from the Reserve Bank of India in holding its meetings in Bombay.

6. The Group had also informal discussions with the senior officials of the ICICI in Bombay and also some leading experts in company finance.

7. The Group also wishes to acknowledge the help received from National Institute of Public Finance and Policy, Delhi, and Centre for Development Studies, Trivandrum. The Group wishes to mention in particular the work done for the Group by Dr. Tapas Sen of the National Institute of Public Finance and Policy. Mrs. N. Shanta of the Centre for Development Studies, Trivandrum also did valuable work for the Group.

8. The Group also wishes to acknowledge the valuable secretarial help it received from the personal staff of Dr. A. Bagchi in the Economic Division of the Department of Economic Affairs.

No. A.12024/7/83-Adm.I
Government of India,
Planning Commission,

Yojana Bhavan, Parliament Street,
New Delhi, the 23 rd July, 1983.

Notification

S.O. _____ It has been decided to set up a Study Group on Corporate Taxation in India. The composition of the Group will be as under:-

1. Dr. I.S. Gulati. Chairman
2. Shri M.P. Chitale, Member
3. Dr. Amaresh Bagchi, Convenor.

2. The terms of the Study Group will be as follows:-

(i) To examine the present system of taxation of business profits, particularly with regard to (a) the computation of profits for taxation, and (b) the various deductions and allowances provided in

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This paper submitted to the Planning Commission in 1984, is being published for the first time here.
- Editor.

the existing law in arriving at the tax base,
(ii) To evaluate alternative bases and structures for taxation of business profits and their suitability in the Indian context.
(iii) To suggest appropriate lines of reform.

3. The members of the Study Group will be entitled to travel by air at their discretion. Orders regarding their daily allowance will be issued separately.

4. The Study Group will submit its Report to the Economic Advisory Council within a period of four months.

5. The expenditure of the Study Group on T.A. and D.A. will be met from within the Budget Grant of the Planning Commission for the year 1983-84.

Sd/- N.K. Aggarwal,
Deputy Secy, to the Govt. of India,
No.A.12034/7/83-Admn.I New Delhi,
the 23rd July, 1983.

ORDER

Ordered that a copy of the Notification be published in the Gazette of India for general information.

Ordered also that a copy of the Notification be communicated to each Member of the Study Group.

Sd/- N.K. Aggarwal,
Deputy Secy. to the Govt. of India.

I. THE CORPORATE SECTOR IN INDIA - AN OVERVIEW

1.1 The-total number of compnies registered under the compnies Act in India at present (as of 1982-83) is in the region of 83,000 with paid up capital of about Rs 30,000 crocre. In 1970-71 the number was 30,412 and the paid up capital stood at, Rs 4,301 crore (Table 1.1). This implies a growth rate 8.7 per cent per anmm in the number of companies and 13.6 per cent in their paid up capital in the course of twelve years.

1.2 The private corporate sector, that is, non-government companies have, recorded a lower growth rate than that of the corporate sector as a whole. While the number of companies in the private sector has gone up from 30,098 in 1970-71 to 81,960 in 1982-83 (i.e., by 8.7 per cent per annum) the volume of paid up capital in the private corporate sector stood at Rs 5,186 crore in 1982-83 as compared to Rs 2,237 crore in 1970-71, showing a growth, of 7.2 per cent. The Average size of paid up capital in the private corporate sector has registered a decline from Rs 7.4 lakh in 1970-71 to Rs 6.32 lakh in 1980-81.

1.3 Much of the growth of the corporate sector in terms of paid up capital is attributable to the public sector. The paid up capital of the government compnies constituted 48 per cent of the total paid up capital of the corporate sector in 1970-71. In 1982-83 government companies accounted for nearly 74 per cent.

1.4 Within the non-government corporate sector again, the number of functioning companies is much less than the number registered. A census carried out by the Reserve Bank of India (RBI) for 1976-77 showed that of the non-government non-financial public limited companies registered upto that year less than 2/3rds (4,572 out of about 7,500) were operating. We do not have similar information regarding non-government private limited companies. From Income tax data it would appear that, as of 1980-81, widely held companies (which are necessarily public limited in character) accounted for the bulk of the corporate income assessed (roughly 79 per cent) and tax demanded (78 per cent) although, in number, they constituted only about 2.6 per cent (2,860 out of 11,105) of the total assessments (Table 1.2). It should be added that the coverage of income tax statistics is incomplete and the number of companies actually assessed for income tax is larger that what is reported in the All India Income Tax Statistics. According to the report of the Comptroller & Auditor General the number of company assessees on the register of the Income Tax Department was 44,125 in 1980-81. However, if income tax statistics can be regarded as representative, it may still not be wrong to presume that the public limited companies account for the bulk of the income generated in the non-government corporate sector and their number has remained stagnant for many years.

This seems to be corroborated also by the findings of the Census of public limited companies carried out by the Reserve Bank of India for 1976-77 to which reference has been made earlier.

1.5 According to available estimates, taking government and non-government companies together, the proportion of value added by the non-financial corporate sector in the GDP has remained almost at the same level, viz., 9-10 per cent, in the last two decades. It was over 9 per cent in 1960-61, increased to 11 per cent in 1965-66 but came down to the earlier level subsequently and stood at 10 per cent in 1977-78.[1] The share of the private corporate sector (i.e., excluding government companies) in value added in the economy registered an almost steady decline.

1.6 The share of non-financial non-government companies in the net value added in the economy has also undergone a decline in the last two decades. It was 7.5 per cent in 1960-61, 6.6 per cent in 1970-71 and 6.5 per cent in 1979-80. Of the total net value added in manufacturing (organised and unorganised), the private (non-financial) corporate sector accounted for a little over 30 per cent in 1979-80, as compared to 40 per cent in 1960-61. In the net value added of the 'organised' manufacturing sector, the share of non-financial private companies was 49.5 per cent in 1979-80 as against 69.8 per cent in 1960-61 and 63.9 per cent in 1970-71.[2] Clearly, there has been a decline in the role of non-government corporate sector in the economy and the decline is particularly marked in manufacturing.

1.7 Non-corporate enterprises on the other hand have expanded their share in net value added in the private manufacturing sector substantially during the last two decades. Their share has increased from 24 per cent in 1960-61 to 36 per cent in 1979-80. This trend is clearly noticeable also in the operating surplus and profits and dividends.[3]

1.8 In 1960-61 the share of the corporate sector in net value added in the registered manufacturing sector stood at 70 per cent, that of non-corporate sector at 23 per cent and the rest, i.e., 7 per cent came from the public sector. In 1977-78, the respective proportions were 48 per cent, 27 per cent and 25 per cent.[4] The share of non-government companies in gross value added by the non-financial corporate sector which stood at 96 per cent in 1960-61 had come down to 74 per cent (as of 1977-78) and that of government companies increased from 4 per cent to 26 per cent.[5]

1.9 The growth of non-corporate business enterprises relatively to that of the corporate sector is evident also from the enormous increase in the number of income tax payers in the status of 'registered firm' as compared to that of companies. Reports of the Comptroller & Auditor General show that in 1975-76 while the number of company assessees was 40,327 the number of firms was 519,344. In 1982-83, the respective numbers were 48,597 and 771,146. The figures for the years 1975-76 to 1982-83 are given below:

	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Companies	40,327	41,878	41,533	35,982	42,581	44,125	46,335	48,597
Firms	519,344	566,091	584,815	508,196	672,817	753,718	786,321	771,146

1. 'Shifts in the Factor Income Shares Comparative Study of the Public and Private Indian Corporate Sector, 1960-61 to 1977-78', by Kripa Shankar and T.G. Nayak, RBI *Occasional Papers*, June 1985, p. 83.
2. 'Trends in Private Corporate savings' by N. Shanta in *Economic & Political Weekly*, November 6, 1982. Figures for 1979-80 computed later for this study.
3. N. Shanta, op.cit.
4. N. Shanta, op.cit.
5. Kripa Shankar & T.G. Nayak, op. cit.

Despite their incomplete coverage Income Tax Statistics too bear evidence of the faster growth of the unincorporated business sector as compared to that of the corporate sector (Table 1.3).

1.10 The private corporate sector's share in gross domestic savings has remained almost stagnant since 1960-61, fluctuating between 1.5 per cent and 1.8 per cent of GDP. Only in two years (1961-62 and 1962-63) the proportion exceeded 2 per cent. Capital formation in the private corporate sector as a proportion of GDP has also remained stagnant at about 2-3 per cent in the last thirty years. It exceeded 3 per cent for a few years but declined to 2.5 per cent again in the late seventies. Generation of gross savings in the private corporate sector has consistently fallen short of capital formation indicating a net transfer of savings from other sectors (mainly household) of the economy.[6]

Profitability Trends in the Corporate Sector

1.11 For large and medium public limited companies the ratio of profit before tax to net worth has increased from 19.9 per cent in 1970-71 to 25.9 per cent in 1980-81 (Table 1.4A). Profit after tax (PAT) as a proportion of net worth has also gone up from 11.6 per cent in 1970-71 to 14.9 per cent in 1980-81. Ratio of gross profits to capital employed has increased from 19.9 per cent to 31.6 per cent during the period. In the case of medium and large private limited companies also, profitability ratios have registered improvement (Table 1.4B).

1.12 Frequency distribution of selected medium and large public limited companies according to profitability ratios for the years 1978-79 to 1980-81 is given in Table 1.5. In the three years 1978-79, 1979-80 and 1980-81, profitability of medium and large companies has shown a rising trend. In 1970-71, the proportion of companies with profit after tax to net worth ratio below 15 per cent constituted nearly 50 per cent of the total; in 1978-79 the proportion came down to 38.2 per cent though in 1980-81 it had gone up to 40.3 per cent. Companies with after tax profitability of 20 per cent or more constituted barely 15 pet cent of the total in 1970-71 and 19 per cent in 1977-78. In 1979-80, the proportion was 27 per cent and in 1980-81 it was 26.4 per cent. So in nominal terms there is no evidence that profitability of companies has declined in recent years. However, it is difficult to judge from these trends how the corporate sector profitability compared with that of the non-corporate sector, which, as noted, has expanded fast in recent, years.

1.13 It should also not be overlooked that the profitability measures mentioned above are in nominal terms and take no account of the impact of inflation. If allowance is made for inflation, profitability of medium and large public limited companies in real terms does not appear to have improved.

1.14 According to a recent study, profits worked out for a sample of companies on current cost basis appear to be much smaller than historical cost accounting profit,[7] that is, if adjustments are made for depreciation of fixed assets and cost of sales. In fact if such adjustments were made, a large number of manufacturing companies would have little profits. Profitability may improve if derived on the basis of a thoroughgoing inflation accounting, that is, if the adjustments are extended to net monetary liabilities as well. Whether this would be the position in most cases, however, cannot be asserted without further empirical work.

Effective Tax Rates

1.15 Effective Tax Rates (ETR) for companies have been consistently lower than statutory rates and what is more, there is wide variation across companies, the tax burden being generally and

6. Vide *Report of the Working Group on Savings* (Chairman: K.N. Raj), RBI.
7. *Impact of Inflation on Taxation of Company Profits* by Tapas Sen, National Institute of Public Finance & Policy 1984. (Mimeo).

significantly lower for companies with larger paid up capital (part 2 of Table 1.6). In 1980-81, for companies with paid up capital of Rs 5-10 lakh, the ETR exceeded 100 per cent while for companies with paid up capital of more than Rs 5 crores, the ETR was only 39 per cent. This has been the pattern in almost all years from 1970-71 to 1980-81. Wide variation in effective tax rate among companies was taken note of by the Economic Administrative Reforms Commission (EARC) also and the EARC observed that 'Given the pattern of frequency distribution it would be obviously misleading to proceed on the basis of an average effective tax rate of tax for the private corporate sector as a whole'.

Trend in Corporate Tax Revenue

1.16 It should also be noted that the proportion of Corporation tax in the tax revenues of the Government has not increased over the years (Table 1.7); rather it has gone down since the mid-sixties. Between 1961-62 and 1966-67 corporation tax formed about 10-12 per cent of the total revenue of the Government taking the Centre, State and Union Territories. The proportion has varied between 7 to 8 per cent since then (col. 7 of Table 1.7). If the tax realised from public sector undertakings is left out, collections from corporation tax have remained virtually stationary since 1977-78 (col. 1.16 of Table 1.7).

1.17 Studies on elasticity of the corporate income tax show that during the fifties the tax on company profits was elastic (i.e., elasticity more than unity) with respect to national income; in the sixties the elasticity went down while in the seventies there has been an improvement.

1.18 While the nominal profitability ratio as such does not seem to have declined there has been a sharp fall in the proportion of profits in the factor incomes in the corporate sector (Table 1.8). From 39.1 per cent in 1960-61, the share of gross profits in factor incomes in the non-government public limited companies had gone down to 31.2 per cent in 1977-78. It improved to 33.5 per cent in 1980-81 but is way below its level obtaining in 1960-61. The share of interest increased from a bare 4.7 per cent in 1960-61 to 14.3 per cent in 1980-81. Profits after tax registered a steep decline from 16.6 per cent in 1960-61 to 7.5 per cent in 1977-78. PAT's share in the factor incomes increased to 12.6 per cent in 1980-81, partly on account of an improvement in the share of gross profits and partly as a result of a fall in the share of the corporate tax. The same trend, viz., decline in the share of PAT accompanied by a rise in the share of interest is noticeable among private limited companies as well as government companies.

Conclusion

1.19 The striking facts regarding the Indian Corporate Sector which emerge out of the preceding analysis may be summed up as follows:

(i) Both in the GDP as well as in the value added in manufacturing, the share of the private corporate sector has suffered a decline over the last two decades. The decline, which has been particularly sharp for the non-government private limited companies, is attributable partly to the entry of the public sector with large investment in many key areas and partly to the growth of non-corporate enterprises. There has been a tremendous growth of the non-corporate sector in India in the last two decades both in terms of number as well as in terms of income generated. Although the number of new registrations of companies has gone up, the number of functioning companies has remained small.

(ii) The contribution of the private corporate sector to the savings of the community has been even smaller than its share in the value added in the economy.

(iii) The share of profits in the value added in the corporate sector has also suffered a sharp fall while that of interest has increased.

Table 1.1. The Corporate Sector in India, 1970-71 to 1982-83

(Rs crore)

(1)	1970-71 (2)	1971-72 (3)	1972-73 (4)	1973-74 (5)	1974-75 (6)	1975-76 (7)	1976-77 (8)	1977-78 (9)	1978-79 (10)	1979-80 (11)	1980-81 (12)	1981-82 (13)	1982-83 (14)
1. Government Companies (Pvt.Ltd.)													
i) Number	223	245	264	303	363	408	428	445	461	472	499	522	534
ii) Paid-up Capital	1931.3	2213.1	2779.4	4396.0	4650.6	5653.7	6582.6	7802.1	7462.5	8779.7	9757.2	11613.0	13222.7
2. Government Companies (Public Limited)													
i) Number	91	107	126	147	210	243	273	300	321	353	352	372	409
ii) Paid-up Capital	133.2	156.0	219.0	249.1	315.4	468.5	591.9	725.5	852.7	973.6	1095.9	1266.1	1499.8
3. Total Government Companies	314	352	390	450	573	651	701	745	782	825	851	894	943
i) Number	2064.5	2369.1	2998.4	4645.1	4966.0	6122.2	7174.5	8527.6	8315.2	9753.3	10853.1	12879.1	14722.5
ii) Paid-up Capital													
4. Non-Government Companies (Pvt.Ltd.)													
i) Number	23655	25640	27768	30749	32732	35149	37346	39485	42376	46730	52401	61339	70589
ii) Paid-up Capital	461.8	483.6	506.7	573.1	750.4	783.3	819.3	847.3	874.9	906.8	967.2	1245.1	1347.1
5. Non-Government Companies (Public Limited)													
i) Number	6443	6571	6715	7184	7275	7465	7585	7725	7893	8225	8749	10169	11371
ii) Paid-up Capital	1775.1	1800.1	1840.0	1969.1	2484.4	2536.1	2554 4	2649.4	2688.0	2751.5	2856.2	3715.9	3839.3
6. Total Non-Government Companies													
i) Number	30098	32211	34483	37933	40007	42614	44931	47210	50269	54955	61150	71508	81960
ii) Paid-up Capital	2236.9	2283.7	2346.7	2542.2	3234.8	3319.4	3373.3	3496.7	3562.9	3658.4	3823.4	4961.0	5186.4
7. Total (All Companies)													
i) Number	30412	32563	34873	38383	40580	43265	45632	47955	51051	55780	62001	72402	82903
ii) Paid-up Capital	4301.4	4652.8	5345.1	7187.3	8200.8	9441.6	10547.8	12024.3	11878.1	13411.7	14676.5	17840.1	19908.9

Source: 1. *Annual Report of the Ministry of Law, Justice and Company Affairs* (various issues).
2. *Report on Currency and Finance*, RBI, (various issues).

Table 1.2. Number of Assessments, Income Assessed and Tax Demand on Companies by Categories of Companies

Year	Number of Assessments				Income Assessed (Rs crore)				Tax Demand (Rs crore)			
	Widely Held Domestic Company	Closely Held Domestic Company	Foreign Company	Total	Widely Held Domestic Company	Closely Held Domestic Company	Foreign Company	Total	Widely Held Domestic Company	Closely Held Domestic Company	Foreign Company	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1966-67	1125	11193	691	13009	160.0	337.9	46.3	544.2	77.3	173.3	24.3	274.9
	(8.65)	(86.04)	(5.31)	(100.00)	(29.40)	(62.99)	(8.51)	(100.00)	(28.12)	(63.04)	(8.84)	(100.00)
1967-68	1352	11539	657	13548	167.3	365.6	61.1	594.0	84.2	180.9	36.0	301.1
	(9.98)	(85.17)	(4.85)	(100.00)	(28.16)	(61.55)	(10.29)	(100.00)	(27.96)	(60.08)	(11.96)	(100.00)
1968-69	1615	12559	529	14703	113.3	435.5	47.4	596.2	59.2	233.5	26.7	319.4
	(10.98)	(85.42)	(3.60)	(100.00)	(19.00)	(73.05)	(7.95)	(100.00)	(18.53)	(73.11)	(8.36)	(100.00)
1969-70	1532	9531	465	11528	126.9	391.2	41.8	559.9	66.8	210.5	24.5	301.8
	(13.29)	(82.68)	(4.03)	(100.00)	(22.66)	(69.87)	(7.47)	(100.00)	(22.13)	(69.75)	(8.12)	(100.00)
1970-71												
1971-72	1376	11669	615	13660	288.9	794.1	64.2	1147.2	156.3	449.9	41.9	648.1
	(10.07)	(85.42)	(4.50)	(100.00)	(25.18)	(69.22)	(5.60)	(100.00)	(24.12)	(69.42)	(6.47)	(100.00)
1972-73	1217	8889	528	10634	187.4	442.7	49.3	679.4	103.2	252.0	32.5	387.7
	(11.44)	(83.59)	(4.97)	(100.00)	(27.58)	(65.16)	(7.26)	(100.00)	(26.62)	(65.00)	(8.38)	(100.00)
1973-74												
1974-75	2217	8020	689	10926	459.6	197.8	40.7	698.1	262.3	119.2	27.7	409.2
	(20.29)	(73.40)	(6.31)	(100.00)	(65.84)	(28.33)	(5.83)	(100.00)	(64.10)	(29.13)	(6.77)	(100.00)
1975-76	3483	8855	966	13304	608.5	182.0	56.9	847.4	346.4	110.2	39.4	496.0
	(26.18)	(66.56)	(7.26)	(100.00)	(71.81)	(21.48)	(6.71)	(100.00)	(69.84)	(22.22)	(7.94)	(100.00)
1976-77	3548	8617	1454	13619	625.2	168.8	92.4	886.4	362.8	104.1	64.6	531.5
	(26.05)	(63.27)	(10.68)	(100.00)	(70.53)	(19.04)	(10.42)	(100.00)	(68.26)	(19.59)	(12.15)	(100.00)
1977-78	3442	9679	1464	14585	774.0	177.3	86.7	1038.0	444.7	109.9	57.5	612.1
	(23.60)	(66.36)	(10.04)	(100.00)	(74.57)	(17.08)	(8.35)	(100.00)	(72.65)	(17.95)	(9.39)	(100.00)
1978-79	2863	7405	1189	11457	1056.0	193.4	96.7	1346.1	590.9	119.5	64.2	774.6
	(24.99)	(64.63)	(10.38)	(100.00)	(78.45)	(14.38)	(7.18)	(100.00)	(76.28)	(15.43)	(8.29)	(100.00)
1979-80	3001	7434	1201	11636	1585.0	293.4	142.0	2020.4	801.4	188.2	85.5	1075.1
	(25.79)	(63.89)	(10.32)	(100.00)	(78.45)	(14.52)	(7.03)	(100.00)	(74.54)	(17.51)	(7.95)	(100.00)
1980-81	2860	7004	1241	11105	1151.6	183.3	129.3	1464.2	660.8	114.5	74.3	849.6
	(25.75)	(63.07)	(11.18)	(100.00)	(78.65)	(12.52)	(8.83)	(100.00)	(77.78)	(13.48)	(8.75)	(100.00)

Note: figures within parentheses denote per cent of the total.
Source: AIITS

Table 1.3. Companies and Registered Firms Assessed to Income Tax - Number, Income Assessed and Tax thereon

(Rs crores)

Year (1)	Total No. of Companies* (2)	Income Assessed (3)	Tax (4)	Total No. of Regd. Firms (5)	Income Assessed (6)	Tax (7)
1960-61	9,412	210.7	100.8 (47.8)	15,396	127.5	4.1 (3.2)
1961-62	10,946	336.7	159.5 (47.4)	17,712	148.7	4.9 (3.3)
1962-63	11,739	322.1	155.1 (48.2)	30,437	197.4	7.8 (4.0)
1963-64	9,891	227.3	110.6 (48.7)	33,741	205.0	9.3 (4.5)
1964-65	11,031	333.2	162.8 (48.9)	37,382	229.3	11.5 (5.0)
1965-66	11,929	389.1	186.6 (48.0)	45,905	288.7	15.0 (5.2)
1966-67	12,818	497.9	250.6 (50.3)	59,273	382.4	23.0 (6.0)
1967-68	12,891	532.9	265.1 (49.7)	65,149	429.2	27.6 (6.4)
1968-69	14,174	548.8	292.7 (53.3)	86,676	570.4	38.5 (6.7)
1969-70	11,063	518.1	277.3 (53.5)	94,149	604.3	46.1 (7.6)
1970-71	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1971-72	13,045	1,083.0	606.2 (56.0)	98,274	675.4	68.4 (10.1)
1972-73	10,106	630.1	355.2 (56.4)	170,235	710.9	68.2 (9.6)
1973-74	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1974-75	10,237	657.1	381.5 (58.1)	211,804	888.4	86.0 (9.7)
1975-76	13,304	847	496 (58.6)	246,035	1,116	112 (10.0)
1976-77	13,619	887	532 (60.0)	276,763	1,266	129 (10.2)
1977-78	14,585	1,038	612 (59.0)	296,809	1,420	147 (10.4)
1978-79	11,457	1,346	775 (57.6)	274,114	1,314	139 (10.6)
1979-80	11,636	2,020	1,075 (53.2)	271,514	1,280	140 (10.9)
1980-81	11,105	1,464	850 (58.1)	221,383	1,129	132 (11.7)
1981-82	10,928	1,523	802 (52.7)	222,851	1,128	127 (11.3)
Compound Growth Rate@ (1960-61 to 1981-82)	+0.7	+9.9		+13.6	+11.0	

Note: Figures in brackets indicate percentage of tax to total income assessed.
* excluding Foreign Companies,
@ = Growth rate has been worked out by taking the end points, and not by fitting any trend line.

Table 1.4A. Profitability and Allocation of Profits: Private Corporate Sector (Large and Medium Public Limited Companies)

(1)	1970-71 (2)	1971-72 (3)	1972-73 (4)	1973-74 (5)	1974-75 (6)	1975-76 (7)	1976-77 (8)	1977-78 (9)	1978-79 (10)	1979-80 (11)	1980-81 (12)
1. Profits Before Tax/Net Worth	19.9	19.7	19.6	22.3	26.6	19.9	19.9	20.6	23.5	27.3	25.9
2. Profits After Tax/Net Worth	11.6	10.8	10.4	11.6	13.7	8.2	7.9	8.8	11.5	14.5	14.9
3. Gross Profit/ Capital Employed	19.9	20.3	19.6	21.3	25.5	25.7	27.4	27.9	30.1	32.9	31.6
4. Dividends/Net Worth	5.4	5.4	5.5	4.7	4.0	4.7	5.1	5.2	5.5	5.5	5.4
5. Ordinary Dividends/Ordianry PUC	9.7	10.1	10.5	9.4	8.7	10.0	10.6	10.8	11.8	12.5	13.1
6. Retained Earnings/ Profits After Tax	53.3	49.9	47.4	59.2	70.7	43.0	34.9	40.3	51.9	62.2	63.7
7. Tax Provision/ Profits Before Tax	41.8	45.3	46.8	47.9	48.5	58.5	60.5	57.5	51.1	46.7	42.7
8. Debt/Equity	43.0	42.0	41.7	41.1	37.8	45.1	46.8	48.7	48.0	51.1	57.1

Source: RBI Studies on Company Finances. (*RBI Bulletin*, various issues).

Table 1.4B. Profitability and Allocation of Profits: Private Corporate Sector (Large and Medium Private Limited Companies)

(1)	1970-71 (2)	1971-72 (3)	1972-73 (4)	1973-74 (5)	1974-75 (6)	1975-76 (7)	1976-77 (8)	1977-78 (9)	1978-79 (10)	1979-80 (11)	1980-81 (12)
1. Profits Before Tax/Net Worth	18.15	19.25	20.16	25.81	25.82	18.69	20.28	21.74	21.41	N.A.	N.A.
2. Profits After Tax/Net Worth	6.2	6.6	7.6	11.4	9.4	4.8	5.9	15.7	16.2	N.A.	N.A.
3. Gross Profit/Capital Employed	32.19	33.64	33.51	37.91	41.02	33.51	38.12	37.17	35.94	N.A.	N.A.
4. Dividends/Net Worth	3.9	3.6	3.3	3.2	2.7	3.0	3.8	4.3	4.1	N.A.	N.A.
5. Ordinary Dividends/ Ordianry PUC	6.2	6.1	6.1	6.2	5.6	6.0	7.6	10.1	9.6	N.A.	N.A.
6. Retained Earnings/ Profits After Tax	37.9	45.4	56.3	71.6	72.4	37.6	25.8	72.8	74.8	N.A.	N.A.
7. Tax Provision/ Profits Before Tax	65.8	65.9	62.5	56.0	61.7	74.1	70.7	52.3	51.4	N.A.	N.A.
8. Debt/Equity	26.0	28.6	27.6	28.6	29.6	34.5	35.7	39.1	47.7	N.A.	N.A.

Source: RBI Studies on Company Finances. (*RBI Bulletin*, various issues).

Table 1.5. Distribution of Selected Medium and Large Public Limited Companies According to Profitability Ratios

	Number of Companies According to Percentage of Profits After Tax to Net Worth										
(1)	1970-71 (2)	1971-72 (3)	1972-73 (4)	1973-74 (5)	1974-75 (6)	1975-76 (7)	1976-77 (8)	1977-78 (9)	1978-79 (10)	1979-80 (11)	1980-81 (12)
Less than 2.5	95	106	93	86	79	102	96	82	87	63	59
	(5.8)	(6.4)	(5.6)	(5.2)	(4.8)	(6.2)	(5.6)	(4.8)	(5.1)	(3.7)	(3.4)
2.5 to 5.0	131	134	139	96	96	101	103	82	74	68	71
	(7.9)	(8.1)	(8.4)	(5.8)	(5.8)	(6.1)	(6.0)	(4.8)	(4.3)	(4.0)	(4.1)
5.0 to 7.5	146	133	144	127	108	126	119	98	92	93	92
	(8.8)	(8.1)	(8.7)	(7.7)	(6.5)	(7.6)	(6.9)	(5.7)	(5.3)	(5.4)	(5.3)
7.5 to 10.0	184	157	161	132	141	121	122	123	121	105	115
	(11.2)	(9.5)	(9.8)	(8.0)	(8.5)	(7.3)	(7.1)	(7.2)	(7.0)	(6.1)	(6.7)
10.0 to 12.5	138	150	134	157	167	154	130	136	144	134	109
	(8.4)	(9.1)	(8.1)	(9.5)	(10.1)	(9.3)	(7.6)	(7.9)	(8.4)	(7.8)	(6.3)
12.5 to 15.0	127	136	120	145	146	137	131	125	140	151	162
	(7.7)	(8.2)	(7.3)	(8.8)	(8.8)	(8.3)	(7.6)	(7.3)	(8.1)	(8.8)	(9.4)
15.0 to 20.0	190	200	191	228	260	169	198	231	206	243	240
	(11.5)	(12.1)	(11.6)	(13.8)	(15.8)	(10.2)	(11.5)	(13.4)	(12.0)	(14.1)	(14.0)
20.0 to 25.0	96	102	85	119	137	96	104	141	162	180	165
	(5.8)	(6.2)	(5.2)	(7.2)	(8.3)	(5.8)	(6.0)	(8.2)	(9.4)	(10.5)	(9.6)
25.0 to 50.0	142	113	142	164	163	100	129	151	189	206	211
	(8.6)	(6.8)	(8.6)	(9.9)	(9.9)	(6.1)	(7.5)	(8.8)	(11.0)	(12.0)	(12.3)
50.0 and above	20	20	28	49	39	15	266	35	62	78	78
	(1.2)	(1.2)	(1.7)	(3.0)	(2.4)	(0.9)	(15.5)	(2.0)	(3.6)	(4.5)	(4.5)
Numerator -ve and	71	85	74	64	65	113	151	159	147	123	124
Denominator -ve	(4.3)	(5.2)	(4.5)	(3.9)	(3.9)	(6.8)	(8.8)	(9.2)	(8.5)	(7.2)	(7.2)
Numerator -ve and	294	299	304	257	225	398	396	320	249	212	231
Denominator +ve	(17.8)	(18.1)	(18.4)	(15.6)	(13.6)	(24.1)	(23.0)	(18.6)	(14.5)	(12.3)	(13.4)
Numerator +ve and	16	24	35	26	24	18	15	37	47	64	63
Denominator -ve	(1.0)	(1.5)	(2.1)	(1.6)	(1.5)	(1.1)	(0.9)	(2.2)	(2.7)	(3.7)	(3.7)
Total	1,650	1,650	1,650	1,650	1,650	1,650	1,720	1,720	1,720	1,720	1,720

Note: Figures in brackets indicate percentage of total of the columns
Source: *RBI Bulletin*, Various issues

Table 1.6. Profitability and Effective Tax Rates: Sizewise (Medium and Large Public Limited Companies)

(Percentage)

Size (1)	1970-71 (2)	1971-72 (3)	1972-73 (4)	1973-74 (5)	1974-75 (6)	1975-76 (7)	1976-77 (8)	1977-78 (9)	1978-79 (10)	1979-80 (11)	1980-81 (12)
1. Provision after Tax/ Net Worth											
a. Rs 5 to 10 Lakh	2.7	3.4	4.6	8.7	8.2	+	4.0	13.9	1.7	2.4	+
b. Rs 10 to 25 Lakh	3.9	3.8	7.7	11.3	10.8	+	+	7.5	9.1	13.8	12.1
c. Rs 25 to 50 lakh	4.0	4.6	9.7	15.1	10.8	+	+	4.9	12.7	16.5	15.0
d. Rs 50 lakh to 1 crore	4.4	4.6	10.1	11.1	12.6	3.4	+	1.7	9.0	18.6	18.2
e. Rs 1 to 2 crore	5.0	5.0	9.7	12.4	12.6	5.0	5.8	8.3	10.9	16.2	16.8
f. Rs 2 to 5 crore	6.4	5.8	10.4	12.2	14.9	8.7	8.1	8.5	10.8	14.8	16.5
g. Rs 5 crore & above	6.2	5.9	11.0	10.7	14.3	11.7	11.3	10.4	12.2	13.5	13.6
2. Tax Provision/Profit Before Tax											
a. Rs 5 to 10 Lakh	63.2	86.1	74.8	58.2	70.4	108.8	82.5	65.1	92.7	88.6	104.0
b. Rs 10 to 25 Lakh	63.8	68.6	54.3	53.0	59.4	174.4	136.5	68.2	62.6	54.1	56.0
c. Rs 25 to 50 lakh	58.9	66.9	49.7	42.8	54.1	181.9	155.5	74.0	50.2	46.8	47.8
d. Rs 50 lakh to 1 crore	53.7	53.7	49.5	51.1	48.8	77.0	101.3	89.4	61.5	45.7	40.8
e. Rs 1 to 2 crore	46.2	51.0	48.9	47.6	50.6	72.2	71.4	63.2	56.5	46.6	45.9
f. Rs 2 to 5 crore	42.5	44.2	46.1	47.7	50.8	57.3	60.4	59.9	57.6	52.5	46.7
g. Rs 5 crore & above	37.3	41.8	42.7	47.4	44.4	49.5	49.4	49.3	45.5	43.7	38.9
3. Retained Earnings/ Profits After Tax											
a. Rs 5 to 10 Lakh	6.8	+	2.6	61.7	64.7	@+	+	64.9	+	+	@+
b. Rs 10 to 25 Lakh	13.3	0.6	46.2	70.3	72.7	@+	@+	40.4	54.5	69.1	67.0
c. Rs 25 to 50 lakh	26.6	+	51.6	72.9	71.5	@+	@+	18.4	64.3	71.7	73.0
d. Rs 50 lakh to 1 crore	38.4	42.3	53.2	63.6	76.6	+	@+	+	44.4	74.5	76.9
e. Rs 1 to 2 crore	48.0	37.8	46.9	61.9	69.1	10.1	9.5	35.3	53.8	69.5	70.8
f. Rs 2 to 5 crore	42.0	43.6	45.4	59.9	70.5	46.0	35.5	36.6	46.3	59.7	65.3
g. Rs 5 crore & above	54.6	52.0	46.2	52.8	69.7	55.3	52.5	48.6	53.3	58.3	58.1

+ = Numerator is negative.
@+ = Both numerator and denominator are negative.
Source: *RBI Bulletin* various issues.

Table 1.7. Revenue From Corporation Tax as Proportion of Total Tax Revenue of Government and of GDP

(Rs Crore)

Year	Revenue from Corporation tax	Of Which from Central Public Sector Undertakings	Tax Revenue of the Centre (gross)	G.D.P. at Market Prices at Current Prices	Total Tax Revenue of the Centre, States and UTs	Col.(2) as per cent of Col.(4)	Col.(2) as per cent of Col.(5)	Col.(2) as per cent of Col.(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1960-61	109.70	-	895.51	15018	1350.41	12.25	0.73	8.12
1961-62	156.46	-	1053.73	15977	1542.98	14.85	0.98	10.14
1962-63	221.50	-	1285.04	17099	1865.07	17.24	1.30	11.88
1963-64	274.59	-	1633.82	19656	2324.55	16.81	1.40	11.81
1964-65	314.05	-	1820.68	23044	2598.80	17.25	1.36	12.08
1965-66	304.84	-	2060.67	24112	2921.59	14.79	1.26	10.43
1966-67	328.90	-	2306.50	27662	3261.19	14.26	1.19	10.09
1967-68	310.51	-	2352.68	32294	3455.51	13.20	0.96	8.99
1968-69	299.77	-	2509.84	33279	3758.73	11.94	0.90	7.98
1969-70	353.40	-	2823.07	36851	4200.01	12.52	0.96	8.41
1970-71	370.50	-	3206.80	40263	4752.41	11.55	0.92	7.80
1971-72	472.10	-	3872.44	43356	5575.18	12.19	1.09	8.47
1972-73	557.90	-	4509.70	47865	6435.77	12.37	1.17	8.67
1973-74	582.60	-	5073.38	58940	7388.58	11.48	0.99	7.89
1974-75	709.50	-	6321.75	69595	9223.06	11.22	1.02	7.69
1975-76	861.70	177	7608.78	74084	11181.73	11.33	1.16	7.71
1976-77	984.20	237	8270.95	79997	12331.74	11.90	1.23	7.98
1977-78	1220.80	251	8858.38	89583	13237.18	13.78	1.36	9.22
1978-79	1251.50	225	10525.11	97580	15527.76	11.89	1.28	8.06
1979-80	1391.90	299	11973.65	107162	17683.08	11.62	1.30	7.87
1980-81	1310.80	222	13179.58	127489	19843.75	9.95	1.03	6.61
1981-82	1969.97	579	15847.49	148678	24142.41	12.43	1.32	8.16
1982-83	2184.50	928	17695.67	164406*	27457.88@	12.34	1.33	7.96
1983-84 (RE)	2565.00		20946.05		31459.93@@	12.25	-	8.15
1984-85 (BE)	2568.00		23186.28		-	11.08	-	-

* = Quick Estimates.
@ = Revised Estimates.
@@ = Budget Estimates.

Table 1.8 Factor Income Shares in Gross and Net Value Added (at current Price) by Type of Companies

(Per cent)

Type of Company	Year	Compensation to Employees	Interest	Gross Profits	of which		
					Depreciation	Corporate Tax	Profits After Tax
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. Non-Govt* Cos.							
1. Public Limited	1960-61	56.2	4.7	39.1	12.2	10.3	16.6
		(64.0)	(5.4)	(30.6)		(11.8)	(18.8)
	1965-66	56.0	7.5	36.5	12.4	12.3	11.8
		(63.7)	(8.5)	(27.8)		(14.3)	(13.5)
	1968-69	57.2	10.8	32.0	13.4	9.2	9.4
		(66.1)	(12.5)	(21.4)		(10.6)	(10.8)
	1973-74	53.4	10.0	36.6	12.2	11.7	12.7
		(60.8)	(11.3)	(27.9)		(13.4)	(14.5)
	1977-78	55.2	13.6	31.2	11.3	12.4	7.5
		(62.5)	(15.2)	(22.3)		(13.9)	(8.4)
	1980-81	52.1	14.3	33.5	10.9	10.6	12.6*
2. Private Limited	1960-61	55.9	5.0	39.1	6.9	15.2	17.0
		(60.1)	(5.3)	(34.6)		(16.3)	(18.3)
	1965-66	55.6	7.7	36.7	6.6	19.7	10.4
		(59.5)	(8.2)	(32.3)		(21.2)	(11.1)
	1968-69	60.6	9.9	29.5	7.9	14.2	7.4
		(65.8)	(10.7)	(23.5)		(15.4)	(8.1)
	1973-74	53.7	12.4	33.9	10.4	13.8	9.7
		(59.9)	(13.8)	(26.3)		(15.4)	(10.9)
	1977-78	58.2	14.0	27.8	10.5	11.0	6.3
		(65.0)	(16.7)	(18.3)		(12.3)	(6.0)
B. Govt. Cos	1960-61	54.5	4.1	41.4	14.8	8.4	18.2
		(64.0)	(4.8)	(31.2)		(9.9)	(21.3)
	1965-66	43.6	14.9	41.5	22.7	3.8	15.0
		(56.4)	(19.2)	(24.4)		(5.0)	(19.4)
	1968-69	49.1	22.5	28.4	34.0	4.6	-10.2
		(74.5)	(34.1)	(-8.6)		(6.9)	(-15.5)
	1973-74	50.3	12.4	37.2	19.6	7.1	10.5
		(62.6)	(15.6)	(21.8)		(8.8)	(13.0)
	1977-78	58.9	18.0	23.1	18.0	10.4	-5.3
		(71.9)	(21.9)	(6.2)		(12.6)	(- 6.4)

Figures in brackets relate to factor income shares in 'net value added'.
* Computed from RBI data on Finances of Medium and Large Public Limited Companies, *RBB*, July 1983.
Source: *Shifts in the Factor Income Shares - A comparative study of the Public and Private Indian Corporate Sector, 1960-61 to 1977-78* by *Kripa Shankar & T.G. Nayak* RBI, Occasional Papers, June 1983
(For data relating to 1980-81, *Reserve Bank Bulletin*, July 1983).

CHAPTER II
Structure of Corporation Tax and Its Deficiencies

The Present Structure and Its Evolution

2.1 Companies are assessed in India as separate entities almost since the inception of the income tax in the country. At first the tax on corporate profits was levied at a flat rate only in the hands of the companies. Dividends were not taxed in the hands of shareholders[1] This system worked well as long as the tax was proportional and both companies and individuals were taxed at a flat rate. Complications set in with the introduction of super-tax and progression. The flat rate was replaced by a slab system in 1916 and the rates were raised. Refund of income-tax on dividends was then allowed to shareholders as small income relief. Super-tax was levied in 1917 in addition to

1. This was the arrangement under the Act of 1886 which laid the foundations of income tax in India.

the income tax. Companies were required to pay super-tax at the same rate as applicable to individuals and HUFs. Incomes above Rs 50,000 alone were subjected to super-tax. In the case of companies the super-tax was charged only on undistributed profits. Share-holders were also required to pay super-tax on dividends regardless of the tax borne by the company.

2.2 The levy of super-tax on undistributed profits created a disinclination to accumulate profits. In 1920 changes were made to neutralise the bias against retention. First, super-tax on companies was payable on the entire profit less Rs 50,000 and secondly it was charged at a flat rate of one anna in the rupee and not on a graduated basis as in the case of other taxpayers. Shareholders were not given any credit for the super-tax paid by the company and it is this portion of the tax on company profits which came to be known as the corporation tax, that is, a tax levied upon corporate entities as such. More or less the same position continued when the Indian income Tax Act, 1922 replaced the earlier legislation relating to income taxation in the country.

2.3 Since it was meant to be a corporation tax, the prescription of an exemption limit of Rs 50,000 for super-tax looked anomalous in the case of companies. The Taxation Enquiry Committee of 1924-25 (the Todhunter Committee) recommended the abolition of the exemption limit for corporation tax on the ground that 'small companies derive relatively as much advantage as large ones from the privilege of incorporation, and the amount of profit made by a company bears no necessary relation to the wealth and poverty of its shareholders'. Nevertheless, the exemption limit was continued up to 1938-39. When the Act of 1922 was amended in 1939, the exemption limit for super-tax in the case of companies was withdrawn and super-tax was made payable by companies at a flat rate on the whole of their profit. It was also made clear that while income tax paid by a company on its profit was treated as a payment on behalf of its shareholders, the super-tax paid by companies stood on a different footing and therefore was not refundable.

2.4 The discrimination against corporate business which was inherent in the taxation of company profits to super-tax and again of the dividend distributed out of taxed profits in the hands of shareholders was brought up before the Taxation, Enquiry Commission (TEC) of 1953-54. The TEC rejected the plea for giving some relief to shareholders for the corporation tax paid on the dividends on the reasoning that a company is a separate entity. The TEC however, did not feel inclined to recommend the withdrawal of the relief given to shareholders for the income tax paid by companies when the distributed profits were taxed in the hands of shareholders. Hence the system of grossing up dividend to allow credit for the income tax paid by the company in the assessment of the shareholder continued. This system was given up in 1959 because of the complexities involved in 'grossing up' entailing the reopening of assessments of hundreds of shareholders after the effective rate of income tax borne by the company was determined. Finally, the income-tax and the super-tax were merged. Since 1959-60 the tax on company profits is levied as an 'absolute' tax without any imputation or credit to shareholders. Dividends are included in the taxable income of shareholders (subject to a deduction upto specified limit) and taxed accordingly. In the case of inter-corporate dividend, a deduction of 60 per cent is allowed in the assessment of the recipient company. Currently dividend received from an Indian company is exempt in the hands of Individuals and Hindu Undivided Families along with income from interest on bank deposits, etc., upto Rs 7,000.

Tax Base

2.5 The corporation tax is levied on profits determined on the basis of conventional accounting practices, that is, historical cost

accounting. Numerous deductions are, however, allowed to provide incentives for various purposes like promotion of investment, exports and so on, so much so that several companies have managed to avoid paying any tax for years. To counter this, the law has been amended this year to ensure that profit-making companies pay the tax on at least 30 per cent of their gross total income (that is, before allowing for the incentive deductions). There are also several restrictions ('disallowances') to curb wasteful spending of corporate funds and prevent siphoning off of corporate profits through excessive payments to directors and their relatives.

Rates

2.6 When the system of grossing up was abolished, the general rate of corporation tax was 51.5 per cent. With the withdrawal of the credit to shareholders for the income tax paid by the, company, the rate was brought down to 45 per cent. The rates were however raised in the subsequent years. At present the general rate of the corporation tax as applicable to widely-held domestic companies is 55 per cent. There is a variation in the rates as between domestic and foreign companies and between widely-held and 'close' companies. Closely- held domestic companies are taxed at the rate of 60 per cent if they come within the category of 'industrial' company, otherwise at 65 per cent. Foreign companies are taxed on their trading profits at the rate of 70 per cent while certain categories of income in the case of foreign companies (e.g., royalties) are taxed at a rate varying from 20 to 40 per cent on gross basis.

2.7 until 1983-84 the rate of tax on domestic companies was graduated also with reference to the size of the profits. Such differentiation has been done away with through the Budget for 1983-84. (Rate structure of the corporation tax since 1965-66 given in the Appendix).

2.8 In addition to the income tax, close companies are required to pay an additional income tax (ranging from 25 to 55 per cent) on their 'undistributed income' if distribution falls short of the specified level. With effect from 1978-79, industrial companies have been taken out of the purview of these provisions.

2.9 In addition to corporation tax there is a surcharge of 5 per cent in lieu of which a deposit can be made with IDBI.

2.10 There is also a surtax on profits exceeding specified level (15 per cent of owned capital or Rs 2 lakh whichever is less) at rates varying from 25 per cent to 40 per cent.

Deficiencies of the Present System

2.11 *A priori* the present system of taxation of corporate profits appears to put a premium on inefficiency and waste, and inhibit the growth of the corporate sector. Deficiencies of the present system arise primarily from two factors: (i) the nature of the base, viz., historical cost profits after allowing for current expenditures with some relief for investment in plant and machinery (without any explicit allowance for inflation), and (ii) double taxation of corporate profits resulting from the 'classical system'.

2.12 A major source of distortion and deficiency is the profit base itself which is arrived at after allowing for all current costs. The line between final consumption and intermediate consumption being difficult to draw - the business expense deduction rule has not helped much in keeping out non-business expense from the purview of deductible costs - attempts have been made to impose restriction, in various forms on the deductibility of certain categories of expenditure. The latest in the series of such restrictions are those relating to expenditure on advertisements, etc. Whether and if, to what extent, these restrictions have had any perceptible impact on

expense account spending in the corporate sector is difficult to specify. However, the tendency to overstate expenses is to be expected as a tax on net profits serves to subsidise costs and puts a premium on inefficiency and waste. Partly to defeat the anti-avoidance measures and partly to benefit the controlling group and their associates, there is a widespread tendency for the management to divert a part of the company profits to themselves or their associates to the detriment of common shareholders. The management also tends to spend lavishly out of corporate funds. The tax system provides strong impetus for this tendency.

2.13 The classical system of corporate profits taxation based on historical cost accounting has come in for criticism on the ground that it is distortionary and causes serious liquidity problem especially under conditions of inflation. 'Corporate Tax distorts the way that companies choose to spend their capital, it also distorts the way they raise it', it is argued.[2] The deduction allowed from the tax base for interest paid on borrowings creates a bias against equity capital as against borrowing; while unrelieved taxation of company profits in the hands of shareholders, when distributed, creates a bias against the corporate form of enterprise itself.

2.14 That the system of taxation of Profits determined after deducting all payment for interest on borrowed capital tends to create a bias in favour of borrowings as against equity capital needs no demonstration. It can be easily seen that for the same rate of after-tax return, the gross yield on equity capital has to be much higher than in the case of borrowed capital. For instances, with a tax rate of 60 per cent, for a net return of 10 per cent, earnings on equity capital should be 25 per cent. It is, therefore, not surprising that there has been a steady rise in the debt-equity ratio and the share of interest in value added in the corporate sector has gone up sharply. The present system has also handicapped entrepreneurs in obtaining subscription for equity capital in new ventures and favours well-established large concerns.

2.15 The tax on corporate profits in its present form distorts the way investors in general and companies in particular use their resources. This distortion arises partly from the fact that the post tax rate of return on a given investment which a saver can get varies widely, depending on a variety of factors, such as the type of saver and the marginal rate at which his income is taxed, whether the savings are used by a company or an unincorporated business, the tax allowance available on the asset in which the savings are invested, whether the investment is financed through equity or borrowing, and whether the income from the investment is distributed or retained, and so on.[3] As noted in chapter I, there is wide variation in the incidence of tax among different companies and this lends support to the criticism of the corporation tax as a source of distortion.

2.16 The restriction on the overall scale of deduction for various incentives now imposed in order to secure a 'minimum tax' from profit making companies would possibly bring down the disparities in the effective tax rate among the companies. Even with the imposition of such a tax considerable variations would still remain in the tax burden as between companies, depending on the category to which they belong, the nature of their activity and the extent to which they are able to avail of the various incentives. While interference in the investment pattern may not always be undesirable - and the tax instrument can be legitimately used in a planned economy to influence the flow of resources into desired

2. *Economist*, September 17 to October 1, 1983.

3. For an idea of how these factors distort the post tax rate- of return on investment, see Meade Committee Report, *The Structure and Reform of Direct Taxes in U.K.*, Institute for Fiscal Studies, London, 1978.

channels - distortions resulting from variations in effective tax incidence resulting from factors like the marginal rate of tax on corporate and unincorporate enterprises, and so on, can scarcely be considered desirable.

2.17 The classical system of corporation tax involving double taxation of distributed profits discriminates against the corporate form of enterprise. It also discourages distribution of profits. Whether the bias in favour of retention of corporate profits is desirable or not is a matter on which opinions differ. In the Indian context a bias in favour of saving may not be undesirable.

2.18 Apart from the distortions resulting from unintended variations in the incidence of the tax and the discrimination against equity vis-a-vis debt capital and against corporate vis-a-vis unincorporated enterprises, under inflationary conditions taxation of profits based on historical cost accounting leads to a drain on corporate resources as it results in overstatement of profits and thereby overtaxation and also creates pressures for distribution in the form of dividend, bonus, etc. The real rate of return on corporate investment has tended to be low in most countries which experienced rapid inflation in recent years. This, it is believed, has depleted the productive capacity of the companies and prolonged the recession in several countries. While this argument may not be entirely valid in the Indian context, it cannot altogether be denied that taxation based on historical cost accounting affects the real capital base of manufacturing enterprises, and accentuates their dependence on financial institutions for expansion or even for modernisation or renovation.

2.19 In sum, the deficiencies of the existing system of corporation tax which are of concern in the Indian context are: (i) it subsidises inefficiency and waste and leads to inefficient use of investable funds; (ii) it discriminates against equity capital, and, together with reliefs given in personal income tax under Section 80L, discourages risk-taking by investors; (iii) discriminates against the corporate form of business enterprise; (iv) it undermines the productive capacity of manufacturing enterprises by failing to take account of current costs and causes liquidity problems reinforcing the tendency to borrow from banks and financial institutions. These deficiencies arise partly from the nature of the base itself (i.e., historical cost accounting profit) and partly from the lack of any integration with the personal income tax borne by shareholders on their dividend income

2.20 Recent discussions on corporation tax reform abroad seem to suggest that there is no practicable way of removing the deficiencies of the base so long as the tax continues to be levied on profits. The distortions arising from the taxation of profits on the one hand and the classical system of taxing companies on the other are compounded by inflation. The capital allowances and other reliefs designed to alleviate the impact of inflation in effect tend to aggravate them. It is suggested that the only remedy lies in moving towards a flow-of-funds base.[4] It is argued that the flow-of-funds base would help to remove the distortions and also get round the problems of inflation and liquidly.

2.21 The distortions caused by the present system of corporate taxation do not admit of any simple solution. Whether it would be desirable in the Indian context to move towards a flow-of-funds base needs careful consideration. Moreover, flow-of-funds base corporation tax would require, as its complement, the expenditure base for personal taxation. That again involves a basic reform of the system of direct taxation. This along with other suggestions are considered in the next chapter.

4. For a brief description of the flow-of-funds based tax, vide Appendix to Chapter III.

Appendix to Chapter II

Rate Structure of Corporation Tax 1965-66 to 1984-85

(1)	per cent 1965-66 (2)	1966-67 (3)	1984-85 (4)	Remarks (5)
Domestic companies				1. A tax @ 7.5% was charged on dividend distribution by widely-held companies between 1965-66 and 1968-69.
1. Widely-held				
(i) small*	42.5	45)	55	
(ii) large	50	55)		
2. Closely-held				2. A tax @ 12.5% on bonus shares was levied in 1965-66.
(i) Industrial				
(a) small**	50	55)		
(b) large	60	60)	60	
(ii) Other	60	65	65	
3. Foreign Companies				3. A surcharge @ 5% of income-tax is levied since 1972-73. The surcharge rate was brought down to 2.5% for sometime, but has been raised to 5% again. The surcharge can be set off against equivalent amount of deposit in IDBI for 1985-86.
(i) ordinary income	65	70	70	
(ii) on royalties	50	50		

* 'small' here means:-
(i) from 1965-66 to 1966-67 companies with total income of not more than Rs 25,000.
(ii) from 1967-68 to 1972-73 companies with total income of not more than Rs 50,000.
(iii) Since 1973-74 companies with total income of not more than Rs 1,00,000.
** 'small' in this context means:-
(i) from 1965-66 to 1972-73 companies with total income of not more than Rs 1 lakh.
(ii) Since 1973-74 companies with total income of not more than Rs 2 lakh.

CHAPTER III
Lines of Reform

3.1 The discussion in the proceeding chapter brings out that the system of corporate taxation contains elements which may have impeded the growth of the corporate form of enterprise, corporate investment and saving, and acted as a source of bias against efficiency. The present system, despite alleviating features in the shape of incentives, is distortionary and puts a premium on debt against equity capital and discriminates against small and new enterprises. The distortions are exacerbated under inflationary conditions. Solutions suggested for remedying these deficiencies and removing the distortions fall broadly under two groups:

A. Suggestions for reform of the base.
B. Those designed to reform the structure.

3.2 Suggestion for reform of the base may be considered under the following heads:
(i) Changing the present system of accounting by moving over from historical cost to current cost basis.
ii) A radical departure from the existing income or profit base towards an 'expenditure' or flow-of-funds base.
(iii) Widening the existing base and reducing the rates.
(iv) Modifying the profit base by excluding funds set apart for investment or other specified purposes.

3.3 Proposals for reforming the structure aim principally at relieving double taxation and removing or alleviating the inequity involved in independent taxation of company profits and dividends. Two alternative routes are suggested for avoiding or mitigating double taxation. These, are: (i) integration of corporate and personal taxation-partial or total, and (ii) provision of

dividend relief - partial or total. The point for consideration is whether in our situation there is any case for reforming the existing structure in either of the two ways or whether the present classical system should continue.

A. Suggestions for Base Reform

(i) Inflation Accounting

3.4 Inflation accounting has been the subject of intense debate in countries which experienced high rates of inflation in recent years. In personal income tax indexation in some form has been introduced in several countries to ensure that progressive taxation does not act harshly on taxpayers simply because of inflation. However, in business taxation, although the problem, posed by inflation in the matter of taxation of profits based on historical costs is recognised, there is no unanimity yet about the modality of moving over to inflation accounting. A central issue in the debate over inflation accounting is the treatment of net monetary liabilities. Adjustment for depreciation and cost of sales would in all probability bring down, in most cases, the profit figures derived on the basis of historical cost. As already noted, a recent study shows that this is generally true of Indian companies.[1] However, it is not at all certain that historical cost profit would in all cases exceed current cost accounting profit if adjustments were made also for monetary assets and liabilities. Equity demands that if inflation accounting is to be adopted as the basis for taxation, adjustments should be carried out all along the line for changes in the real value of assets as well as liabilities. Recent experience with attempts in this direction in some developed countries has not been very encouraging,[2] and met with resistance from the corporate sector as well as the accounting profession. Any serious consideration of proposals for switching over to current cost profits as the base for taxation has to await the formulation of a system of inflation accounting acceptable to business and the accounting profession.

(ii) 'Expenditure' Base

3.5 The liquidity and replacement problems caused by taxation of historical cost profits under conditions of inflation are however real and need to be attended to. Ideally, the tax system has to be so devised that business enterprises are not put to any disadvantage for lack of liquidity in meeting their genuine business expenditures, whether current or capital and the tax is levied only on funds which flow out of the company, for purposes other than the company's business. This would be the counterpart of a tax on 'expenditure' or consumption in the case of individuals.

3.6 The flow-of-funds base which has figured in current discussion of business tax reform essentially seeks to translate the concept of 'expenditure tax' for taxation of business enterprises. The basic ingredients of a flow-of-funds base and their inter-relation are outlined in the Appendix to this chapter. The central idea in moving over to a flow-of-funds base is to allow for all business expenditures, both current and capital, and tax only the residue of receipts which accrue to an enterprise from all its business transactions. Under this scheme the tax will fall on all distributions and share disposals to shareholders whether in the form of dividend or reduction of share capital or on liquidation. The effect would be to put a 'ring fence' around the company so that no tax would be levied so long as funds were kept inside the ring but tax would be charged 'the moment they crossed this ring fence and became

1. Tapas Sen, *Op. cit.*
2. e.g., in U.K., The Statement of Standard Accounting Practice (SSAP) 16 formulated by the Accounting Standards Committee to introduce a consistent format for current cost accounting was reported to have been ignored by more than half the public companies (vide *Economist*, June 30 - July 6, 1984).

personal or institutional income'.[3] One variant of the flow-of-funds base would include not only distributions to shareholders but also outflows in the form of investment in other domestic corporate bodies.[4] As noted earlier, such a tax would be a complement to a personal expenditure tax although the two can work independently.

3.7 The chief merit claimed for the flow-of-funds base is that it would remove the distortions created by the existing system of corporate tax. Of course, the distortions can be avoided also with a better measure of profits by making it wider and bringing it in alignment with the comprehensive income concept, but it is not easy to formulate operational rules for deriving a better measure of profit in this way. For, such reform would require valuing assets periodically on a notional basis and computing depreciation on the basis of replacement cost of assets. As is well known, these are fraught with insuperable practical difficulties. A special attraction of the flow-of-funds base is the total exemption of all spending in business, whether current or capital. Exclusion of all capital expenditure, from the base might serve to clear the way for investment or ploughing back of incomes which currently go underground.

3.8 For all its acclaimed merits, the flow-of-funds base has not found acceptance in any of the countries where company profits are subjected to tax.[5] Though the idea is apparently simple, a number of questions need to be answered before the proposal can be considered for implementation. First, the base of the tax would be very much narrower than the profit base since deduction will be allowed for all outgo, not merely for current purposes but also for capital expenditure. Moreover, misgivings have been expressed about the likely reactions of companies to such a radical shift in the tax base which may necessitate raising the tax rate way above the present rates if the same amount of revenue is to be secured. Also, however rational the base, high rates of tax can be self-defeating. Nevertheless, the idea of a tax on 'expenditure' or outflow of funds of business enterprises for non-business purposes which the flow-of-funds base essentially seeks to implement, has its merits and is worth pursuing. As indicated in paragraphs 3.13-18 below it is possible to capture some of the merits of an expenditure tax on business enterprises indirectly without encountering some of the problem which a flow-of-funds base seems to give rise to.

(iii) Widening the Base and Rationalising the Rates

3.9 According to many, much of the distortions and deficiencies of the existing form of taxation of profits can be avoided if the present base is reformed to make it wider and conform closely to the economic concept of 'income', that is, net realised increment in wealth. This will entail a drastic reduction in the existing incentives allowed in the form of deductions and exemptions as well as a review of the 'disallowances' currently in operation in the computation of business profits in general and corporate profits in particular. Another suggestion sometimes put forward for inducing the base is to include interest in taxable income.

3.10 The Economic Administrative Reforms Commission recently reviewed the system of corporate taxation including the base and the rate structure and made a number of recommendations for reform. Rejecting the argument that the rates of corporation tax are in effect brought down by the incentive provisions, the EARC recommended review of the incentives in order to widen

3. *Corporation Tax* (Cmnd 8456, HMSO, 1982), Chapter 7.
4. See the formulation of the flow-of-funds base by the Meade Committee in *The Structure and Reform of Direct Taxes* Report of a Committee Chaired by Prof. J.E. Meade, Ch. 12 (Institute for Fiscal Studies, 1978).
5. The liberal capital allowances often provided in profits taxation constitute a somewhat clumsy, half way house between a pure profit base and the flow-of-funds base.

the base and bring about a reduction in the statutory rates. However, they did not favour widening of the base to include interest payments. They also did not recommend withdrawal of the investment allowance which constitutes the single most important incentive in the tax system in terms of revenue. Some of the recommendations of the EARC for the withdrawal of other incentives have been implemented. There has, however, been no reduction in the corporate tax rate except for the relief provided in the form of set-off of the surcharge against deposits with IDBI.

3.11 The Study Group is also not in favour of widening the tax base by including interest paid. Such a change would cause difficulty to loss making companies and strain their liquidity. It would also upset the calculus of project evaluation as the real effective tax burden will increase. As regards incentives, while the need for reviewing the incentives periodically and weeding out those which have outlived their utility cannot be denied, it has to be recognised that a major incentive like the investment allowance cannot be dispensed with unless a suitable system of business taxation is devised which takes account of the needs of business enterprises for funds to meet their investment and working capital requirements. The investment allowance goes some way to meet this requirements.

3.12 But the investment allowance suffers from several drawbacks:

(i) Its availability is tied to actual investment in new plant and machinery. This can lead to creation of excess capacity.

(ii) The allowance cannot be availed of by a company which is not in a position to raise funds necessary for investment.

(iii) The allowance is related to the cost of the plant and equipment, regardless of whether the funds are self-generated or borrowed. This distorts the investment pattern and leads to wasteful capacity creation.

(iv) The fact that the investment allowance can be availed of even in respect of funds borrowed for purposes of investment and not merely for funds obtained by equity confers an undue benefit on equity holders, introduces inequity and also puts a premium on debt finance.

(v) In practice, the provision for investment allowance tends to discriminate in favour of established profit making companies, who are in a position to set off investment allowance reserve against profits of old established units. For a new company it is not possible to absorb depreciation as also investment reserve from the profits of a new venture. Even if the new venture happens to be (so very) successful, the new company can declare a dividend only after depreciation and investment allowance reserves are set off against the profits of the new unit and there remains a surplus for distribution. Payment of dividend is therefore delayed for an inordinately long time in the case of a new company, affecting adversely the marketability of its shares. It is this factor of investment allowance which has possibly helped well established large concerns to bring down their effective tax rates nearly to zero, year after year, even while making huge profits and distributing them.

(vi) The investment allowance enables an industry to claim deduction of 125 per cent or 135 per cent of the cost of new machinery. This includes excise duty and sales tax on indigenous machinery or import duty in the case of imported machinery. Levying duties on the one hand and increasing the capital cost per unit of output and grant of investment allowance on the other hand, seeking to diminish the cost of capital, is mutually contradictory and incompatible.

(vii) While the tax loss to Government for grant of investment allowance makes it difficult for Government to reduce the high level of nominal tax rates, the burden of the high

nominal tax rate falls on companies which have no access to financial institutions or whose profitability is low or marginal and turns them into sick units.

(viii) Under the conditions of fast changing technology it may be desirable for a company to discard items of existing plant and machinery and replace those with a modernised plant. Conditions governing investment allowance such as that the equipment cannot be disposed of within a period of 10 years tend to discourage the mobility of capital equipment and force investors to hang on to existing items of plant and machinery.

(iv) Funding of Profits

3.13 The Study Group is of the view that instead of linking the relief in taxation to actual investment in plant and machinery it would be preferable to permit a deduction from taxable profits for amounts set apart by an enterprise from current profit and kept in a separate fund which can be drawn upon by the enterprise for the business needs. The amount should be deposited with the IDBI or other specified institutions and allowed the same rate of interest as is allowed at present for deposits in lieu of the surcharge. Profits funded in this way should be allowed to be withdrawn for specified capital expenditure like investment in plant and machinery, replantation and development of new plantation of tea, etc.. Such a system would permit business enterprises to build up funds out of their profits and plan out their investment. It would create an incentive to generate their own funds. It should also serve to neutralise the bias against efficiency and reduce the premium on wasteful spending and evasion.

3.14 For administrative reasons withdrawals under the funding scheme would have to be restricted to certain specified purposes and subject to certain conditions. As indicated above, the specified purposes may include investment in plant and machinery and certain capital expenditure like development of bushes in tea plantations, housing for workers, etc.. In order to guard against abuse it may be stipulated that plant and machinery acquired with the help of withdrawal from funded profits will not be transferred within a period of 8 years unless the sale proceeds are reinvested in new plant and machinery. Any withdrawal from funded profits except for specified purposes within a period of 8 years of the year of funding would be brought back into the tax base of the year of withdrawal. Since the scheme would operate on the basis of certificate provided by the IDBI or the designated financial institutions it would cast no extra burden on the tax administration. To facilitate compliance, it may be stipulated that deposits under the scheme of funding may be made within 6 months from the end of the accounting year by which time the profit position of the company for the year will be known.

3.15 With a provision for tax free funding there would be no need to provide for investment allowance as such. However, when a company makes any investment in plant and machinery out of borrowed funds, the payment of the borrowings in subsequent years by drawing on profits with IDBI, etc., should be treated as coming within the approved uses of funded profits. Needless to add, withdrawals from funded profits should not be available for financing any investment or for any other approved use before the date of introduction of the scheme.

3.16 On revenue considerations, it is felt that the deduction for funding under the scheme contemplated here may be permitted upto 50 per cent of the taxable profits arrived at after allowing for all expenses and also applying the provisions of Chapter VIA of the Income Tax Act including section 80 VVA which impose certain limits to the deductions available on account of various incentives. In other words, the deduction for funding should be subject to the minimum tax

provisions. The Group is of the view that with the introduction of funding, the investment allowance will no longer be required and all other incentive provisions except those relating to tax holiday, exports and backward areas development may be abolished.

3.17 Funding would no doubt involve substantial revenue loss. From RBI data on finances of medium and large companies it is seen that in, 1980-81, out of profits before tax amounting to Rs 1,524 crore, investment allowance came to about Rs 120 crore which implies an investment of the order of Rs 480 crore. The revenue loss on account of the investment allowance availed of by medium and large companies would thus appear to be of the order of Rs 65-70 crore. For the corporate sector as a whole the revenue loss on account of the investment allowance at present may be put at about Rs 150 crore and the amount qualifying for the allowance (i.e., the quantum of investment) would be about Rs 800-900 crore. A good part of this investment is financed out of borrowing, and depreciation accruals. About 30-40 per cent is financed out of profit. Hence, it is unlikely that the deduction on account of funding would exceed Rs 300-400 crore. The revenue loss would thus be no more than Rs 200 to 250 crore and the additional revenue cost of funding unlikely to exceed Rs 100 crore As against a revenue loss of this order, there will be an additional accretion of Rs 300 to 400 crore to the public financial institutions and their dependence on the Government for funds would be correspondingly reduced. Thus, there can be no question that the net impact on the Government's budget would be on the positive side.

3.18 The group also considered the question of extending facility of funding to the non-corporate business sector and came to the conclusion that the benefit of funding should be available to non-corporate business enterprises and investment allowance discontinued. The Group is unable to offer any estimate of the likely revenue loss if the facility of funding is extended of the non-corporate sector as the required data are not available. At same time, for reasons mentioned in the preceding paragraph, there would be net accretion of funds to the financial institutions which should make up for the revenue loss.

Related Issues

3.19 Closely allied to the question of base reform is the scope of other capital allowances currently available, viz., ordinary depreciation allowance and the additional depreciation allowance. EARC has examined the depreciation allowance at some length and has suggested some drastic change in the scheme of depreciation allowance by reducing the rates to two (a general rate of 33.3 per cent and 50 per cent) while retaining the investment allowance. As part of the measures suggested in this regard, EARC has recomended doing away with extra shift allowance.

3.20 In order to simplify the depreciation provisions, it would certainly be useful to reduce the rates to two or three. While the need for simplification will be readily acknowledged, the case for the abolition of all extra shift allowances is not persuasive. A higher rate of depreciation on plant and machinery used on extra shifts is not only equitable but also serves an important economic objective, namely, promoting intensive use of existing capital equipment and generation of additional employment. Hence, the Group recommends that the provision of extra-shift allowance as at present should continue (i.e., 5o per cent of the normal for double shift and 100 per cent for triple shift). In the Group's view the extra shift allowance should be applicable to machinery and plant only for the unit which has worked extra shift.

3.21 With the continuation of extra-shift allowances, it would not be expedient to raise the general rate of depreciation to 33.3 per cent recomended by EARC. The Group recommends

a general rate of 20 per cent. The special rate of 40 per cent now available for certain categories of assets may continue. The Group does not consider it necessary to require assessees claiming depreciation to create any depreciation reserves.

3.22 With the proposals put forward above, there would be no need to revise the tax rates downward. The EARC had recommended a downward revision on the consideration that the tax base could be widened by withdrawal of the various incentives. But as noted already, the scope for any significant widening of the base is rather limited. The Study Group would like to point out that the proposal for funding and the availability of the option for funding to all business enterprises should serve to reduce effective tax rates on a broad spectrum of business enterprises and promote the important objective of inducing larger saving out of business profits, while also strengthening the Government Budget.

3.23 The EARC had also made several suggestions for rationalizing the rates of corporation tax, e.g., by raising the income limit for the concessional rate available for 'small' companies. The differential rate for 'small' companies has however been withdrawn and all widely held domestic companies are now taxed at a uniform rate of 55 per cent. The differential is now maintained only between (a) domestic and foreign companies, (b) widely held and closely held domestic companies and (c) industrial and non-industrial companies within the closely held category. EARC suggested some modification of the criteria for distinguishing between widely held and closely-held companies.

3.24 The Group recognises the difficulties involved in defining a small company. The distinction based on size of profits is not very satisfactory. It would be more rational to treat a company as 'small' if its own funds, that is equity and reserves do not exceed a specified limit, say, Rs 10 lakh. There is a case for prescribing a lower rate of tax for small companies defined in this way. This will serve to reduce the tax disadvantage of small companies as compared to unincorporated enterprises.

3.25 The rate differentiation between widely held and closely held companies may, however, be abolished. There was a valid rationale for a higher rate of closely held companies so long as the marginal tax rates for personal income tax in the highest brackets were significantly higher than the general corporate tax rates. This is no longer the case.

B. Reform of the Tax Structure

3.26 As noted in the preceding chapter, the corporate tax system in India at present follows the classical pattern, that is, companies are taxed independently of the shareholders. Dividend income is exempt from tax only upto a specified limit.

3.27 In principle, according to many, there is no case for separate taxation of companies. On this view corporate profits should be imputed to shareholder. However, notional imputation of profits to shareholders presents acute practical difficulties. Hence a separate tax on company profits is expedient and necessary. The question is whether shareholders should be given some relief in the tax on dividend over and above the exemption currently available. The Group examined the question and also the various methods employed for providing relief for the tax on distributed profits. In this context the Group noted the recommendation of EARC for a separate exemption for dividend income in the hands of shareholders under section 80L of the Income Tax Act. The Group is not in favour of extending the scope of Section 80L further as it is regressive in character. The benefit is larger for shareholders

in higher income brackets. Also the provision could act as a deterrent to investment in risk bearing ventures.

3.28 The Group is also not in favour of reintroducing any system of imputation which was in operation till 1959-60. Imputation in any form is cumbersome and the benefit is not commensurate with the cost and effort involved.

3.29 While imputation in the case of all companies does not seem to be necessary, one way in which the structure of corporate taxation can be reformed to help to neutralise the bias against the corporate form of business enterprise is to allow 'small' companies, as defined here, an option to be taxed like registered firm subject to their fulfilling certain conditions. At present there is an appreciable disparity in the tax incidence on a registered firm with say 10 partners and a company with 10 shareholders but having the same size of capital employed.[6] The result is that there is a tax barrier for partnerships or proprietary firms to graduate into the incorporated form. This is undesirable as it stands in the way of dynamic firms growing into large entities and gaining access to the capital market.

3.30 For administrative reason, the option for taxation as registered firm should be open only to a small company with the number of shareholders not exceeding the maximum permissible for a partnership, provided the company furnishes particulars of shareholding during the year in the same manner as a registered firm furnishes information regarding distribution of profit among partners. Also, the discipline applying to a firm for obtaining registration under the Income Tax Act should be observed by a company preferring to exercise the option. Such facility is available to certain category of companies in some other countries too (e.g., USA). Given this option it may be expected that the tax factor will no longer act as an inhibitory influence against incorporation. The revenue implication of this reform is not likely to be significant.

3.31 Although, as indicated in pare 3.22, the effective rate of tax on companies and on business profits should come down with the introduction of the proposed funding scheme, any reduction in the statutory rate of company tax will have revenue implications and can be given consideration provided a suitable alternative could be devised to make up for the revenue loss without giving rise to any ill-effects. In this context the Group examined the proposals for a wealth tax on companies.

3.32 A tax on company assets has several merits. One major merit of such a tax would be that it would enforce some discipline in the deployment of corporate funds and induce the optimal use of company assets by penalising inefficiency. Rough calculations show that a 1/2 per cent tax on company assets might provide an adequate revenue cover for a 2 percentage point reduction in the corporate profits tax rate. A tax on certain assets of closely held companies is at present subjected to tax. However, a tax on all assets of companies would involve determination of market value of the assets regularly and this may pose formidable practical problems. The Group is, therefore, not inclined to recommend the levy of a general wealth tax on company assets. Wealth tax based on book value of company assets would be, in the Group's opinion, an irrational and inequitous measure.

3.33 The treatment accorded under the existing tax structure to dividend paid on preference shares is not rational. As dividend on shares is required to be paid out of company profits remaining after payment of corporation tax, cost to the company of issuing preference shares is much higher than

6. Of course, the disparity varies with the quantum of the total income of the company/firm and the shareholders/ partner.

that of ordinary shares. If interest on secured debentures fetching a yield of 15 per cent remains eligible for deduction, it seems illogical not to treat the dividend on preference shares which is a contractual payment like interest on debentures, as eligible for deduction in computing a company's taxable profits.

3.34 One reason for not allowing deduction of dividends on preference shares in the computation of taxable profits may be that dividend on preference shares enjoys exemption from tax upto a specified amount under Section 80L of the Income-tax Act. The benefit of Section, 80L remains available, however, only to individual investors whose income is liable to tax. In the case of non-taxpayers, the exemption under Section 80L has no significance.

3.35 The Study Group is of the view that if the exemption under Section 80L is made inapplicable to dividend on preference share, there would be no objection to permitting deduction of preference dividend in the computation of taxable profits of companies.

3.36 With this benefit, it would be possible for a company to issue participating preference shares and enable company's staff, workers and others whose career is linked to the company's performance to share in the improvement of the company's profitability. A direct financial stake on the part of the company's workers and staff through investment in participating preference shares of the employer company would help to promote healthy relations between workers and management in the company.

3.37 The proposals in the preceding paragraphs should go a long way to promote the generation of funds in business enterprises, and encourage risk taking. The proposal for funding in particular should help to create a climate for disclosure of business profits in greater measure and curb wasteful spending.

Sd/- xxx
(I.S. Gulati)

Sd/- xxx
(M.P. Chitale)

New Delhi.
December 10,
1984.

Sd/- xxx
(A. Bagchi)

Appendix to Chapter III

FLOW-OF-FUNDS BASE - AN OUTLINE*

Essentially, the flow-of-funds base envisages taxation on the basis of the net inflow of funds into an enterprise, that is, the excess of what flows in over what flows out on business account. The starting point of the flow-of-funds base is the classification of cash flows under four categories.

1. Purchase and sales of real goods and services ('R flows');
2. Financial transactions, e.g., interest payments and receipts and new loans extended or repaid ('F flows');
3. Purchases and sales of shares and dividend payments and receipts ('S flows'); and
4. Tax payments ('T flows').

There are alternative ways of defining a flow-of-funds base. First, the tax may, be levied on the excess of inflows to an enterprise from sale of real goods and services over outflows on account of its purchases of real goods and services, whether these are on current or capital account, which means receipts on sale of capital assets will go into the base while all expenditure on acquisition of capital assets will be excluded. This would constitute what is called the 'R' base. An 'R' base would not include flows on account of financial transactions and would, therefore, not be appropriate for financial institutions in whose case financial transactions are more important than the transactions in real goods and services. A comprehensive flow-of-funds base would have to comprise both real and financial transactions,

i.e., net inflow of cash on real as well as financial transactions, viz., excess of loans received over loans given. This is designated as the R+F base.

Locked at from another angle, since the total inflow of a firm must be equal to its total outflow, the net receipts from real and financial business transactions must go either to the shareholder or in investment in other enterprises or in tax payment. The latter is designated as S+T outflows. One variant of the flow-of-funds envisages taxing only those net cash outflows which go to shareholders or the personal sector while under another variant all net outflows from an enterprise whether to the personal sector or in the equity of other domestic companies would come under the flow-of-funds base.

The components of the R+F and S+T flows and the identity of R+T base and S+T base can be seen more clearly from the schematic version of the flow-of-funds given below:

Definitions of R- and S-base flow of funds

Sources of Funds

1. Operating Profit
2. Other Income
3. Prior Year adjustments
4. Other Receipts (e.g., investment grants, written current liabilities)

A. Real inflow = 1+2+3+4

5. Bank Credit, Received
6. Trade and Other Credit Received
7. Issues of Long Term Loans
8. Interest Received

B. Financial inflows = 5+6+7+8

9. Dividends Received
10. Issues of Ordinary and Preference Shares
11. Increase in Liability to Minority interests

C. Share Inflows = 9+10+11

Use of Funds

12. Net expenditure on Tangible Fixed Assets
13. Net expenditure on Intangible Fixed Assets
14. Increase in value of Stocks
15. Sundry expenditure (e.g., written of current assets, expenditure out of provisions)
16. Consolidation Adjustment

D. Real Outflows = 12+13+14+15+16

17. Change in Cash and Tax Reserve Certificates
18. Increase in Trade and other Debtors
19. Increase in Debt Investments
20. Loan Interest
21. Proportion of Loan Interest Unpaid

E. Financial Outflows = 17+18+19+20+21

22. Increase in Equity Investments
23. Dividends (Ordinary and Preference)
24. Proportion of Dividends Unpaid
25. Investments in Subsidiaries.

F. Share Outflows = 22+23+24+25

26. Taxation Payments

G. Tax Outflows:

The R Base = A - D
The S Base = F-C+G (tax inclusive)
Since Sources of funds must be equal to uses of funds.
S Base = Net Real and Financial Inflows (tax inclusive)
= the R Base + Net Financial Inflows.

* Based on Meade Committee Report, 1978, 'The Structure of Corporation Tax in UK', by Colin Mayer in *Fiscal Studies*, July 1982, and 'Revamping Company Tax' in the series 'Tax Reform in Britain' in *Economist*, September 17 to October 11, 1983.

REVIEW ARTICLE*

DAIRY REVOLUTION: INFLATED CLAIMS AND MODEST GAINS

B.S. Baviskar

During 1970-76 the National Dairy Development Board (NDDB) of India implemented the world's largest dairy development programme called Operation Flood (OF). The World Bank provided substantial funding for it. In line with the Bank's practice, this study is published by its Operations Evaluation Department. The study records the achievements of OF, notes the Bank's contribution, makes recommendations for the future, and draws out lessons to be learnt. Although written from the limited perspective of the Bank's involvement in the programme, it says a great deal about the programme itself and about the dilemmas faced by the donor.

The draft of this report was discussed in a workshop at the Institute of Rural Management, Anand, in March 1997. The participants, including this reviewer, were mostly academics, development specialists and managers of cooperatives. However, the known critics of the programmes such as Martin Doornbos and Shanti George were conspicuously absent. A suggestion to invite them was reportedly ignored by the organisers.

It is not easy to review Candler and Kumar's study. It raises more questions than it answers. Is it a scholarly/academic exercise? Or, is it primarily for internal consumption within the Bank and its allied organisations? If it is the latter, then why is it published and publicly distributed? Inspite of these questions in mind, I am reviewing it because it provides on opportunity to discuss vital issues concerning India's dairy development.

In this article I propose to describe, first, the main features of the OF programme and the Bank's contribution to it. I shall then comment upon the report itself - on its substantive as well as methodological aspects.

To grasp the significance of OF, it is necessary to understand the milk situation in the country prior to its launch. The 1950s - 60s were an era of milk shortages and government milk supply schemes. The country imported over 60,000 tonnes of milk powder anually to keep the schemes going. The government schemes were subsidised, consumer prices were kept artificially low, and milk supply had to be almost rationed as the demand far exceeded supply. The schemes protected the consumers but worked against the indigenous milk producers. The availability of cheaper imports depressed the domestic producer prices.

In October 1964, the then Prime Minister Lal Bahadur Shastri visited Anand in Gujarat and was so impressed by the dairy co-operatives in the area that he proposed the creation of a national level organisation to replicate the Anand Pattern of dairy co-operatives in other parts of the country. In the following year a parastatal organisation, the NDDB, was set up for this purpose. Dr. V. Kurien, the General Manager of the Amul Dairy, became its first chairman. Initially NDDB, located at Anand, was a quiet, low profile organisation. However, the launching of OF in 1970 changed all that.

As is well-known, the Anand Pattern is a three-tier co-operative structure composed of the village, district and regional levels, owned and controlled by rural milk producers, employing

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B.S. Baviskar is retired Professor, Department of Sociology, University of Delhi.

* *India: The Dairy Revolution: The Impact of Dairy Development in India and the World Bank's Contribution*, by Wilfred Candler and Nalini Kumar, The World Bank, Washington, DC, 1998, (World Bank Operations Evaluation Department). Pp. xxii+72.

The author is grateful to A.M. Shah and Amita Baviskar for valuable comments on the earlier draft.

professional technicians and managers. The co-operatives help producers by supplying inputs such as cattle feed and veterinary services, and by processing and marketing milk and milk products. The aim is to enable producers to escape exploitation by middlemen, to increase milk yields, and to obtain higher returns for their produce, while keeping ownership and control of dairy co-operatives in their own hands.

During the 1960s the European Economic Community (EEC) faced a problem of the over-production of milk and milk products. Encouraged by various incentives and subsidies, European farmers were over-producing milk resulting in the much talked about mountains of butter. The EEC had four options before it: (1) To sell the produce in Europe and abroad, with the attendant hazard of depressing the prices and ultimately ruining the farmers. (2) To destroy the excess production and maintain the price level by achieving a right balance between demand and supply. This was not feasible in the prevailing international climate. It would have appeared anti-humanitarian given the hunger and malnutrition in many parts of the world. (3) To stop supporting dairying through subsidies and incentives allowing supply to reduce. Given the clout of the powerful dairy farmers' lobby, this was not considered politically feasible. (4) To donate the surplus commodity to a country with a large lactose-tolerant population facing a shortage of domestic supply of milk which could absorb the surplus. This could earn goodwill for the European community for its humanitarian act and safeguard the market interests of its milk producers. Given its large population and persistent shortage of milk, India was identified as the most suitable recipient for such a gift. The critics of this dairy initiative have also pointed out that EEC generosity may have been motivated by the hope that the aid might pave the way for trade in the future. Once the urban consumers in India get used to regular and adequate supplies of milk, there would be discontent if the supply discontinued. In such a situation, the government would have to import milk on payment when aid stopped.

The NDDB, as a big player in the field, saw the potential threat in the European gift to its enterprise of helping the domestic milk producers. If the old practice of distributing the donated commodity free or at a lower price to all or to certain sections of the population (the poor, children, lactating mothers, etc.) was followed, it would depress the domestic prices of milk and harm the interests of indigenous milk producers. The country would continue to face shortage once the donation phase ended which was bound to happen after a while.

Dr. Kurien and the NDDB hit upon an ingenious and innovative alternative strategy and persuaded the donors and the government of India to accept it. According to their proposal, the donated skimmed milk powder (SMP) and butter oil (BO) were to be sold in India on commercial basis. The products were to be combined with domestic milk and sold in the four metropolitan cities and later in smaller urban centres. The funds generated from such sales were to be used through the NDDB for dairy development work in the country, which would include setting up of village level dairy co-operatives, district level milk unions for processing milk, and regional level federations for marketing purposes. The funds would be useful to train farmers in organizing co-operatives, to supply inputs such as cattle feed and veterinary services including artificial insemination (AI) to increase milk output, and to create an urban marketing network to ensure profitable return to the local milk producers. In brief, the idea was to achieve multiple objectives to benefit the milk producer by replicating the Anand Pattern all over the country, the purpose for which the NDDB was set up in the first

instance. At the same time, the proposal aimed at pleasing the consumer by supplying good quality milk in adequate quantity at a reasonable price.

Thus, the NDDB sought to kill several birds with one stone (i.e., OF). It aimed at increasing milk production in the country, to ensure adequate supply of milk and milk products of reliable quality at reasonable cost to the country's population, and to enable the milk producer to improve his production, efficiency and income. By insisting on replicating Anand Pattern co-operatives, it also tried to ensure that the levers of the dairy industry would not be hijacked by bureaucrats, businessmen or politicians, but would remain in the hands of farmers and their leaders.

The Operation Flood - Phase I (OF-I) was launched in 1970 and ended in March 1981. It involved an investment of Rs 116 crore generated through the sale of SMP and BO donated by the EEC through the World Food Programme (WFP). The aim of the programme was to acquire a commanding share in the milk markets of the four metropolitan cities of Bombay, Delhi, Calcutta and Madras. The objective was to cover one million milk producing households and 1.9 million milch animals. The milk producers were to be organized into 12,000 dairy co-operative societies (DCSs) and ten district level milk producers' unions (MPUs) in ten states, all on the lines of the Anand Pattern dairy co-operatives in Gujarat.

The World Bank was watching the Anand (or Amul) experiment since 1968 with periodic visits by its senior officials. However, it was only in 1974 that the Bank decided to participate in the ongoing OF-I programme to a limited extent. In that year the Bank contributed US $ 74.1 million for dairy development activities in the three states of Karnataka, Madhya Pradesh and Rajasthan.

Operation Flood-II (OF-II) was launched in October 1979 even before the OF-I officially came to a close. The OF-II was even more ambitious. It involved an investment of Rs 485 crore generated through the sale of EEC donated SMP and BO. This time the NDDB was to receive the donated commodities directly and not through the WFP. The objective again was to replicate the Anand Pattern co-operative structure to cover 10 million rural milk producing households, by organizing them through 40,000 village level co-operative societies and 155 district level unions in 18 states and union territories. About six or more district level unions were to be organized into a regional or state level marketing federation. The milk procured and processed through these co-operatives was to be supplied to 153 major urban centres, each having a population over 1,00,000. Phase II of the programme ended in 1985.

Following a visit to Anand in 1978 by the Bank's then President, Robert McNamara, the Bank decided to offer US $ 150 million for the implementation of the overall programme under OF-II.

The Bank was much impressed by the objectives of the programme and the institutional mechanism through which it was being implemented. This commitment on the part of the Bank continued through the third and the final phase which ended in March 1996. The Bank's contribution to this phase was US $ 321.2 million. In all, the Bank contributed US $ 690 million (at 1996 prices) to the entire OF - a huge contribution indeed. The Bank's assistance proved to be crucial in accelerating both the scale and the speed with which OF was carried out. The total project cost of OF was US $ 2.7 billion including US $ 1.1 billion worth of food aid from the EEC. The remaining amount came from the central government.

Operation Flood was truly the World's largest dairy development programme in every sense of the term. In 1996 the programme involved 9.3 million farmers. Out of these, 6.3 million were regularly supplying 10,900 tonnes of milk per day through 55,042 functional dairy co-operative societies. (Over 20,000 other societies were non-functional or defunct). The milk was processed and marketed through 170 district level milk producers' unions, 16 state level federations and 9 Apex level unions. The OF operated nationwide in 22 states.

If the organizational dimensions of OF were impressive, some of its achievements were equally so. According to the authors of the report under review, the country's annual production of milk increased from 22 million tonnes in 1970 to 66 million tonnes in 1996 (p. 48). The per capita consumption of milk increased from 107 gms in 1970 to 193 gms in 1994. The authors believe that without OF the country's milk production would have increased only marginally if not remained stagnant.

The authors point out that 6,000 of the DCSs were exclusively for women where they were members and elected office-bearers running the co-operatives. Through these co-operatives over 3,00,000 women were organized in their own collective activity in rural areas - not a small achievement.

Candler and Kumar admit that OF represented only 6.3 per cent of the total milk production and 22 per cent of the entire milk marketed in India. Thus OF was a small part of the total milk activity in the country, but according to the calculations by the authors which are not entirely convincing, OF is assumed to have an indirect but positive influence on the overall production.

The OF also reflected a lopsided development. Forty six per cent of the total milk procured under OF was collected from the two leading 'co-operative' states of Gujarat and Maharashtra. Moreover, Gujarat alone received 40 per cent of the funds invested under OF schemes. Granting that Gujarat was the major producer and supplier of milk in the country, its per member share of investment as also the share of investment per kg, of milk produced and per kg, of milk procured turned out to be much higher than the average for the country as a whole.

By contributing a relatively big amount for the implementation of OF, the Bank has earned a share both in its achievements and failures. Since the volume under review is an assessment of the Bank's contribution to dairy development in India by one of its own departments (Operations Evaluation Department) it may be too much to expect it to be fully objective or openly critical. There is also an inbuilt bias to support and justify the Bank's actions and the programme it assisted, since the failures of the programme would reflect unfavourably on the Bank's judgment to select such a project for assistance.

It appears that the Bank offered funding for OF on its own initiative which is rather rare. It offered assistance to an ongoing programme without insisting on any preconditions or policy changes - again a rarity in the Bank's history of lending. Why did the Bank do this? Candler and Kumar provide an answer. The Bank was attracted towards the programme mainly because of the policy changes it signified. First, the Indian Government's earlier emphasis on public sector involvement in dairy development was now given up. Second, the dairy aid food products (SMP and BO) donated by the European Community (EC) were to be sold in the Indian market at commercial prices to generate funds for dairy development. Third, a major rationale for the Bank's support was the objective of replicating Anand Pattern co-operatives owned and controlled by farmers.

Fourth, OF appeared to be consistent with the aim of helping the poorer sections of the population. To quote,

> 'This was not policy based lending in the sense of an operation rich in policy conditionality. The Bank saw an ongoing policy that it felt was promising and could usefully be supported. The policy was promising because of its probable production impact, but even more because of its capacity to reach the poor' (p. xv).

The organizers of OF have claimed several achievements to its credit. Increasing milk production more than three times within 25 years or so was mentioned earlier. India has not only overcome deficit and become self-sufficient in milk supply, but as the largest producer of milk in the world, it is now in a position to export milk products. Assuming that this is correct, how much of this increase should be attributed to OF, or particularly to the World Bank which contributed to only a part of the total investment? The authors claim that OF contributed 38.5 million tonnes to the total milk production of 63.3 million tonnes in 1994-95 (Pp. 40-41). At another place (p. 38) they claim annual OF contribution to milk production at 43 million tonnes. These claims are obviously exaggerated and the assumptions underlying their calculations could be challenged. After all, OF was producing only 6.3 per cent of the country's milk production (p. 48). They are clearly usurping to OF the progress made in non-OF areas too. We should not ignore the fact that the governments at the centre and the states were implementing a variety of programmes (perhaps less glamourous than OF) such as the Integrated Rural Development Programme (IRDP), Intensive Cattle Development Programme (ICDP) and other animal husbandry programmes from the First Five Year Plan onwards. The green revolution in different parts of the country was also contributing to this process through greater availability of fodder and increasing prosperity in rural areas. The contribution of these programmes cannot be ignored by assigning all credit for growth to OF. Moreover, there is also a market-driven process at work here - with private firms playing a role in improving cattle feed, providing better transportation and processing (an incentive to produce more milk because there is a market with better prices). That is, there has generally been a boom in urban and rural middle class consumption which can't be attributed only to OF or government programmes.

The authors' claim with regard to incomes accruing to milk producers needs to be rigorously examined. It is stated that the annual payment by the cooperative system to dairy farmers has increased from Rs 2.1 billion in 1972 to Rs 34.0 billion in 1995 (p. 48). Converting the amount into US dollars, it comes to US $ 1.0 billion per annum. According to Candler and Kumar, US $ 250 million per annum would be the net increased income to milk producers. The authors argue that since 70 per cent of the milk producers are likely to be small and marginal farmers, the bulk of the increased income from OF goes into the hands of the poor (p. 55).

There are two other claims which appear, for want of hard data, to be exaggerated. It is stated that the increase in household income from milk enabled parents to send their children (both boys and girls) to school. One may accept this as one of the indirect effects of OF. It is also claimed that OF contributed to more girls attending schools. How? The argument is somewhat circuitous. Among the landless and other poor households women went out as agricultural labourers forcing their young daughters to stay at home to look after younger siblings. Now dairying enables women to stay at home and supplement their income. The young daughters are now free to go to school. How simple! The authors admit that there are no direct quantitative data on extra school attendance (p. 52). Their speculation substitutes for data.

Even more enlightening is their claim that the effective use of AI contributes to knowledge and practice of family planning. To quote:

> 'And the thorough understanding of the cow's reproductive cycle, which is part and parcel of the effective use of AI, provides a compulsory tutorial on possibilities of family planning' (p. 50).

This is similar to another myth spread by Dr. Kurien that dairy co-operatives helped reduce caste differences in villages because people of high and low castes supplying milk do so by waiting in the same queue, and pouring milk in the same container. What an easy way to reduce caste conflict in rural India! Ironically, during the anti-reservation agitation serious violent caste conflicts erupted in the same villages in Gujarat where dairy co-operatives were flourishing. Both these examples are Dr. Kurien's contribution to India's dairy mythology.

Along with achievements, the authors also record one glaring failure: non-implementation of Anand Pattern outside Gujarat. One of the main objectives of OF was that of replicating Anand Pattern co-operatives with farmer control. Except in Gujarat, dairy co-operatives set up under OF remained under the control of bureaucrats and their political masters in spite of the NDDB efforts and World Bank pressures. At the most, the village level DCSs showed some evidence of participation and control by local milk producers although bureaucratic and political interference was not totally absent. At the district level MPUs and state level federations there was no pretence of farmer control. These bodies functioned like wings of state governments. Here the naivety of the Bank's understanding of social and political forces operating on the ground and the limitations of its own influence were evident. Since the replication of Anand Pattern co-operatives figured prominently as a major objective of the programme, the Bank assumed that it would be implemented in the normal course. When it realized that the same was not happening, it made it a condition for the release of funds during OF-III. The situation did not change even after stipulating such a condition. The condition had to be waived in order to achieve the target levels of funds utilization.

To quote:

> 'With hindsight, the design was unrealistic.'
>
> '---- It is now evident that the amount of money provided could not be productively invested in states willing to implement the Anand principles in full. Entrenched political and bureaucratic interests were extremely reluctant to relinquish their influence over the industry. In practice, in order to achieve target levels of disbursement, in many cases, it has proved necessary to waive these conditions' (p. 12).

The report admits that the 'state domination of the apex co-operatives is still widespread' (p. 11). It further states that 'the Anand model clearly started from the ground up. Despite attempting to follow this model, the Operation Flood and the Bank projects were 'top down' .... In the event, the apex federations and MPUs were less independent of government than the Anand model stipulates ....' (p. 11).

It is not as if the NDDB and the Bank were not forewarned about the 'top down' approach and unrealistic design of the project. Shanti George (1985) and others had sounded a warning right from the beginning that the Anand Pattern was embedded in the social structure and culture of the *charotar* area of Gujarat and that it could not be replicated in other parts of the country by imposition from above (see also George, 1994).

As stated earlier, the study under review primarily attempts to evaluate OF and specifically the World Bank's contribution to it. But in the process it reveals a great deal about the Bank itself, its objectives and method of functioning.

There are thinly concealed attempts at white-washing and window-dressing. The authors seem to say, if the things have not worked the way they were expected to, it is not the Bank's fault. It is the notorious Indian bureaucracy and the politicians who should be blamed. The NDDB which led the Bank along the garden path is not blamed. Perhaps the Bank wants to continue its relationship with an organisation that, in its perspective, represents the desired shape of India's rural economy. The Bank has to step cautiously around the NDDB because Kurien has effectively managed its public image. Its 'brand equity', its clout with the middle class, its reach in the media through sophisticated PR and advertising are extensive. Management of good impression on Kurien's part has made NDDB a force for the Bank to reckon with.

What is perhaps more shocking is the sloppiness evident all over the study. Factually incorrect and logically absurd statements are made in a casual manner. A streak of arrogance could be seen at many places. The authors assume a high level of gullibility on the part of the readers. Let me illustrate, with examples, some of these observations.

Deliberate Distortions by Suppressing or Twisting Facts.

While reviewing the literature on OF, the authors make an invidious distinction between Indo-Dutch authors and indigenous authors (p. 4). The former are presented as the critics of OF, while the latter are identified as the supporters of OF. There are several layers of distortion in this caricature. The main thrust of the literature review is that the critics are foreign funded and foreign inspired while the supporters are indigenous. (*Videshi* and *Swadeshi* in today's discourse on development). Nothing could be further from the truth. The Indo-Dutch Programme on Alternatives in Development (IDPAD) is stated to be 'sponsored by Dutch Aid' (p. 4). In reality it is a collaborative programme between the Indian Council of Social Science Research (ICSSR) and its counterpart in the Netherlands, jointly funded by the Indian and Dutch governments. In the 'References' (Pp. 67-72) all Indo-Dutch studies on Development Alternatives are mentioned as Dutch studies on Development Alternatives (dropping 'Indo' from Indo-Dutch) to create the impression that the criticism of OF comes from the Dutch (foreigners) while the Indians (indigenes) are supporters of OF. This is a blatant distortion. Twelve of the 16 authors in the Indo-Dutch studies are Indians (not only by origin but by citizenship). Only four of them are Dutch citizens. On the other hand, the authors overlook the fact that three of their four 'indigenous' authors are no longer Indian citizens. They are Indians only by origin. The authors should have concentrated on the substantive arguments put forward by the critics instead of maligning them by labels, 'Dutch' and 'indigenous'.

It is clear that the authors do not want to engage in serious debate with the critics. Among the critics of OF, Shanti George is by far the most serious, consistent, sharp and prolific. She was the first to publish a full length scholarly critique of Operation Flood (1985). That seminal work is nowhere mentioned in this study. George published another book (1994) and many papers dealing with different aspects of OF. They are also missing here. Only one of her papers figures under 'References' and that too without full bibliographical details.

The tendency to suppress facts is clearly evident in the way the authors treat D.W. Attwood's work. The well-known expert on sugar and other cooperatives in India was commissioned by the World Bank in 1985 to study and report on the progress of OF in Madhya Pradesh. Accordingly, Attwood began his fieldwork in the rural areas of that state. Being opposed to any independent evaluation of OF, the NDDB sent its men to Madhya Pradesh to prevent Attwood from doing

any research and brought tremendous pressure on dairy officials in Bhopal to ensure that Attwood abandoned his study immediately. Attwood's plea to the Bank officials in Washington to protect him from the NDDB onslaught were of no avail. (See Baviskar 1983 and 1984, and Baviskar and Attwood 1995 on NDDB hostility to independent research).

On return to Washington Attwood submitted two documents to the Bank: one, reporting on the working of DCSs and MPUs in the state, and the other, on the treatment he received from the agents of NDDB preventing him from completing his research. The authors do not refer to the second document at all, and quote convenient passages only from the first one. Attwood's report is shown as a publication of McGill University suppressing the fact that it was commissioned by the Bank.

Initially (in 1974) the World Bank had funded OF related projects in Karnataka, Madhya Pradesh and Rajasthan. Rajasthan was given US $ 27.7 million, while Madhya Pradesh received US $ 16.4 million only (p. 1). Surprisingly, the report discusses the projects in Karnataka and Madhya Pradesh in reasonable detail but does not discuss Rajasthan even in passing. My guess is that Rajasthan was perhaps a dismal failure in the Bank's operations, hence this silence about its activities in that state.

The authors also seem to specialize in teasing the reader. They promise something to the reader, but fail to fulfil that promise. They refer to the extensive comments on the earlier draft of their report received from the South Asia Regional office of the Bank and say: 'However, three areas of disagreement remain; these are footnoted in the text' (p. xi). Again they say: "The South Asia Regional Office has reservations about some aspects of the report's coverage. These reservations are also noted" (p. xxi). I could not locate these disagreements/reservations in the report. It is strange that these are not highlighted for the benefit of the reader. Similarly, the study frequently refers to the publication 'World Bank 1996c' while mentioning a major shift in the Bank's policy with regard to dairy cooperatives (p. 12). Surprisingly, there is no entry as 'World Bank 1996c' either in the 'References' or under 'World Bank Reports' or under 'Further Reading'. Again, is it a case of convenient forgetfulness or sheer incompetence?

Logical Fallacies and Post-factum Generalizations

The study is weak on logical reasoning and strong on post-factum generalization. Take the case of Madhya Pradesh. The three village-level studies in that state show little difference in matters of dairy development between OF and non-OF villages. The authors are not surprised or disturbed by these findings. They have a ready explanation: 'The easiest escape from this apparent paradox is the likelihood that dairying was growing vigorously in both Operation Flood and non-Operation Flood villages' (p. 17). How wonderful! If dairying can grow without OF, then why bother to have OF at all? The authors do not pause and think about such questions. They can explain anything and everything. They found that the defunct Flood villages (villages where OF programme had ceased to operate) were reported to be the most developed in terms of educational and income levels, agricultural land owned and irrigated, numbers of milch animals owned, and milk sold. These curious facts seem to suggest that there may be *no* link between dairy development and OF in this case. This should make us question the justification for promoting OF. However, the authors conjure up an ingenious explanation for the anomaly. They state: 'This suggests that these villages were close to town and thus able to capitalize on their locational advantage to get high milk prices from *dudhiyas* even in the absence of a DCS' (p. 31). How did an important variable like 'locational advantage' arrive out of the blue onto the scene?

Candler and Kumar are least disturbed by contradictory findings in their study, since they have a ready explanation for every thing. In Madhya Pradesh they found a positive corelation between dairying and education (p. 17). This is easily explained as a result of higher income from dairying enabling the households to send their children to school. But in Karnataka they found that households without milch animals (meaning without dairy incomes) have increased their educational levels faster than the dairy households. Any normal researcher would be puzzled by such a finding in the light of an earlier positive corelation between dairy income and children's education. But not our authors. They are ready with an explanation. 'This (higher educational levels in non-dairy households) may reflect the reliance of non-dairy households on non-farm jobs that require education at higher levels' (p. 31). This is a perfect text book example of post-factum generalization. No matter what the empirical finding is, our authors have a ready made explanation for it.

Apparent Factual Errors in the Study

The authors say, 'Operation Flood reflected the political/developmental insight in 1964 of Lal Bahadur Shastri, a farm boy who rose to be Prime Minister' (p. 56).

'The magic of Lal Bahadur Shastri's decision to endorse Operation Flood was that this same policy protected the whole dairy industry from dumped imports of dairy products and arrested the proliferation of government schemes designed to develop the industry' (p. 57).

First, Lal Bahadur Shastri, although born in a poor family, was not a farm boy. He was a Kayastha - a caste of scribes. Second, Operation Flood was launched in 1970. Shastri had died in January 1966. Although NDDB was set up due to his initiative, there was no talk about OF during his lifetime. Operation Flood was conceived by V. Kurien in response to the availability of free donation of dairy products from the EEC. Shastri was no doubt a great leader and Prime Minister. But he was not the father of OF. Why do the authors go out of their way to assign to Shastri OF's paternity ? Perhaps they want to show a greater legitimacy to the programme than is required.

The authors indulge in another howler. While pointing out even hardheaded fieldworkers' inability to quantify separately supply and demand side effects (p. 56), they are suddenly inspired to quote J.M. Keynes saying 'Those (i.e., fieldworkers) Keynes so unkindly described as 'slaves of long dead philosophers'' (p. 65). This is wrong and inappropriate. Keynes was referring to practical men 'who are usually the slaves of some defunct economist' (Keynes 1957: 383).

There is a discrepancy in calculating the total cost of Operation Flood. According to the Bank's Livestock Sector Review in 1996, the cost was US $ 5.06 billion while Candler and Kumar estimate it to be US $ 2.98 billion, a difference of US $ 2.08 billion (p. 12). If the estimates by the Bank's own studies differ with such a wide margin, whom should we believe?

The annual payment by the co-operative system to dairy farmers was estimated to be Rs 34.0 billion in 1995 (p. 48). But in the next chapter we are told that it was about Rs 34.5 billion (p. 55). What is the correct figure? Perhaps it doesn't matter much. What is Rs 0.5 billion for the World Bank? Not even worth *chatni* as an Indian would say.

The processing margin for the chilling centres should be 18 per cent and not 19 per cent as mentioned in the study (p. 28).

The authors admit that they have no 'before project' baseline data. They cannot tell whether the difference in milk production should be

attributed to Operation Flood, or to a sampling error (p. 15). According to them, the 'increase' in milk production reported in Karnataka could reflect sampling error. Such statements raise doubts about the estimates of huge increase in milk production attributed to OF by the authors in other parts of the study (see note 1 on p. 62).

Conclusion: World Bank's Real Aenda

Why did the World Bank support Operation Flood, and that too on its own initiative? Let us recall the 1970s. Robert McNamara, Bank's then President, had raised the slogan to fight against poverty. He wanted to use the Bank's resources to help the poorest sections of the people in the poorest countries. However, there were not many programmes in the world which seemed to work in favour of the poor. V. Kurien and the NDDB had created the widespread impression that the Anand Pattern co-operatives were successful in helping the poor and in bringing other social benefits. The World Bank decided to join the bandwagon. Its support for the farmer-controlled dairy co-operatives of Anand Pattern appears to be a secondary consideration. Throughout its participation in OF, it never insisted strongly enough on the implementation of the Anand Pattern principles. At the end of the programme in 1995, the Bank abandoned its support for farmer co-operatives. With globalization and liberalization in the air, it wanted to desert the co-operatives in favour of creating a level-playing field for the private sector in the dairy industry. If OF was such a great success as this study makes it out to be, then why is the Bank distancing itself from it now?

Perhaps raising all these questions is futile in this case. The study is more of a formality. The Bank has spent US $ 690 million on OF. The procedures require an evaluation at the end of the project. Once it is done, it will be filed and that will be the end of it. The experts will move on to other projects and other evaluations. That the Bank is not serious about such studies is evident from the warning it has printed at the beginning of this report: 'The World Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility whatsoever for any consequence of their use' (p. ii).

Does one need to say anything more?

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BOOK REVIEWS

Islam, M. Mufakharul, *Irrigation, Agriculture and the Raj: Punjab, 1887-1947,* Manohar Publishers, Delhi, 1997, Pp. 180.

Irrigation plays a crucial role in agricultural development: in addition to being the major supplementary source of moisture in cultivated land, it has a decisive influence on land use and the choice of crops. In areas with plentiful rainfall, well distributed over the whole year, irrigation is not very relevant. But, where rainfall is scanty and uncertain, irrigation becomes absolutely necessary. The state can play an important role in providing irrigation besides other infrastructural facilities like regulated markets and an institutional base for development of agriculture. Punjab is one such region. The uncertain and erratic behaviour of monsoons over this area has made it an ideal place for development of artificial irrigation. As a result, agriculture in Punjab contributes 44 per cent of the state's GDP and the state in turn contributes the maximum to the Central Pool of foodgrains, making it virtually the granary of the country. The substantially higher rate of growth of agriculture in the Punjab can be attributed to the vastly superior infrastructural provisions by the State in the form of irrigation, power, road length, etc.

The role of the State in development of agriculture in the case of Punjab began with the British Raj. With land available in plenty and with great scope for bringing additional areas under cultivation, provided water for irrigation could be made available, the British laid the foundation of the canal system in the Punjab in the eighties of the last century. Subsequently further efforts by the Government of India after independence made the canal system of irrigation in Punjab (East Punjab and West Punjab in Pakistan taken together) one of the largest in the world. This created conditions enabling accelerated growth of agriculture in the state.

The book under review emphasizes the role of the state in the development of irrigation resources in Punjab. The author goes into the motivation of the British in constructing canals in the province and comes out with the view that the motivation was as much developmental as imperialistic. But about that later.

In the first chapter the author describes and discusses certain aspects of irrigation system, with special reference to Punjab. He gives an outline of the different types of irrigation used in Punjab in the late nineteenth century, like private and public canals and liftwells, and goes on to discuss the technological progress achieved in the irrigational field. Reference is also made to land grants and water management in the canal colonies. Chapter two gives a statistical account of the annual rates of change in the total area irrigated and the area irrigated from different sources of water supply - government canals, wells, miscellaneous sources, etc., including the cultivators' preference for a particular source in particular regions of the province. In the third chapter the study discusses the impact of the assured water supply on the crop pattern and crop production. For this, farm level data are used. In the fourth chapter the impact of irrigation on the incidence of tenancy and in the fifth chapter its impact on land transfers are studied. In the sixth chapter the study discusses the financial results of public investment in canal construction.

According to the author, Punjab is an excellent example of successful state intervention in irrigation development which, assisted by engineers' skill, rendered the water of five rivers a valuable asset. Not only that, it also changed the socio-economic pattern as irrigation projects in Punjab were undertaken on waste lands belonging to the Crown which were by and large uninhabited. Along with increase in irrigation, it led to colonisation of these lands - even allowing members of commercial and trading classes, hitherto barred from buying land, to do so. This created a class

of rich peasants who were soon given proprietary rights by the government. This led to a new politico-socio-economic set up in the province.

Large scale government intervention, according to the author, was not for prevention of famine, or for reduction in population density in the older districts, or for creation of villages of a superior kind or dynamism, and for sense of duty of the Punjab school of Administration, or for the paternalistic ethos of British rule - as claimed by the imperialists. It was mainly for the sake of expanding the tax base and for increasing agricultural productivity in order to be able to provide more agricultural raw materials to pay for the imports from Britain and earn an export surplus. At the heart of the whole exercise was the desire of the colonial rulers to extract economic surplus from a colony. The author, unfortunately, beats about the bush and does not bring this simple fact into relief in a straight forward way.

However, the author goes on to show that the contribution of irrigation is that it imparted a certain dynamism to crop production sector - it extended the cultivation to areas which were likely to remain uncultivated but for the construction of canals, increased the yield per acre and ensured greater crop security and indirectly created favourable conditions for the use of improved seeds.

The improvement in agricultural yields and production made possible the fast pace of commercialization of the province's agriculture making it the most market oriented in Asia.

Development of canal colonies helped development of agriculture within the larger framework of strengthening the imperialistic hold in India. The author emphasizes that agricultural development in Punjab was market oriented. Actually, it had to be so; for, agricultural development in Punjab was designed to provide foodgrains and raw materials, specially cotton, to Britain. In fact when the East India Company got the Dewani of Bengal in 1765 after the Battle of Buxor, the agricultural surplus consisting of cotton, indigo, and opium served to finance the East India Company/British establishment in India. Even as late as 1862, Bengal and Bihar were the principal exporters of cotton to Lancanshire. The construction and opening of the Suez canal had important implications for the state of Punjab which the author misses to point out. This canal reduced the distance between India and Europe; the time of travel was reduced from 35 days to 15 days and the introduction of steam vessels, instead of sailing vessels, in the 1870s reduced the transport and shipping costs making it possible to carry commodities having more bulk than value and bringing them into trading stream. This made possible export of agricultural produce which, in turn, paved the way for development of agriculture as part of the imperialistic exploitation of India by the colonial power, England. The development of cotton cultivation in Punjab and Sind made this part of British India a rich source of supply of these needed raw materials to the Manchester mills. The author makes no reference to this development. Again he sadly misses a reference to Dadabhai Naoroji's Drain Theory. Economists have long discussed drain in monetary terms, the payment of which was called "home charges". It was the measurement of drain in monetary terms because payment was made in Sterling. But, measured in real terms the drain was of resources of India in which the agricultural resources were the most important, i.e., food grain surplus. By implication, the main drain was from Punjab. Was it not a case of India starving its own children and suffering severe famine for the sake of supplying surplus grain from canal-irrigated Punjab to its colonial masters?

A close nexus existed between British imperialism and economic exploitation of India on the one hand and the development of agriculture in Punjab aided by irrigation on the other. Unless that nexus is brought out, the real intention of the British in the development Punjab agriculture and irrigation is lost completely. This is a major deficiency of this book.

Another shortcoming of the book is that it omits to discuss the fact that agricultural development and the establishment of canal colonies changed the socio-economic order of the state. For example, the dominant castes, till about the beginning of the twentieth century, amongst the Hindus were Khatris and Aroras who formed the premier economic class also. They were pushed to the background and their place was taken by the Sikh peasants as the dominant economic class. The Sikh peasants brought from Jallundhar and Hoshiarpur or the Doaba in East Punjab became the leaders of agricultural development in West Punjab and prospered after hard struggle. In the process, the entrepreneur class of Khatris and Aroras lost their importance in the process of agricultural development. That itself is a separate history which needs to be studied to which the author makes only a passing reference. Sadly enough socio-economic aspects of the effect of development of canals and the construction of canal colonies are completely missed by the author.

Land Alienation Act of Punjab was directed mostly against Hindu moneylenders living outside canal colony areas to save the peasantry that was poor in those areas. They were the people who were most indebted; the people of the canal colonies were not so indebted. Therefore the impression conveyed by Darling in his celebrated work "Punjab Peasant in Prosperity and Debt" is misleading because the section of peasantry that was prosperous was in the canal colonies whereas the section which was poor and indebted lay outside the canal colonies. It was to protect the latter that the Land Alienation Act was meant, not the people in the canal colonies.

At certain places the author refers to the development of urban industry. Actually Punjab suffered from lack of industrialisation. Till today Punjab has prospered mainly because of agricultural development which has been the chief source of wealth and income of the people there. All the urban industries that developed in Punjab as a result were cotton ginning and a few cotton textiles mills, sugar manufacturing, vanaspati oils and flour mills - all agro-based industries. By no means can this be called industrialisation. Punjab lacked mineral resources; hence basic industries requiring steel and coal could not be established in that state. At the same time, as noted earlier, the agricultural development pushed back the entrepreneurial class of Khatris and Aroras from making pioneering effort. They could have been the torch bearers of industrialisation in the province, but were kept back from doing so. Therefore, entrepreneurship for industrialisation was missing in Punjab. These factors led to unbalanced growth of Punjab economy, with much more emphasis on agriculture and little on industry and services.

The author mentions the development of feudalism in Punjab. Actually, it was outside the canal colonies. It came into existence because big Jagirs were given to people like Tiwanas, Noons and others. These were big Jagirdars who could not cultivate the land themselves and had to give out lands on lease. That explains the development of tenancy in Punjab. But in the canal colonies peasant proprietorship was the dominant system and by and large feudalism did not develop there; it could not develop there because the land given there was in relatively small pieces which became smaller and smaller with the increase in population and consequential subdivision through inheritance laws.

The problem of canal colonies was different from the non-canal areas. This should have been brought out. The author talks of the development of tenancy and feudalism in the whole of Punjab. In fact, it developed essentially in non-canal colony areas.

In sum, in order to understand Punjab as a whole it must be remembered that while development of canal colonies introduced modern technology, the structure of traditional agricultural relations and the traditional methods of cultivation continued. Therefore, by focussing on canal colonies but generalising the conclusions for the whole of Punjab is like missing the woods for the trees. The author would have been well advised to keep his focus on the development of canals, their impact on agricultural development in the canal colonies, the finances of canals and the role of British Raj in these developments. Thereby the book would have served a useful purpose, though there is no dearth of books on the growth of Punjab agriculture and related problems.

The author is to be complimented for the indepth study of the subject he has taken up and commended for taking such pains and making a laborious exercise. Nevertheless, the book suffers more from acts of omissions than commissions, and the end result does not justify the period of twelve years of research spent on it. Further, the effect is spoilt and the flow of thought disrupted by several mistakes - spelling, grammatical and statistical, which could easily have been avoided by careful editing and proof reading. A good effort so far as it goes, but unfortunately it does not go far.

Sitesh Bhatia,
Lecturer in Economics,
New Delhi.

Herman, Barry & Krishnan Sharma, (Eds.), International Finance and Developing Countries In a year of Crisis, Vistar (Sage) Publications, New Delhi, 1998, Pp. ix+143, Price Rs 165/-.

This book is a collection of selected papers, presented at the United Nation on financial issues of global interest in the wake of the South East Asian Crisis. These discussions were expected to serve as platform for discussing pertinent economic and social issues with experts and officials outside the United Nations. The purpose of this volume is to examine the financial crisis, review the results of the Assembly's deliberation on Financial Development in 1997 and to make available to a wider group of readers the perceptions and analysis of the external experts who contributed to the General Assembly's work. These papers have the benefit of the pragmatic ideas based on the experience of the practical policy makers and academics.

The introductory analysis of the South East Asian Crisis by the Editors discusses the build-up of pressure and the eventual collapse of the Thai bhat. Evaluating the outward looking policies adopted by developing countries that made investment from abroad and consequently global financial integration possible, they stress that such integration needs proper sequencing and timing without which the technological advance and consequent increase in the availability of financial instruments can only quicken the crisis. The article points out that while the debt crisis in the 1980s saw the exodus of funds from emerging markets, the 1990 saw their return reflecting a new sense of confidence in these countries and the economic consideration of better returns. The capital flows in the 1990s showed a distinct decline in the flows on official account and a more than offsetting rise in the private account that were primarily of a short-term nature and thus subject

to volatility that resulted in large outflows after the waning of confidence in these countries. Analyzing the cause and spread of the crisis, the authors have divided the oft-discussed concept of contagion into two categories. The first was the result of the investors' concern regarding unsound fundamentals, this contagion affected the South East Asian countries to start with and later spread to other countries outside Asia with weak fundamentals. The second contagion affected countries in the South East Asian group that exported similar products as Thailand or exported to it. The currencies of these countries like Singapore, Hong Kong, etc., were targeted as their exports were expected to shrink. However, these countries emerged almost unscratched from this due to their strong economic fundamentals.

The article expresses concern that economies undergoing stabilization programmes may be caught in a vicious downward spiral in their incomes. This may be caused by a loss of confidence and capital flight feeding into currency depreciation which leads to a rise in foreign debt servicing and import costs resulting in a rise in bankruptcies and a further loss of confidence! The authors highlighted the need for quick restoration of market confidence because if the IMF programmes fail it would be difficult to disentangle the economic difficulties caused by the initial problems and those associated with the IMF programmes which may reduce the credibility of these programmes. The impact on the developed world of the Asian crisis highlighted the potential dangers from the volatility of short-term private capital flows. It underscored the need for a well functioning financial system, which is a Sine qua non for development. Governments need to strike a delicate balance between better regulation and lesser controls. Premature liberalization, without adequate prerequisites like a broad and wide bond market being available had led to the funds into speculative and real estate activities in Southeast Asia. Greater rigidity like that in exchange rates is at the root of the most imbalances that result from the absence of the automatic leverage effected through the market. The governments have the role of overseeing the implementation of the prudential regulation and their efficiency in wake of offshore financing and financial innovation. The international community should also wake towards development of common standards for prudential regulation of national banking system and the financial system that includes a proper risk management information disclosure system in order to work towards increasing the confidence of the international financial investors. Discussing how the role of the IMF was put to severe test during 1997 they underscored its constraints and the need to supplement its resources to enable effective bailouts for affected countries. Such bailouts would require a contingency fund but the existence of such a fund may entail the 'moral hazard' problem wherein these countries could turn towards riskier options.

The authors do not bring out the role of early warning signals and the need for transparency in the foreign exchange transactions including the forward commitment of reserves, the lack of which was one of the prime causes of the crisis in Thailand. Such transparency along with sound policies can make the country's exchange rate management credible, ruling out all arbitrage opportunities that lead to speculation.

The paper by Ambassador Oscar de Rojas explains how the United Nations Organisations have a role in international financial matters. The UN is concerned with finance for development, especially in the wake of the volatility of financial flows that make developing countries susceptible. He stressed the role of initiation of a high level dialogue between the inter-governmental committees of Bretton Wood institutions and the

Economic and Social Council of the United Nations. The 1998 spring meeting that he has referred to has since taken place. It was during this meeting that the idea of International Financial Architecture was put forth. The IMF has launched an initiative to instill transparency in member countries' economy to promote international standards against agreed benchmarks of good practices that minimize asymmetries in information.

While Ambassador Rojas talks of the duty of those who have more towards those who have less the Managing Director of the IMF Michel Camdessus discusses the 'national responsibility' of countries to ensure that their policy fundamentals are sound and work towards reducing the risk. Next, Camdessus stressed the need of getting the priorities right and correcting imbalances promptly to avoid a crisis from building up. He emphasizes the proper mix of monetary and fiscal policies along with structural reform, especially if the domestic policy makers are concerned about the vulnerable sections in the society which suffer the most in the wake of a crisis. Thirdly, he pleads that the countries should deal with private capital flows in a responsible manner by maintaining greater transparency in order to to retain investors' confidence. He advocates the need for international solidarity and development of 'club spirit' through which the neighbouring countries can encourage one another and also exert peer pressure for mutual surveillance. He also remarks that the advanced countries should bear the responsibility to help in the process of integration of the poorest countries into the global economy.

Regarding the much discussed issue of the IMF's response to crisis situations, he says the first task is to detect the financial tension as early as possible so that early corrective action can be taken. Secondly, he thinks the Fund can help to create conditions (with suitable amendments in the IMF article) for smooth functioning of markets. The Fund should try to create safeguards to ensure that the liberalization is neither premature nor delayed. Thirdly, the Fund should emphasis that all countries should be transparent about their economic performance by improving the dissemination of economic and financial data. Lastly and most importantly the Fund should work in close collaboration with the World Bank and United Nations institutions for promoting second generation reforms.

Key financial issues in capital flows to emerging markets are analysed by Ariel Buira who is a member of the Board of Governors of the Mexican Central Bank. He starts by analyzing domestic impact and international aspects of capital flows and their role in enhancing the welfare of the economy. He points out that countries that have experienced private capital flows (after a crisis) are countries that have had important structural transformation that have enhanced their absorptive capacities. He underscores the paradoxical situation wherein growth enhancing capital inflows require an accommodating current account deficit, which in turn make the country vulnerable to the reversal of such flows and consequent increase in volatility. He pleads that the national government and international community should be better equipped to manage such volatility. Relating the experience of the confidence crisis faced by Mexico in 1994 he blames the policies that fostered the build up of 'hot money' flows. Discussing the asymmetry between the investor and host country, he expresses the view that the shorter term flows may be discouraged and stresses the importance of immediate adjustment in the wake of increased financial integration that is subject to systemic risks. He stresses the need for measures to prevent the crisis situation from developing rather than measures to improve the

situation after the crisis has already occurred. Such support should be available to countries that adopt improved policies and corrective measures.

Linda Lim of the University of Michigan Business School analyzes the capital market liberalization and the role of capital flows in the process of development of the Southeast Asian countries. Examining the crisis of 1997, she mentions the pegged exchange rate, addiction to high growth rate on the part of government that took no corrective measures for overheating and the consequent ballooning current account deficit as the major causes of the crisis. She noted that although the susceptibility of the Thai bhat was evident as early 1995 after the crash of the Mexican peso it is surprising that the equity investors and international lenders did not withdraw earlier. Early corrective action by the government could have averted these problems. The policy implications of the crisis are that the countries should strive to maintain strong economic fundamental? She was of the view that capital markets can function efficiently only if there is adequate regulation, supervision of and disclosure by financial sector actors. The transparency in operation regarding the companies would reduce the uncertainty in capital markets. She cautioned that the remedy lies not in turning away from the world but in greater liberalisation which should follow measures for restructuring the weak financial sector and improving the public and financial management.

Arjun Sengupta, member of Planning Commission of India spells out the goals of the developing countries and international community as the promotion of social and economic development by attracting financial resources to developing countries and deploying them productively. The private capital flows are very dynamic and there are three issues that need to be addressed in this context. Firstly, the issue of how to attract private flows, the second involves the adjustment in monetary, fiscal and exchange rate policies of the recipient countries in order to absorb these flows and the third is the issue of sustaining the capital flows in face of exogenous unforeseen developments. He reviews the macro-economic and institutional elements that are essential for generating adequate returns from foreign capital. The returns on investment in infrastructure are not realizable even if marginal product of capital is high because of lack of other complementary services. Such investment was traditionally in the public sector and he illustrates how the private sector can be involved in its development. The author examines the Thai crisis to review the inter-action between the structural issues in trade and production with the financial fragility. He advocated the setting up of a contingency financing facility at the IMF that would be able to ward off the speculative attacks on currencies. The eligibility of such facility would be available to members whose policies are found to be strong at the time of the annual surveillance. One could, however, take the position that such an annual examination may be inadequate for gauging the country's commitment to maintain strong economic fundamentals. The author puts forth the idea of leveraging official development assistance with private external finance, which would be an appropriate way to finance low-income countries. The foreign aid would be to provide a capital subsidy to private foreign investors to make placement in developing countries. The design of the capital subsidy would aim at deriving maximum leverage out of each dollar of foreign aid. The end of the cold war has removed the political motivation behind foreign aid and new cost effectiveness of aid should become a crucial determinant of aid commitments, which is expected to bring greater aid to developing

countries. The article is well structured and offers practical solutions to problems like lower investment in infrastructure.

Gerald Helleiner considers the UN Conference as stating that this is potentially an important initiative. He is of the view that the current system of global government does not represent the developing countries adequately. Even viewed from the symbiotic point of view, the G-7 countries form a small and declining proportion of the world's population and their own economic and political security rests upon the events in the rest of the world. In governing the global economy, therefore, there is a compulsion that it must begin in the area of global finances where the risks are maximum and the payoff from improved arrangements the greatest. The author expresses the view that there is a need to reconstitute the IMF and the World Bank in order to represent the global membership more appropriately. However, this does not seem possible as he has remarked that he urged that the Second Committee of the United Nations General Assembly has little alternative but to take keen interest in the current state of multi-lateral government in monetary and fiscal matters particularly as they affect development. This Committee, he hopes, would consider possible avenues for broader progress in the sphere of global economic governance as they had debated the merits of the proposed co-finance on financing of development.

This collected volume makes useful reading and is relevant as it offers solutions to the global financial problems with a practical orientation of the policy maker. The issues discussed here are of interest to a broad audience and especially to developing countries. Although the papers in this volume are by 3 distinct streams, Economists, Institute officials and Ambassadors, through all these papers there a general consensus regarding the need for regulatory action and dissemination of information, relaxation of controls and proper sequencing of reforms. Some of the articles highlight the need for a contingency fund to bail out the country facing problems. Only one of them hints at the 'moral hazard' involved in it. The tone is to ensure international co-operation to reinforce market discipline by dissemination of data and by exerting peer pressure as suggested by Michel Camdessus. The institutional arrangements for developing a new International Financial Architecture with developing countries receiving their due weightage is hinted at.

Most of the articles do not discuss the limitations of International Co-ordination, since much of what is feasible remains to be accomplished. The issue of banking sector unsoundness that was an important ingredient of the South East Asia crisis has received attention in Arjun Sengupta's paper. Asset-Liability mismatches and over exposure to real estate of the Asian banks tipped the balance of the inherently fragile banking sector in Asia. In fact an unstable banking system can severely disrupt macro-economic performance of the industrial and developing countries alike. There has been widespread awareness of these problems, and concerted international action like the acceptance of the Basle core principles, for effective banking supervision to promote the soundness and stability of the banking systems. International co-ordination is not yet sufficiently developed to offset the differences in operating environment regulation and supervision procedures across jurisdictions. Consequently, a graded system of prudential norms should be worked out accounting for these differences that contribute to differences in country risks.

The next important imperative is to develop early warning signals for crisis prevention at micro and macro levels in the economy because

averting a crisis is better than managing a crisis; sustained efforts need to be made in order to devise workable early warning signals that will help the vulnerable countries steer clear of crisis by taking prompt corrective action. Only one of the authors touched upon this issue. On the whole, the Book has achieved its objective of facilitating better understanding of the whole gamut of issues that the crisis brought to the fore.

Nishita Raje*,
Reserve Bank of India,
Mumbai.

Cadene Philippe and Mark Holmstrom (Eds.); *Decentralized Production In India : Industrial Districts, Flexible Specialization, and Employment*, Sage Publications, New Delhi, 1998, Pp. 412, Price Rs 525/-.

Edited by two Professors, one from the Geography Department and the other from the Anthropology Department, the contributors of the Articles in this book come from varied backgrounds and specialisations in different disciplines. Its approach, consequently, is multi-disciplinary and not restricted to only an economic analysis. For instance, one of its findings is that economic relations between firms are embedded in social relations. A few studies on small firm clusters in LDCs report the presence of local social values and socio-cultural characteristics that impact directly upon inter-firm relations, or more generally influence the local industrial atmosphere.

The subject of forcing the pace of industrial growth in the developing countries has been high on the agenda of current economic discussion. After India launched its liberalisation programme, it has excited tremendous interest among the academicians and policy-makers all over the world and various paths for achieving a rapid growth have been suggested.

The book under discussion constitutes a significant contribution to the ongoing debate about the right path for future industrial development in India, and focuses on decentralised production, especially in small and medium firms and on employment opportunities in general. It has been written in the wider context of the international debate on newly emerging ideas about flexible specialisation, networks and industrial districts.

In the words of Mark Holmstrom, one of the editors, 'This book is intended to suggest answers to some questions about the direction of industrial growth in India generally, about the kinds of industrial development which appear to offer the best prospects, and about dead ends'.

The book first discusses the concept of decentralized production in industrialised and industrialising countries. This is followed by case studies of such clusters in different countries as well as of some of the Indian industrial districts which are in the making. It also brings out the politics of industrial districts. The case studies cover a wide canvas comprising traditional as well as new generation industries. In the end, it suggests the possibility of designing a new model for Indian industry.

Finding that some form of 'industrial districts' is emerging in many parts of the world, the book maintains that the old 'fordist' mass production model is now either gone or is on its way out. It is being replaced, in successful industrial economies, by flexible specialisation, decentralised production and less hierarchical management. In a sense, Marshall had used the same concept when he described a sort of

industrial district. In research on small-enterprise development in LDCs A deliberate focus on clustering is however, relatively recent. The empirical case studies of European industrial districts demonstrates that such clusters are a recent development and have prospered mainly in the 1970s and 1980s.

The authors describe these concepts, which are relatively new. 'The unit of analysis we focus upon is the cluster, defined as the geographical and sectoral concentration of firms. We tend to use the term cluster rather than industrial district because the definition of the latter has come to include attributes which in themselves must be subjected to empirical research. Geographical and sectoral concentration is the basic foundation of the industrial district model; other attributes such as inter-firm cooperation or a conducive social milieu may or may not arise'.

A broader, more inclusive term, 'networks', covers social, economic and moral relations which may be confined to a local area but tend to be more far-flung.

Flexible specialisation is a strategy of permanent innovation: accommodation to ceaseless change, rather than an effort to control it. The 'flexibly-specialised' large firm is like a federation of small firms, with centralised arrangements for marketing, research and development, and investment. Smaller firms achieve similar economies of scale through cooperation, dividing up the stages of manufacturing and marketing among themselves, sharing services and forming consortia: so the whole industrial district sometimes acts almost as a single large firm, with its own presence and reputation in the market.

The thrust of the analysis is on suggesting how clusters or efficient networks of small technically and economically interdependent firms can provide more jobs and help achieve economic growth. The authors claim that clustering opens up efficiency gains which individual producers can rarely attain. Further, the small and medium enterprises are vulnerable if they stand alone, and the new conditions created by liberalisation and globalisation are bound to make them even more vulnerable. Hence the importance of clustering.

The authors vividly bring out the close interdependence between industries of various levels - small, medium and large, and find that the district is at the same time the realm of the most lively competition, as well as the realm of cooperation, custom and informal institutions. So, the whole industrial district acts almost as a single large firm, with its own presence and reputation in the market. The network of social and economic relations within the industrial district gives the workers and their employers most of the advantages of a large firm, without many of its disadvantages.

The contributors of the articles feel that it is possible that efficient networks of technically and economically interdependent firms may be geographically dispersed, but they are more likely to develop when clustered in an *industrial district,* often around a city with special strengths in a range of complementary products. Their importance lies in the fact that they serve, not just the existing units but also induce a growth promoting climate in that region.

Large firms are broken down into smaller decision-making units, while networks of smaller firms, often but not always concentrated in industrial districts, achieve *collective efficiency* by working together.

Highlighting the role of the business associations, it is pointed out that small producers cannot spare the time, effort and money to lobby with the government. But through their associations, they can share the costs and benefits of collective representation.

Flexible specialisation in a large firm means, among other things, that decision making is decentralised, not just to the managers, but to workers who constantly discuss quality and innovation with managers informally, without hierarchical barriers to the free exchange of ideas.

According to the book, conditions now exist in parts of India for the emergence of industrial districts, with the potential to achieve at least some of the objectives such as industrial growth, high quality products, and creative well-paid work for many people. Already these clusters, which could loosely be termed as industrial districts, have a long history in places like Bangalore and Ludhiana.

The authors concede that just as clustering brings certain advantages, it is also not free from problems. Where clustering results in firms becoming highly interdependent on each other, the consequences of their vulnerability to external shocks can be acute and wide ranging. At the same time, while a more diversified local economy is less vulnerable to external shocks, it is also less likely to reap the efficiency gains which come with clustering. Clustering also raises the capacity to respond to crisis and opportunity.

Social relations can have also negative effects on a cluster's growth prospects, as in the case of foot-wear industry in Agra where the caste distinction between the traders and producers created social divisions.

There is a wide variety of inter-firm relations within clusters - vertical production relations between small firms; large-small firm production relations; producer-trader interrelations; horizontal cooperation. But their socio-cultural networks can change with time.

Most developing countries have embarked on changes in their economic policies and structures, which include easy imports, competition, privatisation, deregulated labour markets, etc. The problem is how to pick and choose the most relevant among these, and to adapt and combine policies in order to achieve certain objectives, in the conditions of a particular country, region or city.

The authors, on the basis of the case studies of similar clusters in other countries draw lessons and suggest a model of development for developing countries like India.

While the State has an important role to play in economic development, there are limitations on the State's capacity to produce a given result or growth.

The book devotes considerable space to the discussion of the small scale sector about which there prevail certain beliefs. This analysis should be of tremendous value to the Indian policy-makers, especially those connected with the SSI sector. Despite the claims about the SSI sector, its employment generation capacity, its effect in terms of decentralisation, and its importance in general, precious little is actually done for this sector. Government somehow seems to have persuaded itself that assistance to these units can be extended mainly through reservation of certain items for exclusive production in the small scale sector. An NCAER study has found out that even this benefit is availed of by a very small percentage of the SSI units.

There are other benefits which also hardly ever reach them. The description of the industrial districts would suggest that rather than a restrictive policy of protecting the sector (in effect, protecting employees therein), the policy should have a more positive content. Its focus should really be on 'promotion', not on just shielding it against the medium and large industries. No doubt, many small firms are innovative, make quality products at competitive prices, and teach useful skills to their workers. They have good potential, but the small scale policy militates against the small firms growing beyond the stipulated investment size, with certain harmful consequences.

They caution that the experience of other countries cannot be mechanically replicated. The different kinds of decentralisation need not go together, and can even pull in different directions. With authors drawn from different disciplines, the book suggests that the social, political, historical and cultural background of the different areas will influence the pattern of their industrial development.

The proposition put forward is certainly interesting; but one is not sure of its efficacy. The emphasis in the book seems to be on development of clusters primarily of small industries. However, if our experience of something similar attempted through the medium of large scale public sector units is any guide, it is not clear that even with such colossal investments, industrial growth in such areas has got any significant boost. Clusters of only small units would have even more limitations.

Although the authors have pointed out the limitations on government's ability to force the pace of development, the fact still remains that government has to play an active role. The only difference is that the nature of government intervention will have to be different - instead of its being an entrepreneur itself, its role will have to be that of a facilitator, promoter. This is more likely to succeed than efforts to promote industrial clusters, by whatever name you call it.

The concept of the public sector was informed with the same expectation, viz., that the large complexes will generate around them clusters of small scale units achieve a spread effect. That strategy did not really succeed. It is even less likely that the autonomous growth of small scale industrial clusters, built around some traditional product, will, on their own and automatically, lead to spreading industrialisation.

The book is in the nature of an exploration of a new approach by several researchers. They have only opened up new possibilities without making a firm prescription. No doubt, some of the ideas are still nebulous, but they could be firmed up after more research. Basically, the collection of articles is intended to be an invitation to continue the debate further. They expect the interest of researchers belonging to the economic field and further debate and research on this idea.

P.S. Palande,
Formerly of I.A.S.,
and retired Director,
National Insurance Academy, Pune.

Sathe S.P., *Administrative Law*, Sixth Edition, 1998, Butterworth, New Delhi, Pp. 555, Price Rs 695/-.

The Chief Constable of Brighton, England, had been tried and acquitted of a charge of criminal conspiracy to obstruct the course of justice by a judgement, in which, however, adverse comments of the Chief Constable's leadership in the police force had been made. The law allowed the authority to dismiss a member of

the force whom they thought to be 'negligent in the discharge of his duty' and the authority did this but without giving a hearing to the Chief Constable.

The order of dismissal was challenged and the case went up to the House of Lords which held that the dismissal was illegal in as much as the Chief Constable had not been given a hearing. Failure to give an opportunity of being heard in the first instance is not curable by offering an opportunity at the appellate stage. This was the famous case of *Ridge* vs *Baldwin,* 1964, A.C. 40. The judgement was delivered by Lord Reid who, as pointed out by Sir William Wade (*Public Law in Britain and India,* Tripathi, 1992, p. 43), gave impetus to the renaissance of administrative law.

The importance of *Ridge* vs *Baldwin* cannot be overestimated. This case, S.P. Sathe rightly points out in his classic *Administrative Law,* 'stands as a watershed between judicial restraint of the post Second World War years when courts showed maximum deference towards the decisions of the executive and the period of judicial activism, which commenced thereafter and is still continuing' (p. 126).

Normally the judges do not, publicly at any rate, talk of their judgements. On one rare occasion Lord Reid has publicly stated that *Ridge* vs *Baldwin,* of all his many decisions, was remembered by him with the greatest satisfaction. Lord Diplock, in 1982, described *Ridge* vs *Baldwin* as the greatest achievement of the English courts in his life time.

Prior to *Ridge* vs *Baldwin*, the judges were reluctant to countenance the arguments based upon the right to be heard in challenges to administrative action. There were scores of decisions, both in England and India, trying to distinguish between judicial, quasi-judicial and administrative functions. After 1964, however, the distinction became less relevant in view of the high pedestal on which rules of natural justice were placed.

This is not to suggest that the different faces of administrative action have become blurred or have become irrelevant. This is the reason why Sathe has devoted an entire chapter (Chapter 4) of over 40 pages to 'Classification of Administrative Action'. The discussion is in sufficient details and Sathe is not satisfied with merely enumerating the principles. Theory must be illustrated with facts as indeed facts must be illustrated with theory.

This twin exercise has been attempted in the chapter on the classification of administrative action. It is not enough to say that when a party's right is affected by an administrative action, that action must be regarded as judicial or quasi-judicial. Rules of natural justice are not fixed, immutable rules to be applied rigidly or in a uniform manner. Application of rules of natural justice becomes in several situations a matter of art rather than of science. This has been well brought out, albeit less elaborately in the reviewer's view, in the latter part of Chapter 4. Cases arising out of proceedings as diverse as issue of caste certificates, concession in tariffs, impeachment, and preventive detention have been discussed.

That a person should not be a judge in his own case and that a party likely to be affected by any action must be heard are the twin principles of administrative justice. These fundamental principles constituting the core of fair hearing have several ramifications in practice. Collecting, collating and the classifying principles that emerge in practice as well as from the plethora of case-law is a lawyer's night-mare whether the lawyer is an advocate, judge, or an academic.

Sathe's first book on administrative law came out in 1970. Subsequent editions have appeared regularly and the book under review is the sixth edition and the expected uptodateness at the hands of a scholar of Sathe's standing is there.

Whenever administrative law is mentioned, the first thing that leaps to mind is natural justice. Is it fair? This change in the expectation has been brought about by *Ridge* vs *Baldwin.* Prior to that decision law about procedural fairness was in a nebulous, if not in a chaotic, state. That decision came at a time when vast expansion of governmental power and consequently more intervention and regulation by the government started taking place. The government was in effect told that people may some times endure a harsh governmental decision if it is fairly administered but procedural injustice would not be tolerated.

Returning to the practical application of the rules of natural justice, it should be mentioned that this topic has been dealt with in Chapter 5 under the heading: 'Fair Hearing and Rules of Natural Justice'. One could theoretically discuss natural justice as the 'Gangotri' from which various rules of fairness flow. As I mentioned earlier Sathe has preferred the method of illustrating the theory with facts. Different principles such as interest or bias, audi alteram partem, duty to give reasons have been dealt with separately though contextually.

What is the effect of the violation of rules of natural justice? *Ridge* vs *Baldwin* laid down that a decision taken without hearing the party likely to be affected is invalid. The legal position is not as straight forward as this and Sathe has discussed this question elaborately (Pp. 209-215) with obvious benefit to the reader. The author concludes: 'It is, therefore, quite clear that 'void' 'voidable' dichotomy is needless and need not be imported into administrative law. Every administrative action is in a sense voidable because it is valid until it is struck down by court' (p. 215). Is there a code of rules of natural justice? Are rules of natural justice known today exhaustive or complete? The author's answer is very refreshing. 'The rules of natural justice are open-textured and they are bound to acquire new dimensions as well as new meanings as the vistas of the due process of law and human rights widen' (p. 215).

I am tempted to digress a little. One rule of natural justice is that no authority, while taking a decision, can rely upon information, whether oral or documentary, without disclosing the same in advance to the party likely to be affected. This is not strictly 'right to information' about which discussion has been taking place and on which Sathe has written a book earlier. That a party is entitled to know the material to be used against him is such an elementary rule of natural justice that it does not require elaborate discussion. Sathe has dealt with this (Pp. 196-97).

It is being suggested elsewhere that right to information is a fundamental right which can be spelt out from the right to freedom of speech and expression. This proposition is of doubtful validity. Then, with probably no dissent, it may be suggested that right to information *should be made* a fundamental right. It should be regarded as axiomatic that administrative action should be taken on the basis of proper material which if given to others becomes information. In a court of law, if privilege is claimed in respect of a document, the court insists upon knowing whether there are valid reasons for withholding the documents from the courts, whether injustice will not result by such withholding and whether justice will not be furthered by the disclosure of the documents. Ends of justice - that is the test in judicial proceedings.

Is it not indisputable that the end object of all administrative action is public good? Every power conferred upon a public authority is conferred on the condition that it will be used for public good and in public interest. Quite often it becomes necessary to know the material and the reasons which form the basis of a decision. Shelter is regularly taken behind the need for confidentiality and discretionary power. In the first place, the need for confidentiality cannot be justified without taking into account the need to do justice. Secondly, discretionary power cannot be unlimited. 'If government departments are given a blank cheque, the day will certainly come when they will overdraw' (Prof. Sir William Wade, op. cit., p. 33).

I would advance at least three strong reasons for establishing right to information as a statutory right.

In the first place, the activities of the government have become so numerous that a reasonable check on their correctness ought to be kept. Moreover, the possibility of public scrutiny of administrative action leads to decisions better informed and so better in quality. It is in the interests of the executive itself that the information should be shared with the public.

Secondly, nowadays the level of parliamentary debate is not of the requisite standard. Formerly there were members of the Parliament who, on the basis of information they got and the study they made, examined and exposed in the Parliament the weaknesses, the failures, and the incompetence of the ministers and their mandarins. Today this task has to be performed and can be performed by vigilant citizens who cannot fight elections and get into the Parliament.

Thirdly, the whole state is neck-deep in scams of various types and dimensions. The secretive nature of the governmental activities facilitates large-scale corruption. The possibility of vigilant citizens and groups asking for information and the compulsion to part with information would act as some deterrent.

Though all this is not a part of administrative *law*, Sathe has discussed this subject in Chapter 9 under the heading: 'Suits Against the Administration: State Liability'. This Chapter and Chapter 10, 'Public Enterprises', deal with subjects which traditionally have not formed a part administrative law.

Returning to the right to information, Sathe has discussed the present position on the subject (p. 502 et seq) in India and the USA. The need for a comprehensive law on the subject has been recognised and valuable suggestions on what that law should contain have been made.

It is well-known that the governments do perform legislative functions (as they perform quasi-judicial functions). These functions have been examined. The legislative functions are, however, performed in exercise of power delegated to the government. Naturally, delegated power has to be exercised within limits. Control of delegated legislation is vital. These two interconnected topics have been dealt with in great detail in Chapters 2 and 3.

Discussion of judicial control of administrative action is mandatory in any book on administrative law. What distinguishes Sathe's treatment of the subject is the separation of administrative action and administrative discretion. The two areas overlap to some extent and one passes into the other over a thin line of

distinction. Nevertheless, in my view, a distinct and detailed treatment of administrative discretion is not only desirable but is necessary.

Abuses of power in the name of discretion on a large scale take place and it is often difficult to detect such abuses. How is one to determine the extent of proper discretion in various fields, such as acceptance of tenders, appointments, bestowal of grants? One has to determine this not only on the basis of the nature of the action to be taken but also the purpose of that action. The powers that are conferred by the Parliament on public authorities are conferred as if it were on trust that the powers will be utilised for public benefit. The concept of unfettered discretion is foreign to rule of law. The inclusion of a long Chapter of nearly 60 pages on judicial review of administrative discretion is fully justified.

Returning to the earlier chapter - Chapter 9, on judicial review of administrative action, it is noticed that in this chapter are included the description of the constitution, powers and functions of several tribunals. This has been done in the latter part of the chapter after the treatment of judicial review. This appears somewhat incongruent. A reader will find it more natural to glide into the discussion of judicial review after first learning about the tribunals and administrative bodies. A separate chapter on the latter after the chapter on rules of nature would be appropriate.

It has been said, somewhat unkindly, that judicial review has become a thriving industry - public interest litigation more so. Sathe has extensively written on these subject elsewhere. However, inclusion of these subjects in a book on administrative law of India - which this is - is inevitable. It is essentially meant for those - including non-Indians - who want to know about administrative law in India and through this book they will know it abundantly. The book by a scholar of Sathe's eminence does not require a reviewer's recommendation.

R.A. Jahagirdar,
Retired Judge,
Bombay High Court,
Mumbai.

Pathak Bindeshwar (Ed.), *Rural Violence in Bihar*, Concept Publishing Co., New Delhi, 1993, Pp. 151, Price Rs 180/-.

Bindeshwar Pathak, a sociologist and a noted social reformer from Bihar, has in this small book presented a study of the rural violence in Bihar in the hope that it will provide a clear understanding and fresh insight into that phenomenon.

The first 25 pages of the book go towards a preface, an introduction giving some information about Bihar's past and a delineation of the problem. The last 35 pages go towards various tables depicting the educational and economic conditions of the various castes on a national and regional basis and a topic-index. The rest of the book is devoted to the description and analysis of 27 cases of serious violence (listed in Annexure 2) which occurred in Bihar between the years 1977 to 1992. The incidents have been grouped into 6 categories, each category being considered under a separate chapter. Material for this study has been obtained by interviewing people and by culling out information from different reports, periodicals, magazines, etc. (p. 5).

Caste wars have continued in all their ferocity in Bihar and recently there was a move to dismiss the state government for its failure to maintain law and order. The subject of violence in Bihar is thus very alive and Pathak's book is welcome for giving us an insight into the causes of this violence. Though Pathak has split up the incidents

into six categories, they all form part of one continuum. The picture which emerges from Pathak's study is that in Bihar 'the ideal-typical convergence of caste, class and power is still intact' (p. 63), feudalism 'still governs the relationship between the landed and the landless' (p. 70), the 'ascendance of the middle range castes in the wake of programmes for agricultural development and political mobilisation have led them to challenge the multi-stranded dominance of the upper castes, (Pp. 22-23), and lastly that both the upper castes and the middle castes were furious at the lower castes, who are largely tillers of the land and are claiming their just share of development in the shape of better wages (p. 26).

The problem thus seems to be three dimensional. Firstly, development of agriculture through green revolution does not by itself change the traditional agricultural character and feudal relations of the rural society, it does nothing to break the traditional convergence of caste and occupation and therefore entrenches the caste identities of the people. Secondly, traditional societies being 'holistic' rather than 'individualistic', an economic conflict turns out to be a conflict between communities rather than between individuals. Thirdly, armies are organised on both sides as if they are totally different entities rather than part of the same society. Cruelty on such a vast scale as witnessed in Bihar must be the result of a total alienation of one group from another. Communal riots at the time of partition were no less cruel. Neither was the anti-Sikh pogrom in 1984 any less cruel.

While summing up the study, Pathak has emphasised the need to get land reforms implemented in the right spirit, to ensure that the minimum wages are actually paid, the land which has been settled in favour of the Harijans is actually put into their possession, a network of small industries is created to provide employment to the youth and to organise peace camps and constructive activities through voluntary agencies. He has also emphasised the need to improve the road and communication network to facilitate the maintenance of law and order.

These are very valid suggestions. The most important one seems to be to create small industries, which will attract people from various castes and break the segregation of each caste-cum-occupation group from another. So long as agriculture is the only occupation, land is the only asset. If the economy is diversified, there will be other assets which individuals can build up. The diversification of the economy will also create a system, something which cannot be captured as land can, and will need the cooperation of several people engaged in several trades. Organising peace camps by voluntary agencies and maintenance of law and order by the state are also important but they can only be looked as supplements the diversification of the economy.

However, as Kumudini Dandekar has observed in this Journal (Vol. 11, No. 1, p. 212) 'the question of how far it is possible to start manufacturing ventures in rural areas is not easy to answer ... Attempts have been made but with no success'. Thus, the circumstances in which the various caste-cum-occupation groups in villages remain segregated and totally alienated from one other are not easy to change in a backward state, like Bihar. With the upsurge of backward classes towards securing social justice, violence unfortunately appears to remain a fixed feature of the Bihar social situation for a long time to come.

B.P. Patankar.

Pathak Bindeshwar (Ed), *Continuity and Change in Indian Society,* Concept Publishing Co., New Delhi, 1998, Pp. 390, Price Rs 500/-.

This is a collection of 26 articles on various aspects of the continuity and change in Indian society during the last two centuries in general and the post-independence period in particular. Indian society has been undergoing change under the impact of colonial exploitation, change-over to the capitalistic mode of production, the struggle for independence and the concerted efforts to change it into a modern, egalitarian, secular society. The book seeks to add to the available literature on the theme of continuity and change in order to provide understanding of the factors either facilitating or opposing change (p. 13). The unspoken axiom underlying all the articles in the book is of course that a change towards modernisation and towards an egalitarian society is necessary.

These articles can be classified into three groups: (i) those that are purely theoretical or methodological articles, with very little discussion of the Indian situation, (ii) those that deal with relatively small topics, and (iii) those which deal with wider topics, having a more important bearing on the issues of modernisation and progress.

Thus, Satyendra Tripathi's article is a purely theoretical one on the concept of Social Indicators designed to measure the quality and direction of social change. He recognises that these indicators are not very dependable for assessing policies and programmes (p. 42).

S.N. Chaudhary's article is also a purely theoretical one on the issues involved in the study of community power structure in village India (p. 146). He has discussed the models of power structure developed abroad and two models developed in India - the dominant caste model and the rich peasant model. He is not satisfied with these two models and calls for either an integration between them or a search for an alternative paradigm (p. 161).

Yet another theoretical article is R.R. Singh's, on the types of research and field study. He has also done an assessment of one research project.

Then we have the following articles on relatively small topics: Hetukar Jha traces the caste-based movements in Bihar since the late nineteenth century. Shyam Lal has written about the phenomenon observed in Rajasthan, of upper caste people going in for conversion to lower castes. Valunjkar has written about the first dalit leaders of Maharashtra who lived almost a century ago and the caste structure in Maharashtra at that time. A.C. Sinha has written about the need for making a fuller sociological study of the societies inhabiting the Himalayan regions. Makhan Jha has written about the life of the Muslim tribes of Lakshadweep. S.P. Srivastava has written about the Sulabh Movement (the founder of which, is the editor of this book), which seeks to popularise cheap, environment-friendly toilets, so that the practice of manual removal of human excreta by scavengers is abolished. A.K. Lal has presented a study of the slums of Patna city. K.K. Verma has assessed the existing delivery system of health care in a tribal area of Bihar and argues for giving more scope to the traditional medicine of the tribals.

We then come to slightly wider topics. Here we find some authors recognising that a lot of desirable change has come over Indian society and other authors feeling the opposite. Thus S.L. Sharma recognises that India has modernised herself under the dynamic leadership of Nehru, Indira Gandhi and Rajiv Gandhi (p. 77). Yogendra Singh also says that 'there is much to be

counted', like new social structures and systems of authority, technological, scientific and managerial growth, commitment to democracy, etc. (Pp. 93-94). S.K. Srivastava, however, laments that though the Constitution of India shows a good amalgam of the old and new in thought and ideals, there have been 'aberrations and anomalies', which have made the people 'completely disillusioned and frustrated' (Pp. 67-68). Vijay Kumar begins his article with a strong indictment of the existing development set up, it having been hijacked by contractors, businessmen and corrupt politicians. He puts his hope in mass movements which he sees already arising in the country (p. 133). Archana Sinha dwells on the inadequacy of the presently developed socio-political structures, like communism and democracy, in securing the good of the common man and says, 'The ....performance of democracy in India has been sombre, and in some respects diabolical' (p. 168). She, however, feels that the quest for an alternative has begun in the form of the Sarvodaya Movement of Jayprakash Narayan and the moral re-armament movement of Frank Buchman.

We now come to the articles with a wider perspective and deeper analysis.

M.N. Srinivas talks mainly about work ethics. He finds that as a part of cultural heritage, agriculture does not lack in work ethics nor does the urban family life, whereas, in the urban public space, there is no such cultural heritage, and work ethics is lacking. He also observes that trade unions, while asking for more wages, do not exhort their flock to do a fair day's work (p. 18).

S.L. Sharma first defines modernisation as a process of socio-cultural transformation generated and marked by (i) technological progression, (ii) institutional innovation, (iii) rational value reorientation, and (iv) psychic and physical mobilisation of the people driven by heightened aspirations (p. 72). He then finds that the process of modernisation in India has proceeded under two main phases: colonial and post-independence, with sub-phases under each. He says that while modernisation progressed in the west 'from within' as a 'culmination of a series of cumulative historical sequences' and with resources exploited from the colonies (p. 78), in India the progress of modernisation was difficult because, 'it had no roots in our socio-historical tradition' and had, unlike in the West, no resources. Her resources having been exploited by the British, she had to borrow for her own development and risk 'falling a victim to the debt trap'. As a consequence, says Sharma, 'society in India is still reeling under the weight of unresolved structural contradictions and cultural tensions' (Pp. 78-79).

As for the modernisation which has already taken place, Sharma has posed the question: 'is it a case of adaptive transformation of Indian tradition or of identity assertive resilience?' (p. 70). His own answer to the question is that India has not passively accepted the institutions and mores of modernity but has bent them to suit her own tradition so that ultimately real modernisation has not taken place. Thus, our caste structure, while losing its ritual aspects, is growing strong in its associational aspects, affecting the democratic institutions. Similar is the case with kinship ties, which continue to spread into modern institutions like business houses, political parties, professional groups and even educational institutions and universities. Even the western concept of secularism has changed in the Indian context (Pp. 81-83).

There is a good deal of substance in what Sharma says, but it is perhaps only natural for a large and ancient civilization like India to take the path of what Sharma has termed as identity-assertive resilience.

Yogendra Singh, while acknowledging, as stated above, that there has been much progress, finds India in a crisis which is manifested in the persistence of poverty and the growth of class-caste-ethnic tensions which are sought to be resolved through violence (Pp. 95-96). He finds the roots of this crisis in the unbalanced development of rural India, where only the middle castes have prospered through agrarian reforms and left the dalits, tribals, etc., in a sullen mood, leading to violent movements on the one hand and, on the other, transfer of these tensions to urban areas through migration. Says Yogendra Singh, 'The crisis is that villages have not been able to evolve the new institutional framework through which the changing relationships could be integrated. The villages in India have ceased to be social communities that they once were. They have been transformed into political communities, but without an institutional set-up whose legitimacy all groups could recognise' (p. 97). Control of population is perceived as the 'key to most problems', which we have not been able to manage because of our 'monumental failure' in eradicating illiteracy (p. 98).

Yogendra Singh has further analysed the delegitimation of state-sponsored institutions in this atmosphere and even a disenchantment with the ideology of nation-state and the model of development, each segment of the people seeing something in that model working to its disadvantage (Pp. 97-98). He finds that this has led to a sharp decline in the values of social responsibility, an unprincipled go-getter utilitarianism, misuse of political connections, corrupt appropriation of public resources and 'has deeply affected the work ethic in our society'. Communal thinking has also grown out of this situation (p. 102).

As regards economic policies, Yogendra Singh recognises that the extension of the state into trade and industry, beyond a point, breeds inefficiency and corruption; but he also argues that an unchecked market economy wouldn't do and that Indian conditions call for an emphasis on equality and social justice for the weaker sections of the society (p. 105).

Rajani Kothari sees two different mobilisations in the Indian society. One is that of Hindutva, which is 'throwing the political system that was designed to be multi-centred, multi-ethnic and multi-caste out of gear'. The other mobilisation is that of the deprived sections of the Indian society, who, having been disappointed with the Indian state, have mobilised themselves around caste, sub-caste, tribe ethno-regional and such other identities (p. 106). He generally welcomes the latter type of mobilisation, since, with all its drawbacks, it can, 'under certain circumstances, prove to be secular..... (and be) able to counter communal parties and ideologies' (p. 107). He recognises that the Dalit movement has also its dangers - it can be brutalised and result in the 'dalitisation of the entire social terrain below the privileged upper castes' (p. 109), it is based on demands for jobs, it is internally divided (Pp. 111-112) and, moreover, it is liable to be weakened by the cooption of its leaders (p. 115). But it is here, Kothari says, that the 'sensitive and committed people in castes and classes occupying the middle spaces in the country' can help the Dalit movement in emerging as a movement for genuine emancipation (p. 117).

J. Narayan writes about communal antagonism and riots. His finding is that Hindu-Muslim antagonism has been there since the pre-British period, that the British exploited the communal differences through organisation of the army on sectarian lines, separate electorates, etc., and that

in the post-independence period, the constitutional provisions made for the protection of minorities are being misused, provoking a majority intolerance, a situation which the politicians are exploiting for their own purposes. Narayan wants us to fight both, the minority communalism as well as the majority communalism.

A.R. Desai's essay is on 'sociology of the under-privileged' (p. 178). He has classified the underprivileged in 5 categories and then described the 'upsurge' which has occurred in each class of the underprivileged. He regrets that sociologists have not paid enough attention to the study of these phenomena. He wants sociologists to study these phenomena not by the 'path demanded by the rulers' (p. 186) but by the 'risky' path of 'conscientizing approach..... a humane respectful approach' towards these underprivileged classes.

While it is true that India's development strategy has benefited largely the propertied and the empowered classes, there is no evidence to suggest that the rulers have demanded the sociologists to adopt any particular approach or that the rulers are putting the sociologists to any 'risks' if the latter express any dissent. The trouble is that sociologists have not been able to put up a concrete model for an alternative strategy of development.

A.K. Lal has surveyed the position of land reforms and of the landless in Bihar. He has vividly narrated how the land laws, in themselves well designed, were sabotaged by the landowners with the connivance of the state machinery. He has also vividly described the indignities and privations suffered by the rural poor, especially the women folk.

Lal has brought up the question of distribution of land among the landless. It is not clear how much land is available for redistribution as of today. With about one million heirs being born in rural India every year, large holdings have already broken up. It is impossible to provide land to new entrants to the population. They will have to shift to other occupations. What can be done for those continuing to work on land is to reform and regulate agrarian relations. But regulating agrarian reforms and opening avenues of employment outside agriculture will be successful when people become literate, acquire occupational skills and become able to organise themselves for collective and cooperative action. The state singly cannot solve the problem.

P.C. Pathak, writing about the Scheduled Castes of Bihar, gives the history of the enumeration of these castes, to total population of each, the occupations pursued by various castes, etc. He has also extracted from the census reports of 1981 information showing that all castes are largely clinging to their traditional occupations. This information is almost two decades old. Employment opportunities have diversified considerably during this period. Further study would therefore be necessary to ascertain the present position of the occupational mobility of these people.

R.P. Sinha's article is entitled 'light at the tunnel's end'. What he means is that for the rural poor, the light is at the *far end* of the tunnel - a tunnel which has yet to be crossed. Sinha argues that though social justice has been a policy objective of the government, the institutional arrangements within the bureaucratic fabric and the system of social interaction are such that they facilitate usurpation of development gains by people in higher status (Pp. 303-304). He has put forward a hypothesis that 'policy constraints' also

result in a skewed distribution of 'rewards'. The article does not clarify what these policy constraints are.

Rajeshwar Prasad has dealt with the effects of contemporary changes on family support structures in traditional societies. He has noted that the institution of family has suffered a lot in the developed countries whether capitalist or socialist or simply welfarist, and is in danger in traditional societies also. The writer recognises that the pre-industrialisation character of the family cannot be restored and that there is therefore a need for an alternative support mechanism for the individual. He has not put forward any ideas as to what such a mechanism could be like.

A.K. Sinha deals with the co-relation between social alienation and job satisfaction. He first analyses the concept of alienation and settles on the definition that it is a state of mind resulting from normlessness, powerlessness and isolation in relation to society at large. He argues with the support of some evidence that social alienation and job satisfaction are negatively related, i.e., a more alienated individual is likely to be a more dissatisfied worker. He has not examined how this hypothesis has worked in Indian conditions and what needs to to done to improve our work ethics.

All in all, the book presents us with a wide spectrum of perceptions about the changes that have come about or failed to come about in India. The book set out to provide understanding of the factors either facilitating or opposing change. The factors obstructing change have been well identified; but what can facilitate change has not been well brought out. Vijay Kumar puts his hope in mass movements, Archana Sinha in the Sarvodaya movement, Kothari wants the sensitive and committed people among the dalits to give the dalit movement a proper orientation, J. Narayan calls for a fight against communalism of the minorities as well as majorities, Desai wants sociologists to undertake research on the right lines, etc. Most of the authors have been content to describe the prevailing situation and constructing a theoretical model for its description. Change can come from mass movements or through NGOs. It can come through the efforts of intellectuals, not only the dalit intellectuals alluded to by Kothari, but by intellectuals in general. Change also comes through mass media. But changes would come faster if the biggest social organisation, namely the state, is recognised as an instrument of change and a climate created for acting in partnership with it. Emphasis needs to be given to a partnership between the state, the intelligentsia, activist organisations and the mass media.

B.P. Patankar,
3-4-208, Kachiguda,
Hyderabad 500 027.

Salvi, Gouri, *Development Retold: Voices From the Field*. Concept Publishing Company, New Delhi, 1999, Pp. xxi+167, Rs 275/-.

This is the story of the Indian Cooperative Union (ICU) of Delhi, told by 18 persons who were associated with the various activities of the Union for nearly two decades from its beginning, which was also the beginning of India's independence. While the story of the ICU has been written separately in another book, this book contains the perception of its activists in retrospect. The picture that emerges has three different aspects to it. The first relates to the formation of a voluntary organisation at the dawn of independence: how it was formed and what type of people manned it. For, while the expression 'co-operative' occurs in its name, it was essentially a voluntary organisation (these days called NGO, following the American or the World Bank style, though the earlier nomenclature 'voluntary

organisation' is more appropriate), working as a catalyst in the organisation and initial management of two very notable co-operative organisations in Delhi. The second relates to the participants' perception of the role of such voluntary agencies in promoting co-operatives of farmers, artisans and consumers. And, the third relates to the role of the state in the running of a co-operative, a role which became not only significant but also dominant from the middle of the 1950s, thereby distinguishing the Indian co-operatives from the traditional co-operatives the world over, a role which is now sought to be undone - a difficult task in view of the vested interests and the ossified habit structure in this regard all-round.

The men and women who joined the ICU were mostly ordinary mortals, not seeking a job in a foreign financed NGO, not go-getters trying to gather moss in a newly urbanising and globalising economy; indeed, such ideas as well as expressions were not current in those days. Of course, there were a few like Fori Nehru and Kitty Siva Rao or even the young Devaki (later Devaki Jain) who came from privileged families, wanting to do something socially useful. Many of them were from refugee families with school or college education, at loose ends like most of their fellow beings. The ideas and ideals slowly developed from their work and association in the refugee camps and related organisations. By the time things were acquiring some stability and shape, their values had been formed under the leadership of Kamaladevi Chattopadhyaya. Indeed, she was the founder and the moving spirit of this institution. One of the stalwarts of the independence and the socialist movements in India, an unflinching and uncompromising fighter for her values - hers was the lone hand raised against the resolution on partition in the AICC - Kamaladevi founded, led and nurtured the Indian Co-operative Union till her end. The memoirs in this little book are in a sense a tribute to her leadership and the idea and ideals she helped these men and women acquire in course of their work.

These memoirs tell the reader about the evolution of the farmers' co-operative in Faridabad, the Cottage Industries Emporium (which at one time became somewhat like a tourist centre !), and the Apna Bazar, as experienced by the young men and women who ran these in the early years. The story of the farmers' co-operative in Faridabad is both interesting and instructive. The landless refugees were to be organised to work on agricultural land abandoned by the migrated Muslim families. But it suddenly became clear that most of the land had been given over to the large Hindu/Sikh landlords from the other side, as per the law relating to such resettlement. They were often big officers of the Government of India. Jawaharlal Nehru's visit to the camp and his learning about it resulted in Sardar Patel changing the law and the distribution of land. The voluntary workers started with the idea of co-operative joint farming. But it soon became clear to them that this can not be sustained. They learnt, and the co-operative became a service co-operative.

The Cottage Industries Emporium, in which most of the persons interviewed had worked, was a challenge and an opportunity to help the artisans of India, in far flung places. The young men and women learnt not only the business of collecting and marketing the products of the artisans, but also, in the process, came to see first hand the conditions in which they worked, the pittance they were receiving and their ability to produce different designs learnt from the feedback from the market through these workers. The ICU appears to have functioned as if it was running the artisans' co-operative. But gradually, the situation changed. The other workers in the Emporium began to organise as trade union, under powerful political leadership, demanding wages

comparable to those earned by similar persons in private establishments in the Connaught Place. The ICU's offer to the Union to take over the Emporium and manage it as their own co-operative, was declined: against whom will they struggle for higher wages, they sneered. The ICU learnt another lesson.

The story is the same in case of Apna Bazar. It was a consumers' shop, buying directly from the producers, and selling with a lesser margin, thereby setting the prices for many commodities in the Delhi area, But, that was not to be.

The Apna Bazar and the Emporium were co-operatives, only operated by the ICU on behalf of the state which had a major financial stake in them. The Indian model of the co-operative, in which the state is a major partner, and as such the co-operative is designed as a middle form of economic organisation between private and state enterprise, began showing its real teeth. Instead of the management being gradually handed over to producers or consumers, the state began nominating directors, managers and even contractors. The ICU slowly withdrew. The now not-so-young men and women activists of the ICU learnt another lesson: activist after activist states that if co-operatives are to survive and be given a chance to succeed, they should be managed by the users - producers or consumers, and the state should have no role. It is pointless to bemoan the politicisation of the co-operatives; sooner or later, sooner than later one who pays the piper will call the tune.

Can institutions like the ICU still play a useful role? Yes and No. As L. C. Jain, the young man who became Kamaladevi's most valued associate in this endeavour, says in his recollections in the book, if a similar situation arises, he and such institutions can play a role, but the role will depend on the circumstances and the community in question. But, catalytic institutions, like the ICU, are not meant to be and should not be, rooted. They are transitory ones, to help the needy and then disappear. The main lesson is, they can and should help only the needy, not the state as its agent.

The recollections are personal, and unavoidably tell sometimes the same things. But being personal, they make interesting reading. In order to get the spirit of it all, the reader should read all the pieces, not only the longest one by L. C. Jain. The total impression created is worthwhile for co-operators, voluntary workers as well as the policy makers.

Nilakantha Rath,
Hon. Fellow,
Indian School of
Political Economy,
Pune.

Ganguly, Rajat, *Kin State Intervention in Ethnic Conflicts*, Sage Publications India Private Ltd., New Delhi, 1998, Pp. 266, Price Rs 350/- (cloth).

Indian leaders, even before India became independent, had consistently rejected the theory that a territorial nation state must always he based on ethnicity, language and religion. Such thinking was, in fact, well in advance of western ideas on national entities. Unfortunately the old ideas on nationality persist in the minds of a very large number of people all over the world. The modern concept is that national identity can only be built on an affirmation of the basic values of a free society as enshrined in the UN Charter with particular reference to Human Rights, mid that it should be firmly established as part of the emerging world order. This, one is proud to say, has been the most prominent part of Indian political thinking.

The root cause of almost all past and present conflicts and wars was and is that the differences arising between two ethnic groups could not be bridged. The differences usually span a very broad and wide spectrum. But, ultimately, it all boils down to just one fact namely that two groups accuse each other of limiting the freedom of the other. The involved parties rationalize their actions in terms of political, economic, religion or territorial considerations.

The conflicts that have taken place in South Asia are not unique. Similar conflicts have taken place in the past in other parts of the world and are also taking place there even to-day.

Rajat Ganguly's slim volume on 'Kin State Intervention in Ethnic Conflict' is a very useful study of the ethnic conflicts that have taken place in South Asia since 1947. From the copious foot notes and the select bibliography it is clear that numerous studies have been carried out on the subject of ethnic conflicts. Ganguly's study is a welcome addition to those, Studies as he has focussed his book on only South Asia.

The book comprises seven chapters. The opening chapter provides the frame work for analysing the causes which have led to the conflicts. The following five chapters deal with the etiology of the secessionist movements in Kashmir, erstwhile East Pakistan, Baluchistan, Pakhtunistan and the Eelam movement in Sri Lanka. These chapters give a valuable summary, an objective one from the author's point of view, of the manner in which the conflicts in these sensitive areas had developed and the role that has been played by the neighboring countries, or kin states as Ganguly prefers to refer to them. The problems of Baluchistan Pakhtunistan and East Bengal have been settled with the passage of time. But the problems of Kashmir and Eelam continue to be very live issues and costly ones in terms of human casualties, violation of human rights, and wasteful expenditure on armaments.

Rajat Ganguly has refrained from offerring any solutions but his concluding chapter sums up his findings admirably and states the lessons learnt from the last fifty years of conflict. It is most readable.

The book is well edited and fully worth the price. There is an unfortunate gaffe on page 184 when the author asserts that Pakistan helped the Chinese to build the road in Aksai Chin.

R.D. Sathe,
Former Foreign Secretary
to the Government of India,
Koregaon Park,
Pune - 411 001.

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