FOREIGN DIRECT INVESTMENT IN INDIA: A SPATIAL AND SECTORAL ANALYSIS

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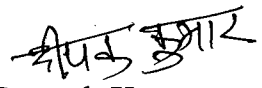for the award of the degree of

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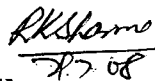JAWAHARLAL NEHRU UNIVERSITY
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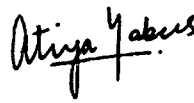### New Delhi - 110067

Certificate

I, Deepak Kumar hereby certify that the dissertation entitled "**FOREIGN DIRECT INVESTMENT IN INDIA: A SPATIAL AND SECTORAL ANALYSIS**" submitted by me in partial fulfillment of the requirement for award of the degree of Master of Philosophy of Jawaharlal Nehru University is my bonafide work and may be placed before the examiners for evaluation. The dissertation has not been submitted for any other degree of this university or other university.

Deepak Kumar

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Deepak Kumar

Content

Abbreviations

FDI - Foreign Direct Investment

FIPB - Foreign Investment Promotion Boards

NEP - New Economic Policy

RBI - Reserve Bank of India

GOI - Government of India

FIB - Foreign Investment Board

FERA - Foreign Exchange Regulation Act

EPZ - Export Processing Zone

SEZs - Special Economic Zone

DIPP - Department of Industrial Policy and Promotion

SIA – Secretariat for Industrial Assistance

FIIA – Foreign Investment Implementation Authority

CCFI – Cabinet Committee on Foreign Investment

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Chapter I

Introduction

Across the world, developing countries, emerging economies and countries in transition have increasingly come to see Foreign Direct Investment (FDI) as a source of economic development and modernisation, income growth and employment. Most of the countries have liberalised their FDI regimes and pursued other compatible policies to attract foreign investment. This is so because FDI is increasingly being considered as an integral part of an open and effective international economic system and as a major catalyst to development. It is considered as one of the best means of transferring business knowledge from the developed economies to the developing world. This consists not only of the technology defined in the conventional sense of production processes for existing and new products, but also organisational, managerial, marketing, distribution, procurement and logistics knowledge & systems. Skills and technology diffuse from such foreign companies into the rest of the economy through movement of skilled personnel, through demands on input suppliers, through supplies of superior output to users and by imitation. FDI flows are preferred over other forms of external finance because they are non-debt creating, less volatile and their returns depend on the performance of the projects financed by the investors. FDI also facilitates international trade and transfer of knowledge, skills and technology. In a world of intensifying competition and accelerating technological change, this complimentary and catalytic role can be very valuable. Therefore, creating a favorable investment climate is crucial for economic development and progress as it boosts growth, which in turn reduces poverty in the long run. Thus, based on the above premise many countries have addressed the issue of how best to pursue domestic policies to maximise the benefits of foreign presence in the domestic economy. However, it is seen that the benefits of FDI do not accrue automatically and evenly across countries, sectors and local communities.

As in most of the developing countries, heavy emphasis has been placed on attracting large sums of FDI in India in the post-liberalisation period. This perception has led different states in India to vie with each other for the location of foreign investment. Government at the centre as well as states have been making efforts since independence to attract FDI for speedy industrialisation and to bridge the gap of capital, technology and managerial skills of the country. However, the major breakthrough came during early nineties when economic reforms where implemented. Trade and investment policies have been considerably rationalized and a host of incentive measures have been introduced. This has led to handsome inflow of FDI in India. As of 1993, Foreign Direct Investment constituted about 1 percent of the India's Gross fixed capital formation, which went up to 3.2 percent in 2001. India received Rs 2,32,041 crore cumulative FDI equity flow from August 1991 to March 2007[1]. Yet, the inflow of FDI is unequal across states and is concentrated in few major developed states. This differential regional inflow of FDI can be associated with a host of characteristics inherent within these states and regions. FDI flows depends on a large extent on the policies pursued within individual states, good governance practices, corruption level, availability of skilled labour and infrastructure facilities like power supplies, communication network, transport systems, ports and banking facilities.

Scope of the study

Foreign direct investment has emerged as the most important source of external resource flows to developing countries over the 1990s and has become a significant part of the capital formation process. FDI generally flows in the form of bundled resources including capital, production technology, technical know-how, organisational and managerial skills and even market access through the marketing networks of multinational enterprises (MNEs) that undertake FDI. These skills tend to spill over to the domestic enterprises in the host country. Therefore, FDI can be expected to contribute to growth (more than

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[1] Economic Survey 2007-08. Government of India.

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proportionately) compared to the domestic investments in the host country.

In the light of the above discussion, it is therefore important to understand the economic role of *foreign direct investments* in India in the post-reform period. The present study draws on an extensive and detailed database on the FDI approvals in India since 2000 and helps resolve at least some of the disputed issues concerning FDI in the post-reform era. Using these data, an attempt has been made to mainly address two major topics related to FDI and regional development in India during the post-reform period and analyze the location choices of the foreign investors. In particular, it is seen that the FDI flows are concentrated in a relatively few advanced locations/states in India that have a fairly good availability of infrastructure facilities. This may result in location specific development and may prevent the effects of FDI generated investments to spread uniformly across the other states in India.

Objectives of the study

- To analyze the state-wise distribution of foreign direct investments in terms of sectors as well as sub-sectors in India.
- To examine the regional distribution of FDI and compare this with the availability of infrastructural facilities in the major states of India.
- To analyze the conditions for attracting FDI flows in different states in India.

Methodology and Data Base

Methodology:
Simple tabulation and graphical method has been used for analysis in the study. The reference period for the study is 1991 to 2007.

Data Base:

Only secondary data from various sources has been used for the study. The most extensively available dataset of FDI in India is the Secretariat of Investment Approval (SIA) News Letters, released by the Department of Industrial Promotion and Policy, Government of India. SIA News Letters for FDI data has been used extensively in the entire study. However, there are certain limitations of this database. The most important limitation is that figures for approved FDI inflow are available but not for the actual amount of FDI inflows. In case of the approvals too, there are certain problems. These represent the number of approvals and not the actual number of ventures. There is also the possibility of multiple counting (as in case of one foreign investor replacing another investor in a venture, which is treated as fresh inflow), thereby overestimating the approved investment and also the number of projects.

Beside SIA News Letters, data has also been extracted from the Reserve Bank of India, Economic and Political Weekly Research Foundation Database.

Chapter Scheme

The study is divided into five chapters – first being the introductory chapter. The second chapter is a review of the existing literature. The third chapter 'Government Policies and FDI flows in India' is a study of the trend of FDI inflows in India. The fourth chapter 'Spatial distribution of FDI in India' is the study of spatial and sectoral FDI inflows in India. The fifth chapter concludes with the findings of the study.

Chapter II

Literature Survey

Since 1991, India's period of economic liberalization has catapulted the country into international limelight as a rapidly growing emerging market, with much economic potential. Most of this story begins with foreign direct investment, a strategy that has imbued India's once stagnant industrial sector with capital and job opportunity. However, as the world grapples with rising inequities between wealthy and poor countries and as India's GDP grows ever larger, there is a concern that the growth within the country is not evenly distributed and may in fact exacerbate current economic disparities.

To get some idea, every researcher needs to give a keen look at the earlier works on the concerned topic and some literature review in order to have some comprehensive information about the topic. Literature on FDI in India is a vigorously growing corpus of facts and opinions. The following studies conducted by the different scholars have been categorized issue wise.

Theoretical Issues

A number of authors have tried to explain the movement of FDI (capital movement) flows. In the theoretical literature, most of the studies emphasize factors that are specific to the multinational firms; specifically those relating to competition among themselves and with the local firms, with less attention being given to the locational factors. The theory of capital movements was the earliest explanation for FDI, which was essentially viewed as part of the portfolio investments. Hymer explained FDI as an Industrial organisation where the transfer of Knowledge and other firm assets was to help organise production abroad. In Vernon's described product life cycle, firms set up production facilities abroad for products that had already standardized and matured in the

lhome market. The eclectic paradigm theory of Dunning's provides an ownership; location and internalization (OLI) advantage-based framework to analyze why, and where MNEs would invest abroad. Such investments could be: (natural) resource seeking, market-seeking, efficiency-seeking or strategic asset-seeking. The theoretical developments explained the dynamic evolution of ownership advantages, and how MNEs transfer them through FDI. These include the resource-based approach by Conner's and the evolutionary perspective by Teece's, The main thrust of these theories is that a firm's knowledge and skills constitute tacit ownership advantages that take time to evolve. MNEs, with their ability to devise and manage complex organizational structures, sustain these advantages by leveraging them through worldwide investments (Sethi et. al., 2003)[2].

Scott and Moulaert (ed. 1997)[3] explained international financial structure and nexus of globalization, which transformed more rapidly than any other sector, moving away from nationally centered credit system towards the single system of integrated financial markets on a global world. Mobilizing financial resources for investments at precise time when they are needed, is the precondition for any industrial, services and infrastructure development with the financial centre being located in the major urban agglomeration of the various countries.

According to Pant (1995)[4], Trans National Corporations (TNCs) are viewed as currency area phenomenon. Here the advantage accrues to all the firms within the currency area. The basic idea is that investors value all the assets of TNC in the currency of home country. Consequently, source country firms are able to borrow at the lowest rate. As per imperfect competitive frame-work theory, there are four possible imperfections, goods market (product differentiation), factor market (including access to patented knowledge), internal

[2] Sethi, D., Guisinger, SE, Phelan, SE and Berg, DM. (2003), 'Trends in foreign direct investment flows: a theoretical and empirical analysis', *Journal of International Business Studies*, 34, pp. 315-326.
[3] Moulaert, Frank and Scott, Allen J. ed. (1997), ' Cities, Enterprises and Society on the Eve of the 21st-Century', Pinter, A Cassell Imprint, Wellington House, London, England. Pp. 23.
[4] Pant, Manoj (1995), *'Foreign Direct Investment in India: The Issues Involved'*, Lencer Books, New Delhi.

and external economies of scale and government intervention. In another industrial organisation approach, TNC investment is seen as a defensive oligopolistic practice, where in a concentrated market, entry of leader firm in the market is followed by others.

A more dynamic explanation of FDI is the product cycle phenomenon, in which there are three types of oligopoly corresponding to the product cycles:
i) Innovation based oligopoly, ii) Mature oligopoly (Price competition and scale economies) and iii) Senescent oligopoly (Cartels, product differentiation and break down of entry barriers) Pant (1995)[5].

Empirical Literature

Rao and Murthy (2006)[6] explained the rise of FDI, in infrastructure sector, especially fuels and telecommunications. They related the industrialization level and infrastructure development and suggested that the recent growth trends are inappropriate. The manufacturing FDI did go to the few backward states which were rich in natural resources and where extractive activities were possible. *However, states that were not in a position to offer the investment incentives and improve their overall investment climate for foreign investment were outside the ambit of foreign direct investments.*

Morris (2004)[7] has discussed the determinants of FDI in Indian economy as well as, has explained the regional patterns of FDI, which tends to drift towards the metropolitan cities having locational 'headquartering' advantage in conducting the country operations of MNCs in India. Then he compares Gujarat state metropolitan cities with Southern states interpolation cities, which have large comparative advantage in terms of available services and skilled man-

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[5] Ibid.
[6] Rao, K.S. Chalapati and Murthy, M.R. (2006), 'Towards Understanding the State-wise Distribution of Foreign Direct Investments in the Post-Liberalisation Period', Working Paper 2006/01, Institute of Studies in Industrial. Development, New Delhi

[7] Morris, Sebastian (2007), 'A Study of the Regional Determinants of Foreign Direct Investments in India, and the Case of Gujarat', Working Paper No. 2004/03/07, Indian Institute of Management, Ahmedabad.

power and technologies.

Chakravrorty (1993)[8] has explained that under the new regulatory structure, the location of post reform investment favor the coastal, advanced regions and the existing metropolises. For this, he uses disaggregated pre-and post-reform emerging spatial patterns in the leading region and compares it to the lagging region as well as those where central government is increasingly becoming a weaker player.

Nagraj (2003)[9] has explained FDI trends in India from 1991 to 2001, as well as compared it with the Chinese economy. In India, FDI goes to mainly manufacturers of consumer goods, automotive industry, telecom and software industries. Further, approved FDI has largely gone to a few developed states. This foreign investment in the consumer goods industry has increased competition among the domestic players, resulting in a greater choice and quality improvement for the consumer at a competitive price.

Rao, Murthy, Ranganathan (1999) have provided the empirical content to the development of FDI during the first seven years of liberalization. They have studied India's approach towards FDI, which have been governed by the multiple objectives of self reliance, protection of national industry and entrepreneurs import or select technologies and export promotion. As a part of the structural adjustment programme, along with the virtually dismantling of the industrial regulatory system, India seeks to attract FDI with special favors and persuasion while there is very little discussion on the various facets of actual implementation. This paper deals in brief with NEP and the approved FDI between 1991 to 1997 along with the extent of foreign ownership, industry wise pattern of FDI, state wise location of new foreign investments and the impact of FDI on the Indian stock markets.

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[8] Sanjoy Chakravorty (2000), 'How Does Structural Reform Affect Regional Development? Resolving Contradictory Theory with Evidence from India Source: Economic Geography', Vol. 76, No. 4, (Oct., 2000), pp. 367-394 Published by: Clark University.

[9] Nagraj, R. (2003), 'Foreign Direct Investment in India in the 1990s Trends and Issues', *Economic and Political Weekly*, April 26, 2003.

Using regional panel data, Wen (2003) [10] has investigated how FDI has contributed to China's regional development. The author found that the FDI inflow generates a demonstration effect in identifying the market conditions for investments in fixed assets. This, effects industrial location. However, since the second half of the 1990s, its effects on regional export and regional income growth varied across the east, central and west China depending on the FDI orientation in the different regions. In east China, geographical advantages in export attracted FDI, which in turn promoted exports. This further resulted in rise of the regional FDI-GDP ratio, which increased the region's share in the industrial value added in east China. These effects contributed positively to regional income growth in east China, although there was a crowding out effect between FDI and domestic investments. But the negative impact of FDI inflow in central China, on raising regional export orientation weakened its contribution to the regional income growth. Furthermore, this contribution of the improvement of market mechanism to regional development was evidenced in attracting even more FDI, which by way of contributing to the regional industrial development promoted exports as well as directly contributed to regional income growth. Therefore, the author suggested that further development of regional market mechanisms will be the most efficient approach to regional development, especially in central and west China. As FDI has a demonstration effect to investments in fixed assets and there is a crowding out effect (between FDI and domestic investments), increasing the efficiency of domestic investment is also very important for fast regional income growth.

According to Virmani (2004)[11], engineering activities, services, electronics and electrical equipments and computers were the main sectors receiving FDI in India in 2000-01. Domestic appliances, finance, food & diary products, which were the important sectors attracting FDI in the early nineties,

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[10] Wen, Mei (2003), 'Foreign Direct Investment, Regional Geographical and Market Conditions, and Regional Development: A Panel Study on China', Division of Economics, RSPAS, ANU, June 2003. www.hiebs.hku.hk

[11] Virmani, Arvind (2004), 'Foreign Direct Investment Reform', Occasional Policy Paper, Indian Council for Research on International Economic Relations, New Delhi, www.icrier.org.

had seen a downtrend in the latter half of the nineties. Services and computers have seen an increasing trend in the latter half of the nineties. The inflow of FDI into computers has seen substantial increase over the years and on the whole there have been significant changes in the pattern and composition of FDI inflows with few clear trends over the decade as whole.

In the empirical investigations done by Accolley (2003)[12], the effects of some macroeconomic variables such as economic growth, market size, degree of openness, real effective exchange rate, and labor cost on FDI flows in the USA have been tested. Taking into account the fact that economic growth could be both, a determinant and an impact of the FDI inflows, the study found that economic growth in the USA does not explain the long-run behavior of the FDI inflows equation. However, the study did confirm that the FDI inflows do contribute to economic growth in the US. Thus, he proposes open-market operations as the economic policy to attract FDI flows in the nation.

Bajpai, and Sachs (2000) [13] in their paper has attempted to identify the issues and problems associated with India's foreign direct investment regime, and more importantly the other associated factors responsible for India's unattractiveness as an investment location. According to the authors, in spite of India offering a large domestic potential market, low labor costs and a well working democracy, her performance in attracting FDI flows has been far from satisfactory. A restrictive FDI regime, high import tariffs, exit barriers for firms, stringent labor laws, poor quality infrastructure, centralized decision-making processes, and a very limited scale of export processing zones make India an unattractive investment destination.

Based on the literature, Balasubramanyam and Mahambare (2003)[14] have

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[12] Accolley, Delali (2003), 'The Determinants and Impacts of Foreign Direct Investment', MPRA Paper No. 3084, http:// mpra.ub.uni-muenchen.de/ 3084/

[13] Bajpai, Nirupam and Sachs, Jeffrey D. (2000), 'Foreign Direct Investment in India: Issues and Problems', Development Discussion Paper No. 759, March 2000, Harvard Institute for International Development.

[14] Balasubramanyam, V.N. and Mahambare, Vidya (2003), 'Foreign Direct Investment in India', Working Paper 2003/001, The Department of Economics Lancaster University Management School. http://www.lums.co.uk/publications.

analysed the requirements for attracting large volume of FDI in India. They have also identified the determinants of FDI flows and its efficacy in promoting development. The reform package as a whole heralded a departure from the earlier dirigiste regime. Relaxation of controls over the extent of foreign ownership of equity signals a major departure from the earlier regime. Some of the reforms such as those relating to the labour laws, elimination of red tape and cumbersome bureaucracy, and financial sector reforms should be implemented in the interests of growth and efficiency in general. Further, according to them, a distortion free economic environment is essential for the growth of both foreign and domestic investments. Increased autonomy over decision-making and implementation of reforms by the state governments is yet another suggestion for attracting increased volumes of FDI in India. Low levels of competitiveness of the Indian industry and high ranking on corruption are also cited as deterrents to FDI flows in India by the authors. According to them, the one principal characteristic of FDI which distinguishes it from other sorts of capital flows is its ability to transmit technology and know-how, broadly defined to include managerial and marketing know-how. There are, however, channels through which such spillovers occur. These include imitation, acquisition of skills, competition and enhanced export intensity of locally owned firms. Acquisition of skills occurs mainly through the movement of skilled labour employed by the foreign firms to locally owned firms. Quite often foreign firms may have invested in training the relatively cheap labour available in the host countries. Another potent channel for spillovers is competition.

Sethi et al (2003)[15] in their paper have attempted to provide a rationale for changing trends in the flow and the determinants of foreign direct investment. They associate it with the macro-economic policies and the strategies followed by the firms. They have also identified several factors that impact such trends and developed propositions that could explain the phenomenon generically. The study then provides preliminary empirical support

[15] Sethi, D., Guisinger, S. E., Phelan, S. E. and Berg D. M. (2003), 'Trends in Foreign Direct Investment Flows: A Theoretical and Empirical Analysis', *Journal of International Business Studies*, Vol. 34, No. 4, (Jul., 2003), pp. 315-326.

for the propositions presented and outlined the path for further research needed to investigate more causal links. The statistical analysis of investments by the US multinational enterprises revealed significant changes in the regional distribution of FDI and also identified certain changes in some of its traditional determinants. Results showed that US MNEs are making increasing investments in Asia to exploit low wage levels and to secure entry into new markets.

Kumar (1995)[16] in his paper examined the trends and patterns in FDI inflows into India over the post- Independence period as well as the emergence of Indian enterprises as direct investors abroad, against the background of changing policy regime. The study found that the sectoral pattern of FDI in India revealed a shift in favour of more technology and skill intensive industries, as the country industrialised itself. The Indian government policies appeared to have played an important role in shaping this pattern by affecting the relative configuration of ownership, internalization and locational advantages of foreign investors in the country. Over the years, large volume of Indian investments has been made in a large number of countries all over the world. However, a clear divergence was observed between India's FDI in countries ranking below India in terms of the level of economic development and in those above it. In the former, the ownership advantages of Indian enterprises in the form of technology and product adaptations, human resources, experience of operating in a developing country environment and ethnic links have led to investments in manufacturing. In Southeast and East Asian countries, Indian FDIs largely represent strategic investments made in trading subsidiaries to provide a market backup to Indian exports or those in human resource intensive services where Indian enterprises have accumulated some advantages and capability.

Menon and Sanyal (2004)[17] in their paper analyzed patterns of foreign

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[16] Nagesh Kumar (1995), 'Industrialization, Liberalization and two way flows of Foreign Direct Investments: The case of India', The United Nations University, Institute for new Technologies, Discussion Paper Series-9504,TC Maastricht, The Netherland, p no-1.

[17] Menon, Nidhiya and Sanyal, Paroma (2004), 'Labor Conflict and Foreign Investments: An Analysis of FDI in India'. (June 11, 2004). http://ssrn.com/abstract=556710.

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direct investment in India. They have investigated how the labor conflicts, credit constraints and indicators of a state's economic well-being influence the location decisions of the foreign firms. They have also accounted for the possible endogeneity of the labor conflict variables in modeling the location decisions of foreign firms. Their result indicates that the foreign direct investment tends to veer away from states that have high incidences of labor conflicts, particularly as measured by the number of man-days lost due to work stoppages. Furthermore, results of fixed effects technique confirmed that measure of labor conflicts are endogenous in an analysis of FDI location in India. It was also found that the labor disputes across the states in India arise in a systematic fashion, state-level heterogeneity measures have significant negative impacts on labor conflict variable. This suggested that states 'muffle' pro-worker legislations in the hopes of attracting new foreign direct investments. Further, they have argued that the local governments that seek to encourage investments from abroad should be given a free hand (within reasonable limits) to modify labor laws and regulations as FDI contributes positively to the overall progress of the state. Meanwhile according to them, states with low FDI location propensities (either due to poor infrastructure, lack of educated workers, or the presence of a bad political climate that favors an overly militant workforce) should be provided with adequate incentives by the central government to move to fostering an environment more hospitable to investments from overseas. Such a strategy would be welfare improving from all perspective for a developing country like India.

According to Chakraborty and Nunnenkamp (2006)[18] foreign direct investment (FDI) has boomed in post-reform India. Moreover, the composition and the type of FDI have changed considerably as India has opened up to the world markets. This has fuelled high expectations that FDI may serve as a catalyst to higher economic growth. In addition, the paper has assessed the growth implications of FDI in India by subjecting industry-specific FDI and

[18] Chakraborty, C. and Nunnenkamp, P. (2006), 'Economic Reforms, Foreign Direct Investment and its Economic Effects in India', Kiel Working Paper No. 1272, The Kiel Institute for the World Economy Duesternbrooker Weg 120 24105 Kiel (Germany).

output data to Granger causality tests within a panel cointegration framework. Results show that the growth effects of FDI vary widely across sectors. FDI stocks and output are mutually reinforcing in the manufacturing sector. In sharp contrast, any causal relationship was absent in the primary sector. Most strikingly, the study found only the transitory effects of FDI on output in the services sector, that attracted the bulk of FDI in the post-reform era.

Study by Nunnenkamp and Stracke (2007)[19] indicated that FDI is likely to widen regional income disparity in India. The concentration of FDI in a few Indian states tends to work against favorable FDI effects spreading across the Indian economy. The regional dissemination of FDI-induced growth was further impaired by the increasing concentration of FDI at the state level since the early 1990s. FDI has been heavily concentrated even within Indian states: Typically, the three most attractive districts account for more than two thirds of all FDI projects located in the state as a whole. Analysis of possible determinants of FDI by the authors also reveals that it has become increasingly difficult for less developed states to induce economy catching-up processes by drawing on FDI. Foreign investors strongly prefer locations in India that are relatively advanced in terms of per-capita income and infrastructure. In addition, states endowed with workers who are poorly/inadequately skilled, may face mounting difficulties in attracting the foreign investors. In some contrast to earlier studies, the study found FDI to be positively correlated with per-capita income growth across Indian states and negatively correlated with the share of people with incomes below the poverty line. This finding holds for different specifications of the FDI variable as well as for different sub-categories of FDI. This may indicate that the link between FDI and growth has become stronger in the aftermath of economic reforms so that earlier, much more skeptical assessments may no longer apply. According to the paper, FDI is unlikely to work wonders for India's regional development. It is only for relatively rich states that a higher intensity of FDI is associated with a significantly higher growth rate in the post-

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[19] Nunnenkamp, Peter and Stracke, Rudi (2007), 'Foreign Direct Investment in Post-Reform India: Likely to Work Wonders for Regional Development?', Kiel Working Paper No. 1375, August 2007. Kiel Institute for the World Economy Duesternbrooker Weg 120 24105 Kiel (Germany).

reform era. By contrast, FDI does not appear to be a decisive factor for the growth prospects of less advanced states. All in all, it appears to be unreasonable to expect that booming FDI in India will lead to regional convergence. In particular, FDI tends to leave growth unaffected in poor regions where local companies operate far off from the technological frontier. Under such conditions, FDI-induced spillovers are impaired by lacking incentives of local companies to innovate, as well as their weak capacity to absorb superior foreign technology.

Kolstad and Villanger (2004)[20] explored the impact of social development variables on FDI and private domestic investment using panel data from 75 countries for the period 1989-2000. The results show that reducing corruption leads to an increase in domestic investment. Religious tensions appear to be a deterrent of FDI but have no impact on domestic investment. In addition, socio-economic conditions could affect domestic investment through savings. Results of econometric analyses indicate that the political freedom was a significant attractor of FDI flows. Similarly, religious tensions appear to reduce foreign investments. The political freedom and religious tension variables were also economically significant, in the sense that a one-category improvement on either index has an impact on FDI flows that is comparable to an increase in trade/GDP by 14-20 percentage points. However, no evidence of a relationship between corruption and FDI was found. The significance of political freedom and religious tensions suggested that foreign investors are drawn to more politically stable countries. However, the impact of political freedom might also reflect a perception that countries governed by impersonal institutions, have more secure property rights. The study also explored the link between social development and foreign direct investment and domestic investment, using the same dataset of 75 developing economies for the above mentioned period (1989-2000). The results point to corruption as a major deterrent of domestic investment. However, no significant relationship between corruption and FDI

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[20] Kolstad, Ivar and Villanger, Espen (2004), 'How does social development affect FDI and domestic investment?' Social Development Study, 22080 VB. Chr. Michelsen Institute, Norway. www.cmi.no/public/public.htm

was found. The policy implications of these results are therefore fairly straightforward; countries seeking to increase their total level of investment, should aim to reduce corruption. The implications of the results on political freedom are less obvious. Econometric analyses found that improvements in political rights and civil liberties tend to increase FDI, while reducing the domestic investments. Though the study found that the direct effect of political freedom on domestic investment is negative, it is therefore possible that there is an additional indirect effect whereby political freedom reduces corruption which in turn promotes domestic investment. Political freedom might thus have a more positive effect on total investments than their results may indicate. Furthermore, results suggested that religious tensions appeared to be a robust deterrent of FDI. Some evidence that socio-economic conditions affect domestic investment through increased savings was also found.

Increase in competition among developing countries to attract FDI, results in higher investment incentives being offered by the host governments and removal of restrictions on operations of foreign firms in their countries. This has also led to an ever-increasing number of bilateral investment treaties (BITs) and regional agreements on investments. The study by Banga (2003)[21] aims to provide an empirical evidence on the impact of government policies and bilateral and regional investment agreements on FDI inflows into fifteen developing south, east and south-east Asian nations for the period 1980-81 to 1999-2000, after controlling for the impact of economic fundamentals of the host country. The impact has also been analyzed separately for FDI coming from developed and developing countries into ten developing nations of this region for the period 1986-87 to 1996-97. Using panel data analysis the study found that:

(a) Economic fundamentals, namely, large market size; low labour cost (in terms of real wages); availability of high skill levels (captured by secondary enrolment ratio and productivity of labour); lower external debt; and extent of electricity consumed in the economy are found to be significant determinants of aggregate FDI.

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[21] Banga, Rashmi (2003), 'Impact of Government Policies and Investment Agreements on FDI Infliows', Working Paper No. 116, November 2003, Indian Council for Research on International Economic Relations, New Delhi.

(b) After controlling for the effect of economic fundamentals, FDI policies are found to be important determinants of FDI inflows. Results show that lower tariff rates attract FDI inflows. However, fiscal incentives offered by the host governments are found to be less significant as compared to removal of restrictions in attracting FDI inflows.

(c) Bilateral investment treaties (BITs) which emphasise on non discriminatory treatment of FDI play an important role in attracting FDI inflows into developing countries. However, bilateral investment agreements with developed countries and developing countries may have differential impact. Results show that BITs with developed countries have a stronger and more significant impact on FDI inflows as compared to BITs with developing countries. With respect to regional investment agreements, they find that the different regional investment agreements have different impact. While APEC is found to have a significant positive impact on FDI inflows, ASEAN is not found to affect FDI inflow. However, it is noted that regional agreements may still be too new to show an impact in the period studied.

(d) The results of the analysis with respect to FDI from developed and developing countries show that economic fundamentals differ in terms of their significance in attracting FDI from developed countries and developing countries. FDI from developed countries are attracted to large market size, higher educational levels and higher productivity of labour, better transport and communication and lower domestic lending rates, while the cost factors play a more significant role in attracting FDI from developing countries. The determinants found of significance were the large market size, potential market size, lower labour cost, devaluation of exchange rate, better transport and communication, lower lending rates and lower budget deficit.

(e) The impact of FDI policies also differs on FDI from developed and developing countries. Lower tariff rates are significant determinants of FDI from developing countries but do not attract FDI from developed countries. Fiscal incentives are also found to attract FDI from developing countries but it is the removal of restrictions on their operations that attract FDI from developed countries. This is corroborated by the results with respect to BITs. BITs with developed countries are found to attract FDI from developed countries but BITs

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with developing countries is not found to be a significant determinant of FDI from developing countries.

The results of the study highlighted the importance of government policies in attracting FDI inflows into developing countries. It showed that apart from the economic fundamentals of the economy, which may attract FDI inflows, FDI policies of the host governments and investment agreements also play an important role. Within the national FDI policies adopted by the government, it is the removal of restrictions on the operations of foreign firms in the host country that matter the most, especially to FDI coming from the developed countries.

To investigate the role of institutions and geography on economic development, Shepotylo (2006)[22] look at the inflows of foreign direct investment in 24 transition countries from 1993 to 2003. Using econometric panel data model that takes into account spatial spillovers and spatially correlated error terms, he has estimated the model by applying a generalized method of moment (GMM) three-stage procedure. The results showed that the regional quality of institutions is an important factor that explains variations in FDI inflows. The positive effect of good regional governance dominates the effect of better developed regional markets. The effect of regional governance has been both statistically significant and of the same order of magnitude as the effect of good governance inside the country. The paper also states that EU membership and high oil and gas resources are also important determinants of FDI inflows in transition economies.

In broad terms, governance infrastructure represents attributes of legislation, regulation, and legal systems that condition freedom of transacting, security of property rights, and transparency of government and legal processes. Globerman and Shapiro (2003)[23] in their paper examined the statistical

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[22] Shepotylo, Oleksandr (2006), 'Regional Governance Infrastructure: The Positive Externality on the Inflow of Foreign Direct Investment', Job Market Paper, University of Maryland. http://www.eerc.kiev.ua

[23] Globerman, Steven and Shapiro, Daniel (2003), 'Governance Infrastructure and US Foreign Direct Investment', *Journal of International Business Studies*, Vol. 34, No. 1, (Jan., 2003), pp. 19-39.

importance of governance infrastructure as a determinant of the US foreign direct investment. The paper applied econometric analysis with a two-stage estimation procedure. In the first stage, the probability that a country is an FDI recipient was estimated. The results indicated that countries that fail to achieve a minimum threshold of effective governance are unlikely to receive any US FDI. Countries that receive no US FDI are typically countries that do not promote free and transparent markets, that have ineffective governments, and that often have legal systems that are not rooted in English common law. In the second stage, the analysis was restricted to those countries that did receive FDI flows. The estimated equations focused on the determinants of the amount of FDI received. Given that a country is a recipient of US FDI, governance infrastructure - including the nature of the legal system - was an important determinant of the amount received.

In his paper Kuemmerle (1999)[24] has examined the determinants of foreign direct investment in research and development laboratories by 32 multinational enterprises in the pharmaceutical and electronics industries. The paper applied a dichotomous set of motives for FDI. Results from an econometric analysis of 136 laboratories investments showed that relative market size and relative strength of a country's science base determine whether FDI in research and development were carried out in order to exploit existing firm-specific advantages, or in order to build up new firm-specific advantages. The finding also suggests that when investing in R&D abroad, firms seek different types of spillovers from the national and local environment in which they invest. It would be precipitous, however, to assume that foreign firms investing in local R&D facilities are free riders. Foreign firms also create spillovers for the local environment because R&D sites provide employment and learning opportunities for local researchers.

Foreign direct investment (FDI) can play important role in achieving rapid

[24] Kuemmerle, Walter (1999), 'The Drivers of Foreign Direct Investment into Research and Development: An Empirical Investigation', *Journal of International Business Studies*, Vol. 30, No. 1, (1st Qtr., 1999), pp. 1-24.

economic growth in the developing countries. The fact is that FDI mostly flows towards the developed countries and only a small portion of FDI flows to a limited number of developing countries. Thus, most of the developing nations almost fail to attract a handsome amount of FDI. Mottaleb (2007)[25] in his study tried to find out the influential factors that determine the FDI inflow. To find out the influential factors, the socio-economic conditions of the sample top and low FDI recipient countries were compared. This was done using panel data from 60 low-income and lower-middle income countries, this paper firstly identifies the influential factors that determine FDI inflow in the developing countries and secondly empirically demonstrates the relationship between economic growth and FDI. Findings of the study showed that top FDI recipient countries in 2005 have large domestic market with high GDP growth rate. These countries were also well equipped with modern infrastructure, such as telephone and internet. Moreover, business environment in the top FDI recipient countries in 2005 was friendlier compared to other countries indicated by high score of corruption perception index and low business start-up costs. The paper concluded that large GDP and high GDP growth rate, business friendly environment and modern communication facilities, such as internet encourage FDI inflow in the developing countries. It was suggested by the author that developing countries should try making the more business friendly environment and ensuring create business friendly environment, developing countries, in the long run need to develop some necessary institutions to reduce the extent of corruption and to control the factors that increase both visible and invisible business start-up costs. A reduction in corruption and the expansion of infrastructural facilities can reduce transaction, information, communication and business start-up costs. It can contribute to the development of a business friendly environment, which might encourage inflow of FDI to the developing countries and also might contribute to attain rapid economic growth in the developing countries.

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[25] Mottaleb, Khondoker Abdul (2007), 'Determinants of Foreign Direct Investment and Its Impact on Economic Growth in Developing Countries', MPRA Paper No. 9457. http://mpra.ub.uni-muenchen.de/9457/.

Singh and Jun (1995)[26] in their paper analysed three empirical issues including political risk, business conditions, and macroeconomic variables - that influence direct investment flows to developing countries. First was what types of sociopolitical instability are detrimental to FDI flows? Is there a structural difference between countries with high and low FDI flows?, second does the perception of favorable business operating conditions positively affect FDI flows? Does taxes on international transactions impede FDI?, and the third what type of exports (primary or manufacturing) are related to FDI? Does export oriented economies attract FDI (exports precede FDI) or does inflows of FDI tend to increase exports (FDI precedes exports)?

Using a pooled model of developing countries, they tested three groups of hypotheses on what influences direct investment - that political risk matters, that business conditions matter, that macroeconomic variables matter. Results of the analyses indicated that a qualitative index of political risk is a significant determinant of FDI flows for countries that have historically attracted high FDI flows. For countries that have not attracted such flows, sociopolitical instability (proxied by work hours lost in industrial disputes) has a negative impact on investment flows. Second, a general qualitative index of business operation conditions has been an important determinant of FDI in countries that receive high flows. This country group also showed a positive relationship between taxes on international transactions and FDI flows. And third, exports generally, especially manufacturing exports, are a significant determinant of FDI flows for countries in which FDI were high. This hypothesis was supported by standard regression analysis and by Granger causality tests, which indicated that the feedback had been predominantly from exports to FDI. Export orientation has the strongest variable for explaining why a country attracts FDI. This finding was in line with the secular trend toward increasing complementarity between trade and FDI.

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[26] Singh, Harinder and Jun, Kwang W. (1995), 'Some New Evidence on Determinants of Foreign Direct Investment in Developing Countries', Policy Research Working Paper 1531, The World Bank, International Economics Department, International Finance Division, November 1995

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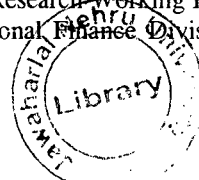
Thus, for countries with relatively low-FDI flows, sociopolitical instability manifested in work hours lost were a significant deterrent to FDI flows. Given that FDI operations in the low-FDI group are likely to be labor intensive, a higher premium appears to be placed on labor relations. A priority for these countries should be to stabilize labor relations and the working environment to attract FDI inflows. For countries that receive relatively high-FDI flows, perceptions of overall political stability have a significant influence on FDI flows. In the high-FDI group direct investment were likely to be capital intensive, requiring a relatively more substantive and long-term commitment. Importantly some developing countries are not seriously considered by transnational firms until they have achieved a reasonable level of corporate hospitality. A higher relative burden of revenues raised from international trade does not appear to be detrimental to FDI flows for the high-FDI countries. Also export orientations are a significant determinant of FDI flows for high-FDI countries. In fact, the relative sizes of the export sector are the strongest explanatory variable for FDI flows. In particular, manufacturing exports played a critical role.

Biswas (2002)[27] in her paper addressed determinants of foreign direct investment by a multinational corporation and the corporation's consequent choice of investment location by analysing a number of traditional and nontraditional variables into the standard theory of investment based on the maximization of the expected value of the firm. The theoretical model showed that both traditional as well as nontraditional factors matter in determining the flows of foreign direct investment in a country. The generalized investment theory on US foreign direct investment then was tested empirically utilizing panel data for 44 countries from 1983 to 1990. The estimation results provided considerable support for the importance of both traditional and nontraditional factors in determining flows of foreign direct investment in a country. The country-specific dummies showed high level of significance, reflecting the importance of the country-specific characteristics in explaining flows of foreign

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[27] Biswas, Romita (2002), 'Determinants of Foreign Direct Investment', Review of Development Economics, 2002, vol. 6, issue 3, pages 492-504.

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direct investment.

Na, Lv and Lightfoot, W.S. (2006)[28], in their paper analyzed the determinants of foreign direct investment (FDI) on both the country and regional level through the extensive review of past research studies, as well as through the development of a multiple regression model for identifying key determinants of FDI at the regional level in Chian during the year of 2002. The paper examined five potential determinants of FDI in 30 regions of China using a regression model. The study provided evidence that GDP that proxies for the market size and potential were a big attraction for FDI. Labor quality and the progress of reform or the degree of openness are also important determinants of the distribution of FDI. There is some mild evidence that high labor cost deters the inflow of FDI and the level of infrastructure has positive relation to FDI. These results have important implications for both the central and regional governments as they can be useful in helping the authorities to allocate funds and resources which will help attract FDI. From this initial study the authors suggests that the government should consider encouraging capital-intensive FDI through the further development of a skilled workforce. This means increasing funding for higher education, and infrastructure, while also encouraging more openness in state owned enterprises.

China, as a major emerging market, has attracted significant flows of FDI, to become the second largest receipt. Ali and Guo (2005)[29] in their paper briefly examined the literature on FDI and focused on likely determinants of FDI in China. The paper investigated the determinants of FDI in China from the perspective of country characteristics, identifying what are the most significant factors in China that influence foreign investors' decision to invest in the country. Several location advantages as determinants of FDI in China, drawn from previous studies were tested. Responses from 22 firms operating in China

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[28] Na, Lv and Lightfoot, W.S. (2006), 'Determinants of Foreign Direct Investment at the Regional Level in China', Journal of Technology Management in China, Vol. 1, Issue 3, pp. 262-278.

[29] Ali, Shaukat and Guo, Wei (2005), 'Determinants of FDI in China', Journal of Global Business and Technology, Volume 1, Number 2, Fall 2005

on what they see as the important motivations for them to undertake FDI were analysed. Results showed that market size has been a major factor for FDI especially for US firms. For local, export-orientated, Asian firms, low labor costs are the main factor. The paper concluded with managerial implications for businesses wish to exploit opportunities in China. Research has found that China's huge potential market size is the most significant factor for FDI inflow in China, which is in line with both theory and previous studies. China's large population, fast growing economy, coupled with membership of the World Trade Organization, are an unbeatable combination for foreign firms. Government incentive policies are another important reason; other key factors include labor costs, and high investment return. One of the new findings from the research is that global integration is one of the key factors for some foreign firms investing in China. This indicates that China is a very important market and investing in China is part of firms' global strategy. Foreign firms do not simply come to China to take the advantage of any single location factor, but are more importantly driven by a whole myriad of often conflicting and competing reasons.

Chapter III

Government Policies and FDI flow in India

The main aim of this chapter is to understand the present situation of foreign direct investment through analysis of the past and recent policy regulations in India. In second section of the chapter we briefly examine the changing flow of FDI in terms of technical and financial flows as well as see the trend of FDI flow in India from 1991- 2006.

The Pre – Reform Phase (before 1991)

The Indian government's approach towards foreign investments has evolved over the post-Independence period in four distinct phases. The period from Independence up to the late 1960s was marked by a gradual liberalization and the period from the late 1960s through the 1970s were driven by the needs of local industry and economy. The 1980s were clearly towards liberalization of the economy, though they were implemented in a small step.[30] The analysis of the major policies of the Government of India (GOI) before the reform phase reveals much of these processes.

Industrial Policy, 1948: This policy was the foundation of industrial development in Independent India. While emphasizing on public investment in the industrial infrastructure of the country, the GOI looked for foreign investments in the other sectors of the economy. They considered that 'participation of foreign capital and enterprise will be of value to the rapid industrialisation of the country', but it should *be carefully regulated* in the national interest. Foreign investors were

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[30] Nagesh Kumar (1995), 'Industrialization, Liberalization and two way flows of Foreign Direct Investments: The case of India', The United Nations University, Institute for new Technologies, Discussion Paper Series-9504,TC Maastricht, The Netherland, p no-1.

assured of unrestricted remittances of profits and dividends and foreign companies were treated on equal terms with the Indian companies.[31]

Industrial Policy, 1956[32]: Based on the strategic nature of the industries, this policy reserved few industries for public investments and the foreign companies were restricted from investing in these industries. However, the policy did not distinguish between the local companies and the foreign companies on other accounts. Following the foreign currency crisis in 1957-58, the GOI offered the foreign companies several incentives, concessions and relaxed restrictions on entry in some industries. Both the policy of 1948 and 1956 were such that foreign investments into India in this period steadily increased until 1961. Based on the strategic nature of the investments made in machinery fabrication facilities, manpower development, scientific and technological infrastructure made in the previous period led to development of certain 'created' assets in the country. For instance, certain capabilities for process and product adaptations had been built up in the country. A number of local design engineering and project management consultants had accumulated considerable expertise while acting as subcontractors for western prime consultants. Locally available skills and capabilities needed some sort of infant industry protection as these were not able to stand competition from more established industrialised country sources[33].

On the other hand, outflow on account of remittances of dividends, profits, royalties, and technical fees, etc. to abroad on account of servicing of FDI and technology imports from the earlier period had grown sharply and had become a significant proportion of the foreign exchange account of the country. All these factors together prompted the government to streamline the procedures for foreign collaboration approvals and adopt a more restrictive attitude toward FDI. A new agency called the Foreign Investment Board (FIB) was created within the government in 1968 to deal with all the cases involving foreign

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[31] Ibid,p.no-3

[32] Nayak, Chakravarti and Rajib (2005), 'Globalization Process in India: A Historical Perspective Since Independec, 1947', *South Asian Journal of Managament*, Volume 12, No. 1, Jan-Mar 2005.

[33] Nagesh Kumar (1998), 'Liberalization and Changing Patteins of Foreign Direct Investments: Has India's Relative Attractiveness as a Host of FDI Improved?' Economic and Political Weekly, May-30, 1998, p.no-1322.

investment or collaboration with up to 40 percent foreign equity. Those with more than 40 percent foreign ownership were to be screened by a Cabinet Committee. Restrictions were put on proposals of foreign direct investments unaccompanied by technology transfer[34].

Restrictions were imposed on renewals of foreign collaboration agreements. A new Patents Act was enacted in 1970 which abolished 'product' patents in foods, chemicals, and drugs and reduced the life of process patents from 16 to 7 years (14 years in other cases). From 1973 onwards, further activities of foreign companies (along with those of local large industrial houses) were restricted to a select group of core or high priority industries. In the same year a new Foreign Exchange Regulation Act (FERA) came into force which required all foreign companies operating in India as branches of companies incorporated abroad, to register themselves as Indian companies with up to 40 percent foreign equity. The Indian companies were also directed to dilute their foreign equity to a maximum of 40 percent and exceptions were made only for companies operating in high priority or high technology sectors, tea plantations, or those producing predominantly for exports[35].

The government policy encouraged outward investments by Indian companies as means of promoting exports of Indian capital goods, technology and consultancy services. A systematic treatment of overseas investments, however, started only since 1974 when an Inter-ministerial Committee on Joint Ventures Abroad was created within the Ministry of Commerce to approve proposals from the Indian companies. The guidelines for approval were formulated in 1978, which required the Indian participation to be in accordance with the host country regulations. The guidelines encouraged the joint venture form of operation with local enterprises and required that Indian equity participation be made by way of capitalization of export of indigenous plant, machinery, capital goods and some times even know how to the joint venture from India[36].

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[34] Ibid,p.no-1
[35] ibid.,p.no-1
[36] ibid.

Towards the end of the 1970s, India's failure to step up significantly the volume and proportion of her manufactured exports in the background of the second Oil Price Shock began to worry the policy makers. As a consequence, there was a softening of the regulatory regime. To encourage exports, firms that produced primarily for exports were granted exemptions from the usual FERA restrictions on foreign equity ownership. In an attempt to modernize manufacturing industry, restrictions on technology transfers and royalty payments were relaxed and, where attempts to acquire technology through licensing had failed, foreign equity participation was permitted again.

The Industrial Policy Statement of 1980 and 1982, for instance, announced a liberalization of industrial licensing (approval) rules, a host of incentives, and exemption from foreign equity restrictions under FERA to 100 percent export-oriented units. It was decided to set up four more export processing zones (EPZ) in addition to the two existing ones, namely those at Kandla (set up in 1965) and at Santacruz (set up in 1972) to attract MNEs to set up export-oriented units. The trade policies in this period gradually liberalized the imports of raw materials and capital goods by gradually expanding the list of items on the Open General Licence (OGL).

Between 1984-85, 150 items and 200 types of capital goods were added to OGL list. Tariffs on imports of capital goods were also slashed. Imports of designs and drawings and capital goods were permitted under a liberalized Technical Development Fund Scheme[37].

The Post - Reform Phase (after 1991)

In the financial year 1990-91, India entered a period of severe balance of payments crisis and political uncertainty. A rapid increase in India's external debt coupled with the political uncertainty led international credit rating agencies

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[37] ibid

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to lower India's rating both for short and long term borrowing. This made borrowing in international commercial markets difficult and also led to an outflow of foreign currency deposits kept in India by non-resident Indians. The situation was made worse by the Gulf War. In so far as it led to rise in petroleum prices and caused virtual stoppage of remittances from Indian workers in the Gulf. These developments brought the country almost to the verge of default in respect of external payments liability which could only be averted by borrowing from IMF under standby arrangement and certain emergency measures taken by the government to restrict imports[38].

The new economic policy (NEP)

The NEP and subsequent policy amendments liberalised the industrial policy regime in the country especially as it applied to FDIs beyond recognition. The industrial approval system in all industries was abolished except for 18 strategic or environmentally sensitive industries. In 34 high priority industries, FDI up to 51 percent was to be approved automatically, if certain norms were satisfied. FDI proposals were then not necessarily have to be accompanied by technology transfer agreements. Trading companies engaged primarily in export activities were also allowed up to 51 percent foreign equity. To attract Multi National Enterprises in the energy sector, 100 percent foreign equity was permitted in the power generation sector. International companies were also allowed to explore non-associated natural gas and develop gas fields including laying down the pipelines and setting up of the liquefied petroleum gas projects. A new package for 100 percent export-oriented projects and companies in export processing zones was announced. Foreign Investment Promotion Board (FIPB) authorized to provide a single window clearance was set up in the Prime Minister's office to invite and felicitate investments in India by international companies. The existing companies were also allowed to raise foreign equity levels to 51 percent for proposed expansion in priority industries. The use of foreign brand names for goods manufactured by domestic industry, which was restricted earlier, was also liberalized. Further, India became a signatory to the Convention of the

[38] ibid

Multilateral Investment Guarantee Agency (MIGA) for protection of the foreign investments. The Foreign Exchange Regulation Act of 1973 has been amended and restrictions placed on foreign companies by the FERA were also lifted. Companies with more than 40 percent of the foreign equity were also treated on par with fully Indian-owned companies. New sectors such as mining, banking, telecommunications, highways construction and management were also thrown open to private, including foreign owned, companies. These relaxations and reforms of policies were accompanied by active courting of foreign investors at the highest levels. The international trade policy regime was considerably liberalized too with lower tariffs on most types of importable and sharp pruning of negative list for imports. The Rupee was made convertible first on trade and finally on current account[39].

Institutional Changes for FDI Inflows:

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a) *SIA and FIPB* -Within the government, the Department of Industrial Policy and Promotion (DIPP) is responsible for foreign investment, with the Secretary (DIPP) chairing the Foreign Investment Promotion Board (FIPB), the nodal agency for FDI. The Foreign Investment Implementation Authority (FIIA), designed to assist foreign direct investors with respect to post-approval operational problems is also serviced by the Secretariat for Industrial Assistance (SIA) in the DIPP.

The Secretariat for Industrial Assistance (SIA) under the Department of Industrial Policy & Promotion in the Ministry of Commerce & Industry provides information and assistance to Indian and foreign companies in setting up industries and also assist them in finding out joint venture partners. It functions as *the Secretariat* of the Foreign Investment Implementation Authority (FIAA). Once a project has been approved, the FIAA helps them in obtaining the required clearances. It also sorts out operational problems through constitution of Fast Track Committees (FTCs).

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[39] ibid.

The Foreign Investment Promotion Board (FIPB), on the other hand, is a committee of secretaries, with representations from Ministry of Finance, Ministry of External Affairs, Ministry of Small Scale Industries and Department of Commerce under the chairmanship of Secretary, Department of Industrial Policy & Promotion. The FIPB considers those projects, which require its approval. However, investments exceeding Rs.600 crores are required to get the approval of the Cabinet Committee on Foreign Investment (CCFI).

B) Foreign Technology Agreements - Foreign technology induction is encouraged both through FDI and through foreign technology agreements. India has one of the most liberal policy regimes with regard to technology agreements. Foreign technology collaborations are permitted either through automatic route or through FIPB

Automatic approval: RBI accords automatic approval for all industries for foreign technology collaboration agreements subject to:

1. The lump sum payments not exceeding US$ 2 million

2. Royalty payable is limited to 5 per cent for domestic sales and 8 per cent for exports subject to total payment of 8 per cent on sales over a 10 - year period.

3. The period for payment of royalty not exceeding 7 years from the date of commencement of commercial production, or 10 years from the date of agreement whichever is earlier.

FIPB Route[40]: For the following categories, Government approval is necessary:

1. Proposals attracting compulsory licensing.

2. Items of manufacture reserved for the small-scale sector.

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[40] **Foreign Investment Promotion Board (FIPB)** of the Government of India is constituted mainly to promote inflows of FDI into the country, as also to provide appropriate institutional arrangements, transparent procedures and guidelines for investment promotion and to consider and approve/recommend proposals for foreign investment. Indian companies getting foreign investment approval through FIPB route do not require any further clearance from RBI for the purpose of receiving inward remittance and issue of shares to the foreign investors. These Companies are required to notify the RBI of receipt of inward remittances within 30 days of such receipt and file required documentation within 30 days of issue of shares to Foreign Investors.

3. Proposals involving any previous joint venture or technology transfer / trade mark agreement in the same or allied field in India.

4. Extension of foreign technology collaboration agreements (including those cases which may have received automatic approval in the first instance).

5. Proposals not meeting any or all of the parameters for automatic approval.

The different components of foreign technology collaboration such as technical know how fees, payment for design and drawing, payment for engineering service and royalty are eligible for approval through the automatic route, and by the Government. Payments for hiring of foreign technicians, deputation of Indian technicians abroad, and testing of indigenous raw material, products; indigenously developed technology in foreign countries are, however, governed by separate RBI procedures and rules and are not covered by the foreign technology collaboration approval. Similarly payments for imports of plant and machinery and raw material are also not covered by the foreign technology collaboration approval for which RBI is the competent authority.

c) *Special Economic Zone* (SEZs) – Special Economic Zone scheme was launched in April 2000 with the specific intends of providing an internationally competitive and hassle free environment for exports. Salient features of this scheme being:

1. Units may be set up in SEZs for trading, manufacture, re-conditioning, and repair or service activity.

2. Units in SEZs enjoy relaxation in regard to Industrial Licensing, SSI reservation, FDI, FEMA and Customs and Excise Acts, in comparison to those in the Domestic Tariff Area (DTA).

3. Units in SEZs can import capital goods and raw materials duty free and may access the same from DTA from bonded warehouses without payment of duty.

4. Purchases of finished products from DTA to SEZs, to be on duties as applicable to imports. Since such supplies from DTA would be regarded

as 'deemed exports', they would be exempt from payment of central excise duty and central sales tax.

5. Units in SEZ could sell 50 per cent of the FOB value of exports in the DTA subject to payment of applicable duties and fulfillment of minimum net foreign exchange earning (NFEE) requirement. Units in SEZs may further sell finished products to DTA, which are freely importable or are allowed against other import licenses.

6. Supplies affected in DTA against payment in foreign exchange shall be counted towards fulfillment of export performance and NFEE requirement.

7. Retention of 100 per cent of exports earnings in EEFC account and allowed for repatriation without any dividend-balancing requirement.

SEZs are being increasingly perceived as a major source of attracting FDI across the globe. It needs to be stressed that a large number of Free Trade Zones (FTZs)/ Export Processing Zones (EPZs)/ Special Economic Zones (SEZs) operating in the developing countries are aggressively competing with each other, thereby providing the foreign investors a choice to invest[41].

Flow of FDI through Institutional Channel

Table 3.1 shows route-wise approval of FDI inflow and year-wise share to total FDI amount of respective year. Total amount of FDI from 1991-2008 (January) was Rs 2902443.70 millions. In the total FDI amount the highest share was from Automatic route 34.20% followed by FIPB & SIA board 32.14%, acquisition of share in foreign Institution 22.34% and rest of routes combined share was 11.30%. In the year 1991 only two channel of approval of FDI, first was FIPB & SIA board and there share was 54.09 percent and another Reserve Bank of India NRI's scheme share was 45.06 percent [special NRI scheme administered by RBI from 01.01.1991 to 31.12.02 in 1991 Rs1623.0 million and in 2002 only

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[41] Government of India (2002), Planning Commission, Report of the Steering Group on Foreign Direct Investment, 2002, New Delhi.

Rs110.8 million (0.06%) approval amount came].

Compared to the share trend of Automatic and FIPB & SIA route in starting year 1992, FIPB & SIA share was 70.99%. It is ten times higher than Automatic route, which is 6.87%. But in 2002 FIPB & SIA approval share starts to decline with 38.24% and came down at 12.52% in January 2008. On the other side in 2002 Automatic route share started rise from 13.74% and reach to 50.00% in January 2008. Approval of FDI inflow through share acquisition started in 1996 that was only 3.47% (RS 3038.0 million) which increased sharply and in January 2008 it increased to 37.48%. FDI through Stock swapped was highest in 2007 year when it reaches at 17.86%. Last Closing balance of advance route get FDI approval from 1991 its 6.92% to 2004 was 14.39%. Out of total FDI approval amount, its share was 3.40%.

Table 3.1: ROUTE-WISE FDI IN INDIA (1991-2008)

Year	%FIPB,SIA	%Automatic	%SHARE	% RBI'S-NRI'S	% S.SWAPPED	%CLOSE BAL.	TOTAL
1991	54.09			45.91			100.00
1992	70.99	6.87		22.14			100.00
1993	55.93	13.27		31.12			100.32
1994	51.55	11.65		36.80			100.00
1995	61.17	8.17		30.65			100.00
1996	65.89	7.08	3.47	23.56			100.00
1997	77.97	6.68	7.34	8.00			100.00
1998	62.10	4.60	30.59	2.71			100.00
1999	60.88	7.48	19.29	3.43		8.92	100.00
2000	51.29	13.74	16.66	2.82		15.48	100.00
2001	57.45	19.32	17.66	1.37		4.21	100.00
2002	38.24	21.45	28.92	0.06	0.46	10.87	100.00
2003	36.98	20.14	25.21		1.48	16.19	100.00
2004	28.10	31.40	26.11			14.39	100.00
2005	25.77	35.59	38.50		0.15		100.00
2006	13.84	63.90	22.27				100.00
2007	13.53	45.27	23.34		17.86		100.00
2008	12.52	50.00	37.48				100.00
TOT	32.14	34.20	22.34	2.90	5.00	3.40	100.00

Source: DIPP, SIA News Letters, Feb. 2008.

Tab 3.2: Foreign Collaboration Approvals in India (1991 -2004)

Year	No. of Approved Collaborations Financ ial	Technic al	Total	% of Financial Collaborati on	% of Technical Collaborati on	Total	%of Foreign Investme nt
1991	289	661	950	30.42	69.58	5.3	0.20
1992	692	828	1520	45.53	54.47	38.9	1.44
1993	785	691	1476	53.18	46.82	88.6	3.28
1994	1062	792	1854	57.28	42.72	141.9	5.26
1995	1355	982	2337	57.98	42.02	320.7	11.88
1996	1559	744	2303	67.69	32.31	361.5	13.40
1997	1665	660	2325	71.61	28.39	548.9	20.34
1998	1191	595	1786	66.69	33.31	308.1	11.42
1999	1726	498	2224	77.61	22.39	283.6	10.51
2000	1702	418	2120	80.29	19.71	172.3	6.38
2001	1976	288	2264	87.27	12.73	209.4	7.76
2002	1986	307	2293	86.61	13.39	110.6	4.10
2003	1550	321	1871	82.84	17.15	54.2	2.01
2004*	1010	86	1096	92.15	7.85	54.6	2.02
Total	18548	7871	26419	70.2	29.8	2698.6	100.00

Source: DIPP, SIA News letter, Sept. 2008.

Table 3.3: Approval of Foreign Collaborations and FDI in India

Year	Number of collaboration	coll (%)
1985	1024	3.26
1986	957	3.04
1987	853	2.71
1988	926	2.95
1989	605	1.92
1990	666	2.12
1991	950	3.02
1992	1520	4.84
1993	1476	4.70
1994	1854	5.90
1995	2337	7.43
1996	2303	7.33
1997	2325	7.40

1998	1786	5.68
1999	2224	7.07
2000	2120	6.74
2001	2264	7.20
2002	2278	7.25
2003	1871	5.95
2004*	1096	3.49
TOTAL	31435	100.00

Note: Figure is till August 2004

Source: DIPP, SIA News letter, Sept. 2008.

Figure 3.1: Total Number of Collaborations (1985-2004)

Total Number of Collaborations (1985-2004)
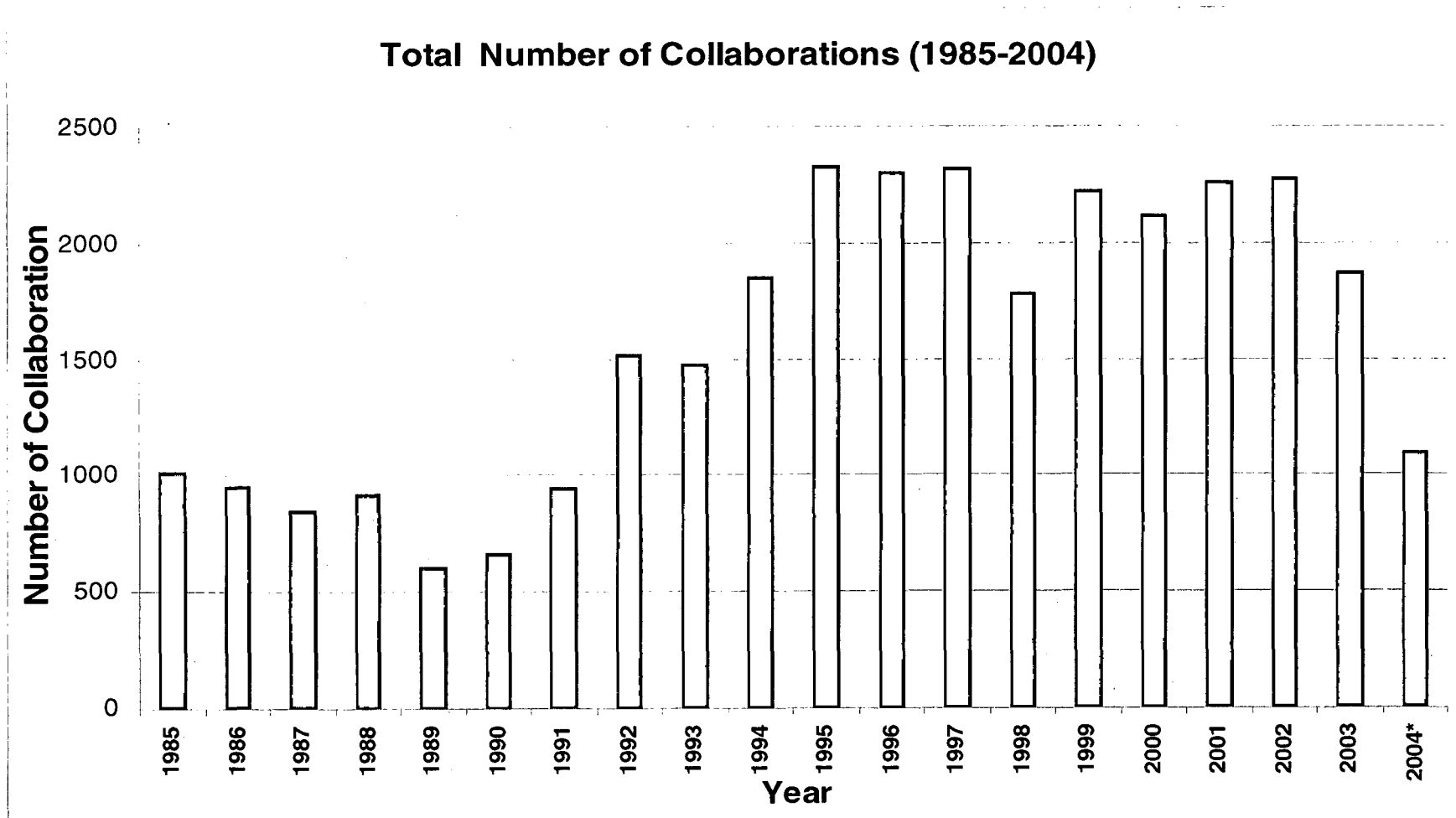
Historically, India's policy has been to encourage technology imports without financial participation by the technology supplier. This was intended to give the much needed boost to technological development as the recipients of foreign technology were expected to absorb the technology and develop further with the help of their own R&D and without the restrictions imposed by foreign collaborators. However there was pressure from domestic interests to alter this. In particular, this requirement was usually violated so that often the same technology was available under different brand names. More importantly, after 1969 policy on foreign collaborations was made more specific and integrated into the overall policy on foreign investment.

Table 3.4: Foreign Collaboration Approvals in India by SIA,RBI,FIPB (1991- 2004)

	Total Number of Foreign Collaboration Approvals						
	By						
Year	SIA	% of Total	RBI	% of Total	FIPB	% of Total	Total
1991	760	80	188	19.79	2	0.21	950
1992	585	38.49	736	48.42	199	13.09	1520
1993	307	20.8	676	45.8	493	33.4	1476
1994	382	20.6	702	37.86	770	41.53	1854
1995	593	25.37	799	34.19	945	40.44	2337
1996	410	17.8	719	31.22	1174	50.98	2303
1997	167	7.18	801	34.45	1357	58.37	2325
1998	193	10.81	432	24.19	1161	65.01	1786
1999	221	9.94	571	25.67	1432	64.39	2224
2000	197	9.24	551	25.99	1372	64.71	2120
2001	207	9.14	1132	50	925	40.85	2264
2002	420	18.43	1010	44.33	848	37.22	2278
2003	230	12.29	898	47.99	743	39.71	1871
2004*	67	6.1	536	48.9	493	44.98	1096
Total-91-04	4739	17.94	9751	36.93	11914	45.12	26404

Source: DIPP, SIA New Letters,
Note: 2004* Figures are till August 2004.

Figure 3.2: Number of Approved FDI Collaboration in India (1991-2004)
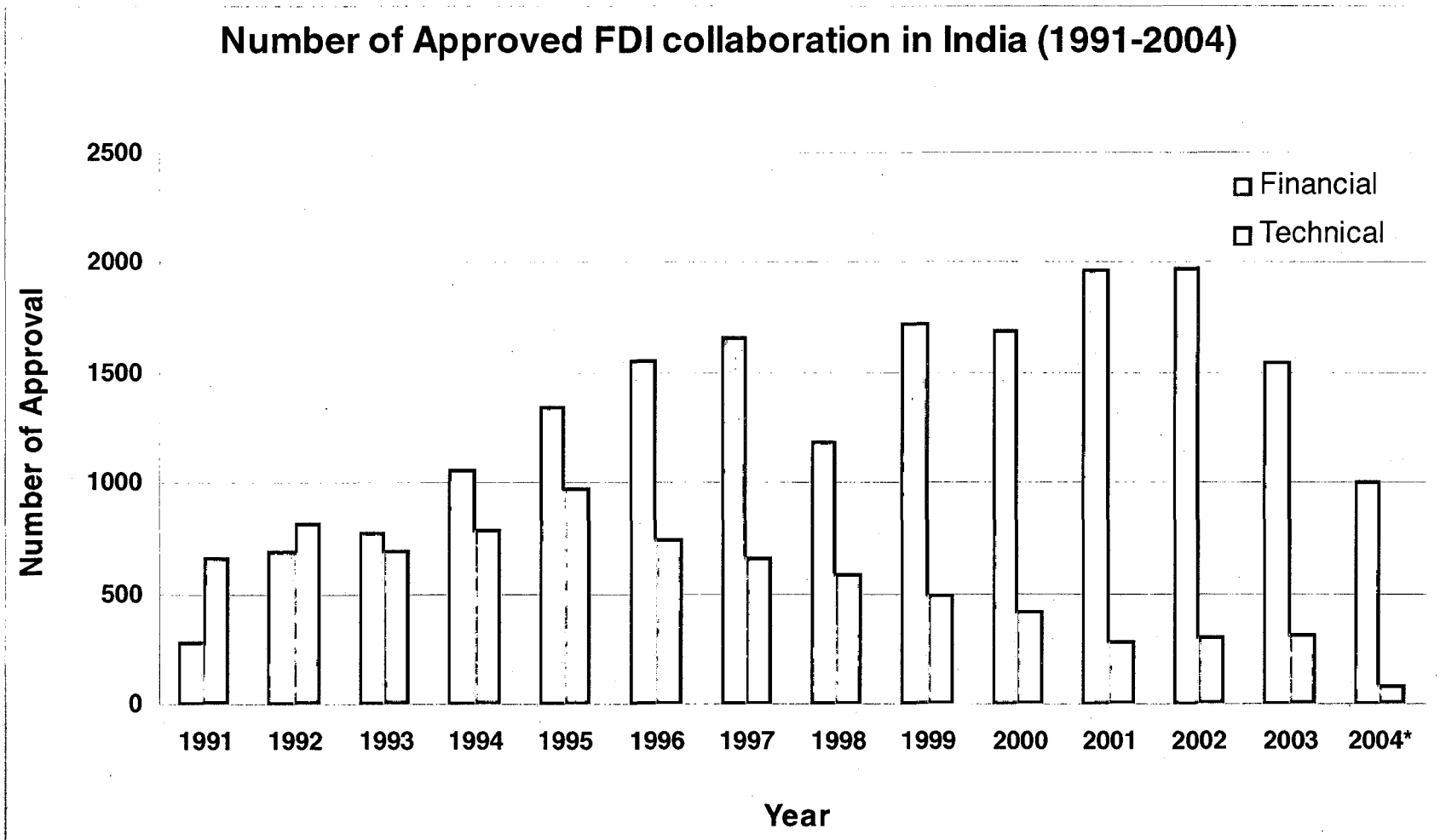
Total Foreign Approvals by SIA,RBI,FIPB-1991-2004
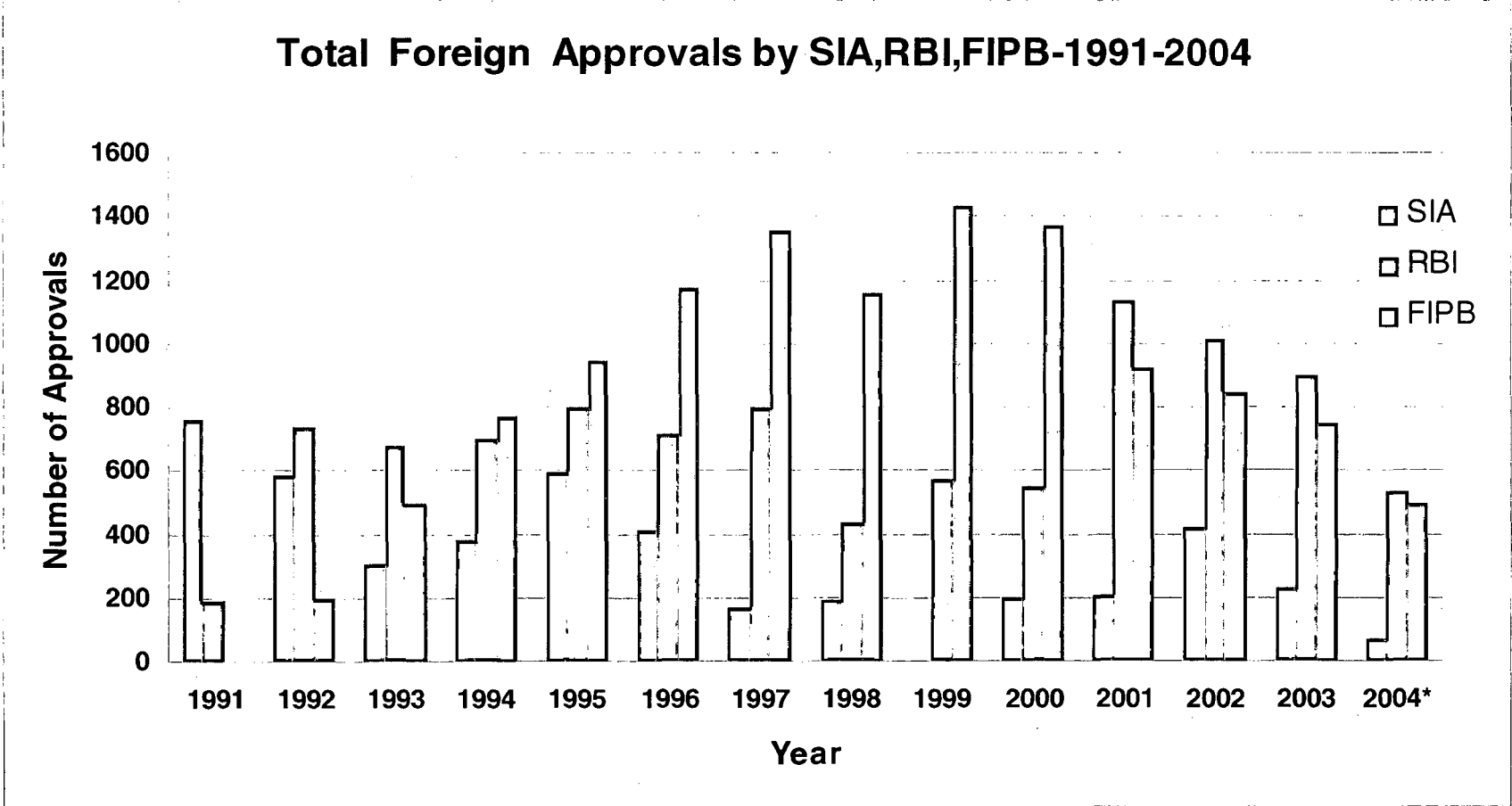
However, subsequently the phrase *'indigenous'* was replaced by *'sophisticated and high technology'*. The specific purpose of a separate treatment of collaborations was unpacking of a technology so that only the essential elements remain[42].

The Main Thrust to encourage foreign collaboration came in 1980's in the Technology Policy Statement of 1983. Essentially collaboration can take the form of either *financial collaboration* or *technical collaboration* or both. A financial collaboration can take the form of equity inflows or loans where as a technical collaboration is one where the foreign collaborator undertakes to sell technical design and drawings on the basis of a lump sum fee or royalty which is specified in the agreement. In actual practice collaborations tend to have elements of both financial and technical agreements. There are some restrictions to collaboration agreements[43].

Table 3.5: Foreign Investment Approvals in India by SIA, RBI, FIPB (1991-1999)

	Total Amount of Foreign Investment Involved						
	(Rs. In Billions)						
Year	SIA	% of Total	RBI	% of Total	FIPB	% of Total	Total
1991	3.6	67.92	1.4	26.42	0.3	5.66	5.3
1992	4.2	10.8	7.8	20.05	26.9	69.15	38.9
1993	1.6	1.81	6.6	7.45	80.4	90.74	88.6
1994	3.2	2.26	5.3	3.74	133.4	94.01	141.9
1995	3	0.94	5.4	1.68	312.3	97.38	320.7
1996	11.8	3.26	12.5	3.46	337.2	93.28	361.5
1997	3.2	0.58	92.7	16.89	453	82.53	548.9
1998	7.2	2.34	1.9	0.62	299	97.05	308.1
1999	0.1	0.04	9.9	3.49	273.6	96.47	283.6

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[42] Pant Manoj (1995), 'Foreign direct Investment in India: The Issue Involved', New Delhi: Lancer Book.-

[43] Ibid.

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2000	1.9	1.1	15.7	9.11	154.7	89.78	172.3
2001	7.9	3.7	23.5	11.22	178	85	209.4
2002	10.1	9.13	27.8	25.13	72.7	65.73	110.6
2003	3.1	5.71	13.2	24.35	37.9	.69.92	54.2
2004*	0.6	1.09	16.6	30.4	37.4	68.49	54.6
Total '91-04'	**61.5**	2.27	**240.3**	8.9	**2396.8**	88.78	**2698.6**

Source: SIA Newsletter, January 2004.

The increased in the number of foreign collaborations from 1985 to 2004 is encouraging (see Figure 3.1). It is clear that after adoption of the new economic policy investment proposals and their approval by the Government increased drastically. The size of the foreign investments approved in 1991 was Rs.5.3 billions, number of collaboration was 950 (0.21 percent of the total approved collaboration from 1991-04, see Table 3.5). When compared, the approvals of investment that rise was noticed from 1991 where the investment was 5.3 billions which was 0.20 percent of the total investment from 1991-2004. In the later three years (1992, 1993 & 1994) sudden rise in the total number of collaboration (1520, 1476 & 1854) as well as in the approved foreign total investment were noticed (respectively Rs 38.9, 88, 6 & 141.9 millions). Approval was 661 with 30.42 percent financial and 76.76 percent technical collaborations. The largest number of approvals were made in 1995 which were 2337, i.e., 13.93 percent of the total with 57.28 percent financial and 42.72 percent technical collaborations and an investment of Rs.320. billions (11.88 percent of the total). The peak year during the 1990's was 1997 when the total investment was 54890 billions (20.34 percent of the total investment in India from1991-2004). The numbers of approvals were 2325 where 71.61 percent was financial and 28.39 percent were technical collaborations. Since the adoption of SAP in 1991, the total amount of approval is Rs. 2698.6 in billions i.e. an average of Rs. 192.75 billions per annum. Out of this Rs. 2423.9 billions i.e. 89.82 percent were approved between 1995 to August 2004.

To examine the relative position of FDI in the Indian economy, a pre requisite for it is to be able to exert significant influence on her economic development. Compared to many developing countries, the relative magnitude of FDI in the economy in India is small but it is increasing. As per the latest available data, the ratio of FDI stock to gross domestic product (GDP) increased from 0.5 per cent in 1990 to 5.9 per cent in 2004 (UNCTAD, 2005) and that of FDI inflows to gross fixed capital formation (GFCF) increased from 0.2 per cent in 1991 to 3.4 per cent in 2004[44].

A comparison between the foreign collaboration and investment from 1991's to 2000's shows a variation between the number of approvals as well as the amount invested (see Table 3.2 and Table 3.3 and Fig 3.2 Fig 3.3). In the 1991s, the total collaboration was 10324, but in 2004's the total number were 26419 its double times increase within the fourteen year's the amount also increased from Rs. 209.76 billions to 2698.6 from the1991 to 2004's.. The main Difference between the two periods is that numbers of technical collaboration was dominant (69.58 percent) and financial collaboration was only 30.2 percent.

[44] Rao. K S C & M R Murthy (2006), 'Towards Understanding the State-wise Distribution of Foreign Direct Investments-in the Post-Liberalisation Period', ISID Working Paper-2006/01,New Delhi no-4.

Table 3.6: Foreign Financial Collaboration in India by SIA, RBI, FIPB (1991-1999)

Total Number of Foreign Collaboration (Financial) Approvals							
Year	SIA	% of Tot	RBI	% of Tot	FIPB	% of Tot	Total
1991	246	85.12	41	14.19	2	0.69	289
1992	243	35.12	251	36.27	198	28.61	692
1993	59	7.52	235	29.94	491	62.55	785
1994	92	8.66	201	18.93	769	72.41	1062
1995	165	12.18	247	18.23	943	69.59	1355
1996	99	6.35	295	18.92	1165	74.73	1559
1997	48	2.88	385	23.12	1232	73.99	1665
1998	64	5.37	31	2.6	1096	92.02	1191
1999	51	2.95	247	1431	1428	82.73	1726
2000	65	3.81	265	15.56	1372	80.61	1702
2001	131	6.62	920	46.55	925	46.81	1976
2002	298	15	848	42.69	840	42.29	1986
2003	92	5.93	715	46.12	743	47.93	1550
2004*	4	0.39	513	50.79	493	48.81	1010

Source: SIA Newsletter, September,2004.

Note- *2004 data was available at August month.

After the adoption of the New Economic Policy in 1991 the atmosphere of foreign investment totally changed due to exemption in the regulation. So there is a rise in the financial collaborations (92.15 percent) and the technical collaborations have been reduced to 7.85 percent in 2004. The reason behind this decline in technical collaboration agreements is 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 financial collaboration agreement becomes necessary only when payments have to be made abroad.

Tab:3.7 Foreign Technical Collaboration Approvals in India (1991 -2004)

Year	SIA	% of Tot	RBI	% of Tot	FIPB	% of Tot	Total
1991	514	77.76	147	22.24	0	0.00	661
1992	342	41.30	485	58.57	1	0.12	828
1993	248	35.89	441	63.82	2	0.29	691
1994	290	36.62	501	63.26	1	0.13	792
1995	428	43.58	552	56.21	2	0.00	982
1996	311	41.80	424	56.99	9	1.21	744
1997	199	30.15	416	63.03	125	18.94	660
1998	129	21.68	401	67.39	65	10.92	595
1999	170	34.14	324	65.06	4	0.80	498
2000	132	31.58	286	68.42	0	0.00	418
2001	76	26.39	212	73.61	0	0.00	288
2002	122	39.74	185	60.26	0	0.00	307
2003	138	42.99	183	57.01	0	0.00	321
2004*	63	73.26	23	26.74	0	0.00	86
Total '91-04'	3162	40.17	4580	58.19	209	2.66	7871

Source: SIA Newsletters, August 2004

Some of the foreign companies which; initially entered into only technology licensing agreements have later on acquired equity shares in such collaborations. Thus, a purely technology transfer agreement 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 the 1991's. These observations tend to indicate the decreasing importance of arms-length transfer of technology, which is giving way to technology transfer among other affiliates. Technology may then remain closely held by foreign companies with little chance of further local development. Some of the technical collaborations approved in case of large MNC's shed doubt about the real purpose of the agreement as also the possible behavior of the MNC subsidiaries. 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 horizontal[45]. In case of technical collaboration agreements automatic approval procedure is much more effective. In total 7871 (29.8 percent) technical collaboration agreements (see Table 3.6) from 1991-04, the RBI granted 58.09 percent followed by SIA (40.17 percent) and FIPB (2.66 percent). The number of financial collaborations in the total approvals has increased rapidly during the 1990's. Out of 18548 financial collaboration from 1991-04 (see Table 3.5), the FIPB granted 11914 approvals (45.12 percent), RBI 9751 approvals (36.93 percent) and SIA 4739 approvals (17.94 percent).

Sector or Industry wise Approvals

Industry-wise break up of FDI in India shows; which are the sectors who are able to take advantage of the New Economic Policy (NEP. After the new economic policy many public reserved sector gradually eliminated as a matter of deliberate policy, was reopened to foreign investor, so more and more sector coming under private sector.

During the period (1991-04) total foreign investment has been Rs.2476643 million and 26117 number of foreign collaboration out of total number of collaboration 7635 in technical collaboration with share 29.23% percent and 18482 in financial collaboration with 76.77 % percent. It shows in that in all sector financial collaboration is more than Technical approvals. Electrical Equipment approved highest number of Financial and Technical number of collaboration (1244 and 4660) with share of 21.07% and 78.97%. But Industrial Machinery accounted highest share of the Technical approvals 858 number with (56.19%). Highest share has been in fuel and power and oil refinery sector 28.2% of the total share followed by Telecommunication with 16.7 percent after that transport industry come with 8.39 percent and electrical equipment industry and service industry with 7.56 and 6.7 respectively. More

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[45] Ibid.

than 60% of share comes under the five major sectors (Fuel and Power and Oil refinery, Telecommunication sector, Service sector, Miscellaneous Industries, Electrical Equipment). These five sector show growth in their year wise foreign investment. From 2004 onward highest upward moving sector has been in Electrical & Service sector with the share (23.87 % and 16.34%) in 2005 and 2006 with (18.37% and 35.46%) respectively. Telecommunication is on third position with Rs 43541.1 millions and (14.96%) in the year 2006.

This shows that in only few sectors like service sector and Telecommunication getting highest share of investment. Engineering, Services, Electronics and Electrical equipment and Computers were the main sectors receiving FDI in 2000-01. Domestic appliances, finance, food & diary products which were important sectors attracting FDI in the early nineties, have now seen a downward trend in the latter half of the nineties. Services and computer have seen an increasing trend in the latter half of the nineties. The inflow of FDI into computers increased from 6 per cent in 1999-00 to 16 per cent in 2000-01. On the whole there have been significant changes in the pattern and composition of FDI inflows with few clear trends over the decade as whole[46].

TABLE 3.8 SECTROAL SHARE OF FDI IN INDIA (1991-2004)

S.No	Sector	(%)FIN	(%)TECH	FDI (Rs)*	FDI (%)
1	ELECTRICALS EQUIPMENT	21.07	78.930	187261.13	7.56
2	CHEMICALS (OT. THAN FERT.)	44.46	55.538	117129.36	4.73
3	TRANSPORTATION INDUSTRY	38.66	61.339	207669.83	8.39
4	INDUSTRIAL MACHINERY	56.19	43.811	15873.49	0.64
5	Others (Misc Industries)	37.68	62.325	31838.84	1.29
6	SERVICE SECTOR	5.01	94.993	165820.76	6.7
7	MIS. MECHANICAL & ENGG.	40.04	59.963	18607.21	0.75
8	FUELS (POW & OIL REF)	29.54	70.459	697471.46	28.16
9	CONSULTANCY SERV.	12.63	87.368	24529.09	0.99
10	FOOD PROCESSING IND	17.39	82.609	95457.38	3.85
11	TELECOMMUNIC.	13.93	86.069	413682.76	16.7
12	TEXTILES (INC DY, PRINTED)	20.66	79.336	29374.57	1.19
13	TRADING	2.48	97.525	32681.21	1.32
14	METALL. IND.	46.26	53.739	154050.32	6.22
15	HOTEL & TOURISM	29.11	70.895	49082.15	1.98
16	DRUGS AND PHARM.	42.28	57.717	27530.67	1.11
17	RUBBER GOODS	45.42	54.582	14200.86	0.57

[46] Government of India (2002), Planning Commission, Report of the Steering Group on Foreign Direct Investment, 2002, New Delhi.

18	CERAMICS.	25.10	74.897	6376.54	0.26
19	MACHINE TOOLS.	38.89	61.111	4137.55	0.17
20	INDUSTRIAL INSTRU.	53.10	46.903	1673.56	0.07
21	LEATHER, LEATHER	19.56	80.444	5760.03	0.23
22	PAPER AND PAPER PRODUCT	32.34	67.662	31131.26	1.26
23	GLASS	28.39	71.613	25223.03	1.02
24	MEDICAL AND SURGICAL APP.	25.17	74.825	3897.08	0.16
25	COMMERCIAL, OFF & H.H EQ	33.61	66.387	11654.41	0.47
26	CEMENT & GYPSUM PRODUCTS	36.13	63.866	19571.36	0.79
27	FERMENTATION INDUS.	28.74	71.264	15366.19	0.62
28	BOILERS AND STEAM PLANTS	57.47	42.529	1471.58	0.06
29	EARTH-MOVING MACH.	58.02	41.975	2489.25	0.1
30	FERTILIZERS	81.94	18.056	1476.53	0.06
31	SOAPS, COSM & TOILET PREP.	34.29	65.714	3817.9	0.15
32	VEG OILS AND VANASPATI	6.25	93.750	3081.68	0.12
33	PRIME MOVERS OT. THAN ELCT.	62.30	37.705	917.24	0.04
34	AGRICULTURAL MACHINERY	64.00	36.000	4577.85	0.18
35	SCIENTIFIC INSTRUMENTS	35.42	64.583	658.09	0.03
36	PHOTOGRAPHIC & PAPER	36.36	63.636	2382.49	0.1
37	DYE-STUFFS	20.83	79.167	1233.5	0.05
38	TIMBER PRODUCTS	13.04	86.957	364.44	0.01
39	SUGAR	6.25	93.750	10634.28	0.43
40	DEFENCE INDUS	100.00	0.000	0	0
41	MATHEMATICAL, DRAWING	33.33	66.667	383.7	0.02
42	GLUE AND GELATIN	20.00	80.000	19.33	0
43	**Sector Total**	**33.41**	**66.593**	**67921.87**	**2.74**
44	**Grand Total**	**29.23**	**70.766**	**2476642.96**	

Source: DIPP, SIA News Letters, Sept. 2004

Figure 3.4: Sector wise Number of FDI approvals (1991-2004)

Sector wise number of FDI Approvals (1991-2004)
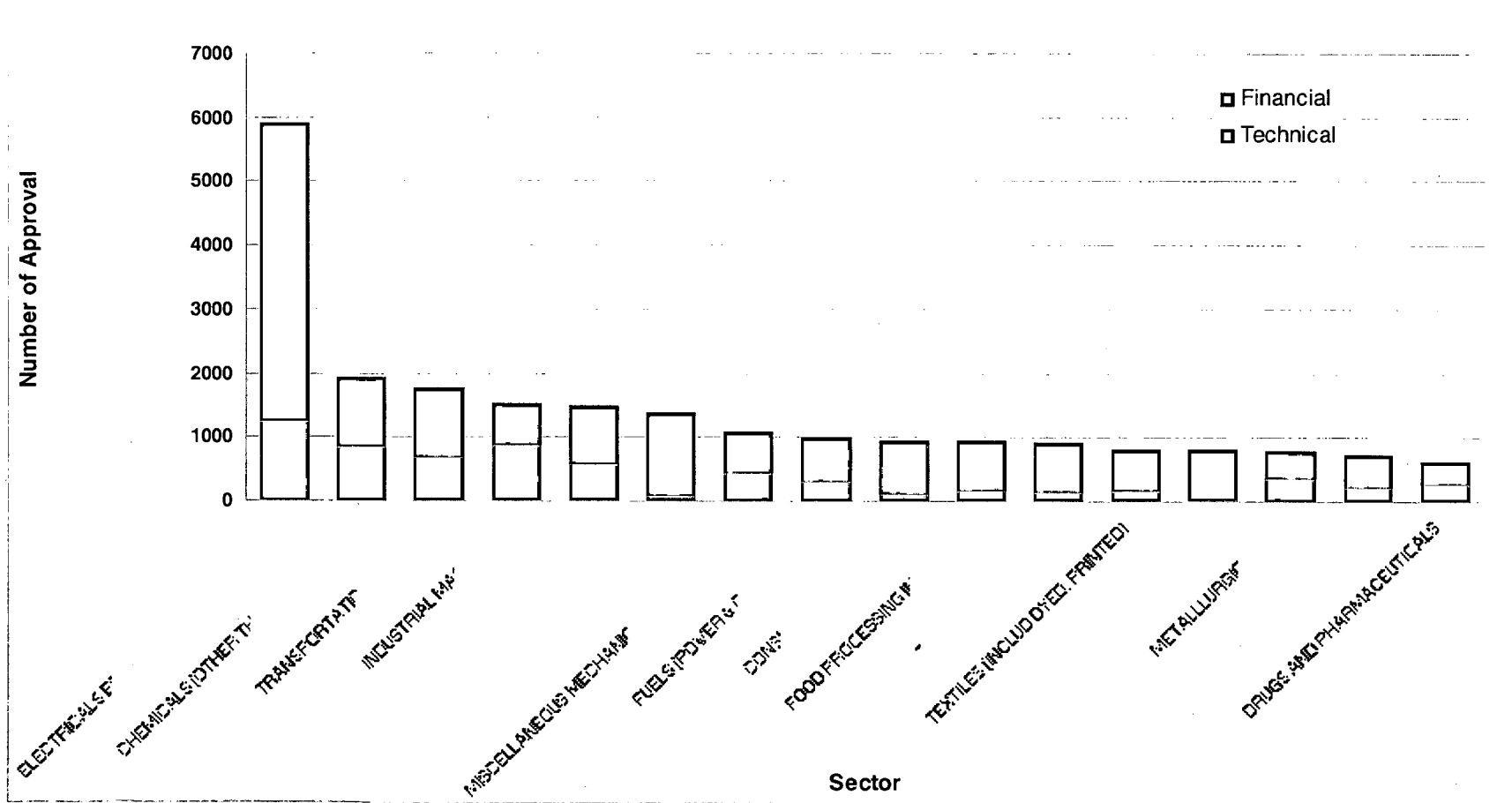
Country wise Distribution of FDI Approvals

Given the relative freedom now offered to foreign investors, one should expect that the sources of foreign investment would get further diversified. Developed countries account for nearly the entire stock of FDI in India. Over the years, however, the relative share of individual countries has undergone changes. At the same time, since many large MNC's are based in the developed country and they have gained a better foothold in India. At the end of 1991-2004 (see Table 3.9) Mauritius occupied the highest position followed by USA, Singapore, U.A.E and U.K. The four countries had a combined share of 82.7 percent. As better technology does not appear to be a special consideration for permitting new investments, one might witness a diversification of sources of investment.

Table 3.9: Country wise Distribution of FDI Approvals

SI No	Country	1991-1999 (Aug-Dec)	2000 (Jan-Dec)	2001 (Jan-Dec)	2002 (Jan-Dec)	2003 (Jan-Dec)	2004 (Jan-Dec)	2005 (Jan-Dec)	2006 (Jan-Dec)	Total in (%)
1	Mauritius	30.60	34.92	45.93	48.75	30.01	33.49	55.62	49.14	42.78
2	U.S.A.	20.51	17.61	10.12	9.08	22.09	21.61	12.24	7.34	14.40
3	U.K.	5.47	2.75	7.86	11.37	10.01	4.78	5.66	17.30	9.70
4	Netherlands	11.05	11.37	13.94	3.53	13.48	16.52	3.12	4.97	6.58
5	Japan	7.29	9.65	6.10	13.25	5.04	3.87	4.40	1.16	5.63
6	Singapore	3.04	4.91	0.98	1.51	1.95	2.07	8.38	6.31	4.21
7	Germany	5.77	3.63	3.66	4.44	4.21	5.28	2.18	3.09	4.20
8	France	2.37	3.34	3.64	3.55	1.91	3.84	0.76	0.86	2.24
9	Korea(S)	5.14	0.75	0.12	1.21	1.31	0.89	1.74	0.65	1.96
10	Switzerland	1.95	1.83	1.09	1.68	4.98	2.28	2.18	0.70	1.74
11	Italy	2.26	5.71	0.98	0.15	0.72	0.85	0.85	0.57	1.39
12	Bermuda	0.25	0.12	0.89	0.11	0.01	0.10	0.00	4.10	1.32
13	Sweden	1.22	2.49	2.75	0.58	2.44	2.49	0.81	0.06	1.23
14	U.A.E.	0.09	0.03	0.63	0.40	0.96	0.98	1.24	2.43	1.06
15	Hongkong	2.37	0.57	0.16	0.24	0.14	0.80	0.73	0.47	0.95
16	Belgium	0.61	0.33	1.13	0.14	0.74	0.15	0.07	0.85	0.59
17	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: DIPP, SIA News Letter, Feb 2007.

Figure 3.5: Country wise Number of FDI Approvals (1991-2004)

Country wise numbe of FDI Approvals (1991-2004)
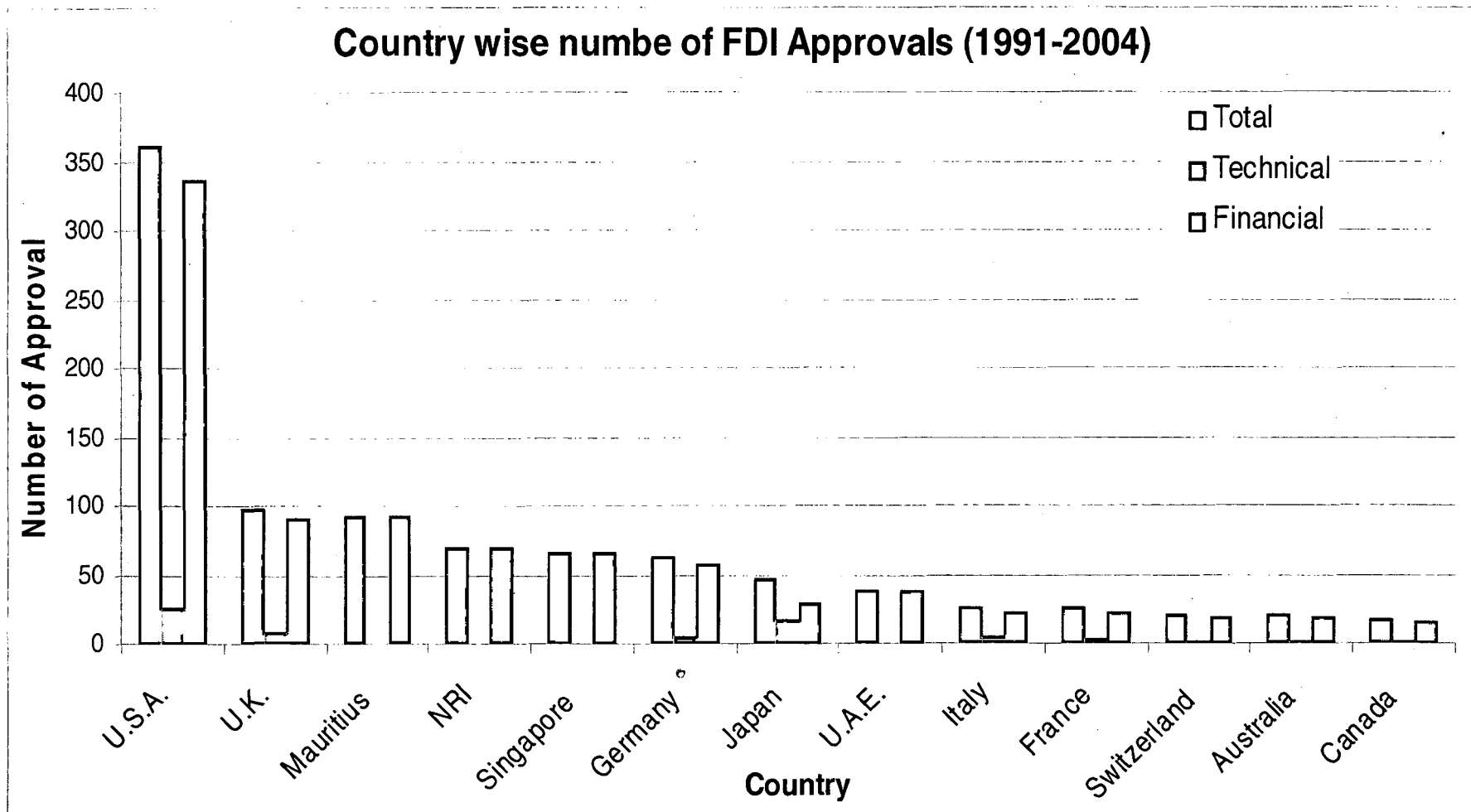
Conclusion

1.   It is clear from the above discussion that there has been a substantial rise in the foreign direct investment in India after Liberalilsation in 1991. The total FDI inflow increased from Rs 3514.3 million in 1991 to Rs 797356.40 million in 2007.

2.   Route wise trends show that in the initial years FIPB and SIA board sanctioned more FDI, however, from 2003 onward there has been a decline. At present FDI through Automatic Route accounts for the maximum amount of FDI inflow in India. This is due to more incentives provided by the government to attract more FDI in the country.

3.   Maximum approval has been made under financial collaborations, which is 70.2 percent of the total approval made from 1991 to 2002. Number of approvals more than doubled from 1991 to 2002 (950 approval in 1991 to 1871 in 2002). Approval foreign financial collaborations are made mainly through RBI (50.79 %) and FIPB (48.18 %). Sectoral approval has shown a major shift from core sector to services sector after liberalization in 1991.

Chapter IV

Spatial and Sectoral Analysis of FDI

Introduction

The main purpose of this chapter is to examine the impact of the New Economic Policy (NEP) on state level FDI inflow through assessment of spatial distribution foreign direct investment which acts as growth engine of an economy. Also an attempt has been made to analyse the availability of necessary conditions that attracts the inflow of FDI in a particular state.

The recent decade has seen fundamental changes in the world economy and the process of economic development of regions. These changes are associated with the new International economic order and the extensively spatial spread of International capital leading to considerable reconstruction of the economy in the different parts of the world. The structure of relations between countries and inflow of International capital is interpreted in traditional economic analysis as basically one involving a harmony of interests. It is viewed that mutual benefits can arise from the promotion of new economic activities induced by the flow of factor of production, goods and service across national boundaries[47].

As in most developing countries, the perceived benefits of Foreign Direct Investment (FDI), have led to a heavy emphasis being placed on attracting large sums of FDI to India in the post liberalisation period. Within the country, the same perception has led to different states to via with each other for the location of foreign investment[48]. In general, India's development strategy has largely

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[47] Swapna Banerjee-Guha (1990), 'Spatial spread of Multinational Corporations in Developing Countries and Some , related aspects' Social Scientist, vol.18 , no.1/2 (Jan-Feb1990),

[48] K S C Rao & M R Murthy (2006), 'Towards Understanding the State-wise Distribution of Foreign Direct Investments in the Post-Liberalisation Period',ISID Working Paper-2006/01, ND.

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been a spatial. Though balanced regional development has been the avowed goal, the actual thrust of any policy is the actual thrust of economic growth. If the NEP follows the same route, the regional disparities in economic development are going to increase, at least in the foreseeable future[49].

Location Factor and FDI Inflow

The issue of location of FDI at the regional level in the context of balanced regional development as also in the states' desire to attract investment as a means of employment generation and as a strategy of economic development. Barring situations of extractive industries and those based on natural resources, it is observed that FDI generally flows into developed areas. Further, investors from certain countries tend to go to areas where other establishments from the same country are located. This is likely to further result in FDI getting concentrated in certain regions of various economies. For instance, in China more than 85 percent of FDI is concentrated in the eastern region, in Brazil the southeastern region accounted for 87.5 percent of the assets of all companies with foreign participation and in Russia 10 out of 89 regions attracted 83 per cent of the total FDI. One of the factors responsible for this phenomenon is the fact that FDI tends to take advantage of agglomeration economies and is influenced, probably more than domestic investments, by the demonstration effect. Industrial licensing system under the IDRA had been a major policy instrument for influencing the location of large projects in India. Industrial undertakings are now free to select the location for a project. The only restriction is in the case of cities with populations of more than a million as per the 1991 census. The proposed location should be at least 25 km away from the Standard Urban Area limits of that city unless the project is to be located in an area that has been designated as an 'industrial area' before 25 July 1991. Similarly, exceptions are also available for electronics, computer software, printing and any

[49] Sanjoy Chakravorty (2000), 'How Does Structural Reform Affect Regional Development? Resolving Contradictory Theory with Evidence from India' *Economic Geography'*, Vol. 76, No. 4, (Oct., 2000), pp. 367-394, Clark University

other industry which may be notified as a 'non☐polluting industry'. Relaxation in the locational restriction is possible if an industrial licence is obtained as per the notified procedure. Location of industrial units is further regulated by local zoning and land use as well as environmental regulations. Statutory clearances relating to pollution control and environment protection are also required from the Ministry of Environment, Government of India for setting up industrial projects in respect of 29 industries. There are, however, no restrictions on setting up administrative and other central offices. Similar is the case with service enterprises

Foreign direct investment usually refers to the participation of a foreign investor in the risk capital of an existing or a new undertaking and also having a say in the management. The most common form of FDI flow is through participation in risk capital of the host country's joint stock companies. Some of the important ways in which FDI can enter a host country are:

i. Acquiring controlling stakes in existing host country companies;

ii. Infusing fresh capital from abroad in existing FDI companies by the same foreign investor either for maintaining his percentage share or to increase it; and

iii. Setting up branches

State –wise Distribution of Approved Investment

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. Official estimates place the total value of the approvals till August 2004 at Rs. 2,476,642.96 million. 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 for the period up to August 2004, the top ranking received by Maharashtra (Table 4.1). Delhi accounted the second largest amount Rs 303037.96 millions (12.24 percent of the total) of foreign

direct investment and number of foreign approvals was2763 (technical share 11.07%and financial share is 88.93%).

It is clear from fig 4.1 that next importance states foreign direct investment are, Tamil Nadu, Karnataka, Andhra Pradesh and Gujarat with the respective share (9.12%,7.6%,4.69% and 4.51%).There are four group of states In fig 4.1, first group where share are more than four percent(Maharashtra, Delhi, Gujarat).In the second group share is between less than four but more than two percent only three state received (Andhra Pradesh, Karnataka and Gujarat).besides these all states received less than two percent came under in three group. It shows that foreign investment and approvals are uneven distributed in India it's going more and more in advance states. More importantly, in about 28.32 % of the cases, location was not indicated at the time of the approval. These projects account for approximately one-third of the total investment.

Top six regions getting foreign financial approvals are the following:

First, **region having above 1500 (>1500) number of financial foreign approvals** - Only four states come under this category. These are Maharashtra, Tamil Nadu, Karnataka and Delhi.

Second, **regions having financial foreign approvals between 1000 and 1500)** - Only the state of Andhra Pradesh state qualified for this category.

Third, **regions that have financial foreign approvals between 500 to 1000** - In this group, Gujarat, U.P and the state of West Bengal are present.

Fourth category consist of **region having the number of foreign financial approvals between 100 to 500** - States like Rajasthan, Madhya Pradesh and Punjab, came under this categorisation.

Fifth category consists of **regions where the financial foreign approvals lie between 10-100** - States of Bihar, Jharkhand, Orissa, Himachal Pradesh and Uttarakhand qualify for classification under this categorization.

Sixth **region accountes for least (below 10) number of foreign financial approvals** – Here all north-east states and Jammu and Kashmir is present. (see.Fig:3.4).

FDI approvals received were located (more than 40 percent) in southern and western region of the country. Only Delhi and Haryana (12.24% and 1.56%) accounted for a significant amount in the northern region. Total number of foreign approvals accounted up to August 2004 was 18482 (technical share 29.23% and financial share 70.77%). (See App.4.a)

To gain better insights into the shares of various states in approved FDI we now look at the shares of the top most four sectors in each state. This exercise is based on the approvals accorded during August 1991 to august 2004 (Table 4.2).In the highest accounted states Maharashtra and Delhi the most contributor was Telecommunication (18.63% and52.90%),but in other states like Tamil Nadu, Karnataka, Andhra Pradesh, Haryana had majority of share accounted in Fuel & Power sector (45.59%,28.39%, 41.26%, 29.67%). Approval of foreign direct investment in particular sector create a better view to understand the spatial distribution of determinant which act as pulling force for FDI in the sector. In Maharashtra share of different sector was following- Telecommunications (18.63%), Fuels & Power (16.16%), Transport Industry (16.37%) and fourth higher share in service sector (14.24%). Telecommunications shared highest in Delhi with (52.90%) followed by Transport industry (9.53%). In Karnataka Fuel & Power received (47.66%) of the total amount, Electrical Equipment and Service Sector had followed with (21.36% and 12.09%). In Gujarat Transport Industry received second palace (9.35%) and followed by Chemicals (7.67%). In Andhra Pradesh, after Fuel & Power, Electrical Equipment and Drugs & Pharmaceuticals account for 41.26%, 19.82%, 9.52% of the FDI respectively. In Punjab, highest FDI is received in the Textiles Industry accounting for 28.08% of the FDI.

The second placed industry in many of the states seems to be representative of the state's importance for the industry. For instance, Services occupies the second position and in case of Maharashtra which is the base for many automobile companies even in the pre-liberalisation period, so the Transport Industry get third place.

TABLE 4.1 STATE WISE DISTRIBUTION OF FDI IN INDIA 1991-04

Sl	State	% (T)	% (F)	FDI (In Rs)	% Total
1	MAHARASHTRA	26.49	73.51	366024.2	14.78
2	DELHI	11.07	88.93	303038	12.24
3	TAMIL NADU	23.16	76.84	225826.4	9.12
4	KARNATAKA	19.37	80.63	188184.3	7.6
5	A.P	20.85	79.15	116091.4	4.69
6	GUJARAT	46.24	53.76	111765.1	4.51
7	M.P	30.04	69.96	92714.08	3.74
8	ORISSA	35.46	64.54	82293.13	3.32
9	W. BENGAL	29.16	70.84	77898.35	3.15
10	U.P	34.16	65.84	48266.92	1.95
11	HARYANA	36.84	63.16	38751.56	1.56
12	RAJASTHAN	30.03	69.97	29112.04	1.18
13	PUNJAB	30.85	69.15	21241.53	0.86
14	KERALA	21.08	78.92	17806.31	0.72
15	PONDICHERRY	32.31	67.69	12861.53	0.52
16	H.P	57.58	42.42	11741.45	0.47
17	GOA	23.91	76.09	9977.32	0.4
18	BIHAR	44.90	55.10	7397.05	0.3
19	CHATTISGARH	64.58	35.42	6363.03	0.26
20	CHANDIGARH	14.29	85.71	2413.6	0.1
21	JHARKHAND	66.67	33.33	1465.15	0.06
22	UTTARANCHAL	46.15	53.85	1256.49	0.05
23	D&N.H	66.67	33.33	1239.8	0.05
24	DAMAN & DIU	34.88	65.12	554.64	0.02
25	MEGHALAYA	0.00	100.00	529.6	0.02
26	A&N	0.00	100.00	137.87	0.01
27	ARUN. PD.	0.00	100.00	110.6	0
28	J&K	60.00	40.00	84.1	0
29	NAGALAND	50.00	50.00	36.8	0
30	MANIPUR	0.00	100.00	31.85	0
31	TRIPURA	25.00	75.00	30.88	0
32	MIZORAM	0.00	100.00	15.22	0
33	ASSAM	78.95	21.05	14.95	0
34	LAKSH.	0.00	100.00	5	0
35	NOT AVIALABLE	41.74	58.26	701362.8	28.32
36	TOTAL	29.23	70.77	2476643	100

Source: DIPP, SIA News Letter, Sept. 2004.

Figure 4.1: Percentage Distribution of FDI (1991-2004)

PERCENTAGE DISTRIBUTION OF FDI
(1991-'04)

% OF FDI
Below 0.50
0.51 - 1.00
1.01 - 2.00
2.01 - 4.00
4.01 - 8.00
Above 8.00

Kilometers
0   37.5 75   150   225   300
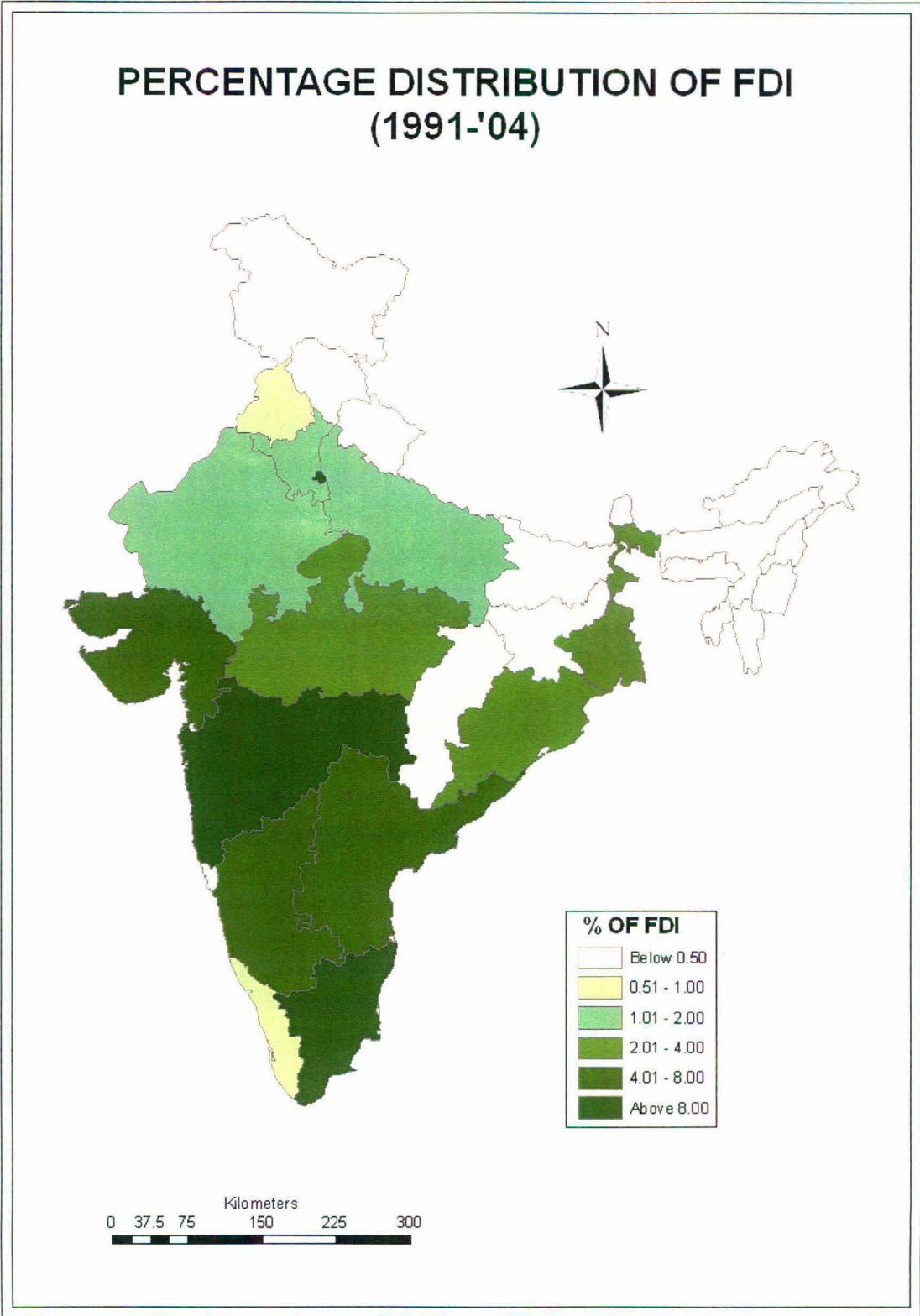
Figure 4.2: FDI Distribution in India (1991-2004)

FDI DISTRUBTION IN INDIA (1991-2004)

RAJASTHAN 2%
HARYANA 2%
U.P 3%
W. BENGAL 5%
ORISSA 5%
M.P 5%
GUJARAT 7%
A.P 7%
KARNATAKA 11%
TAMIL NADU 13%
DELHI 18%
MAHARASHTRA 22%
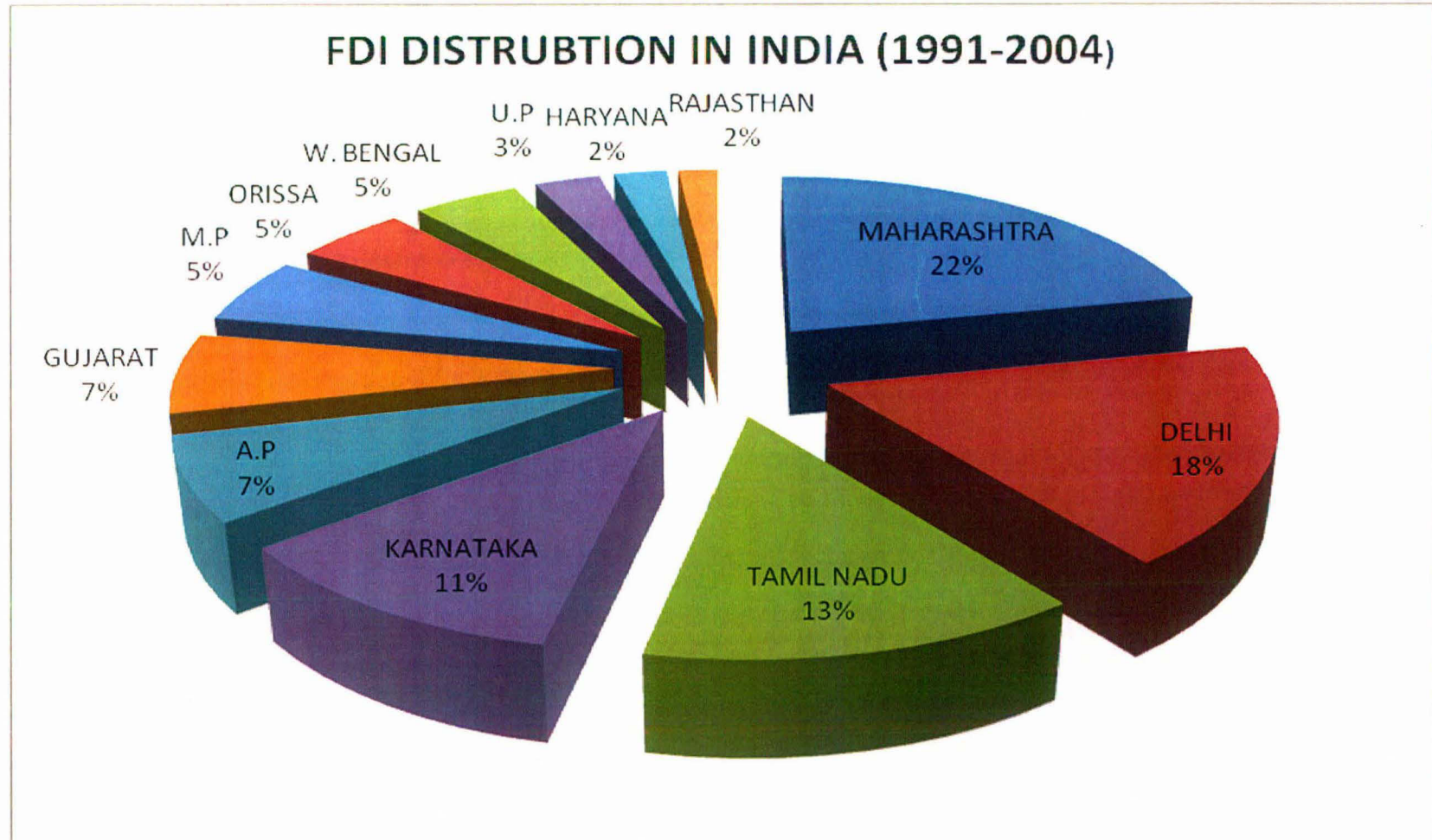
Figure 4.3: Number of Approved Financial Foreign Collaboration (1991-2004)

NUMBER OF APPROVED FINANCIAL
FOREIGN COLLABORATION
(1991-'04)

No. of Financial Approvals
Below 10.00
10.01 - 100.00
100.01 - 500.00
500.01 - 1000.00
1000.01 - 1500.00
Above 1500.00

Kilometers
0   37.5 75   150   225   300
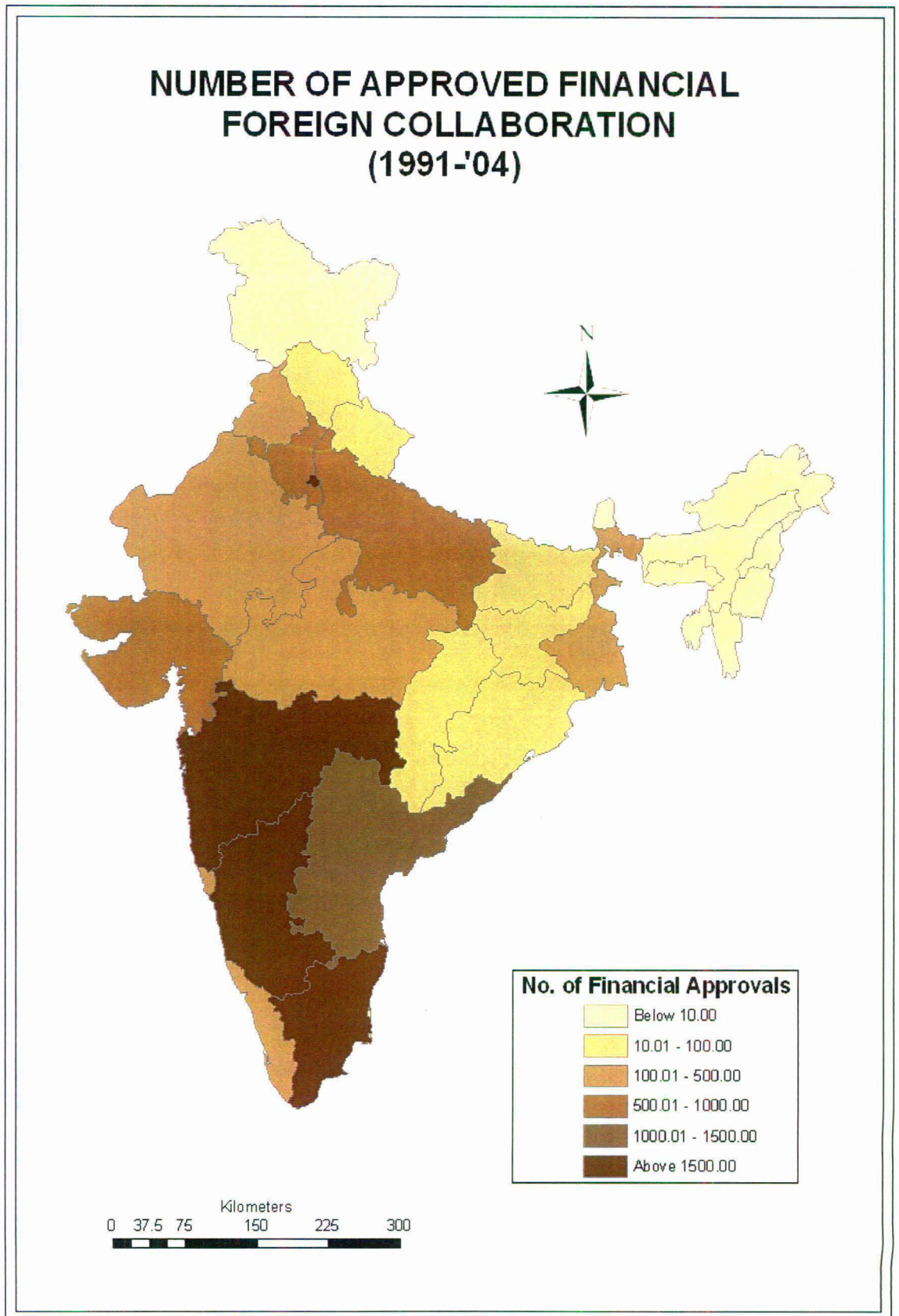
TABLE 4.2: State wise Distribution and their Sectoral in India 1991-2004 (in Rs million)

STATE	FDI AMT.	SECTOR	FDI	SECTOR SHARE
ANDHRA PRADESH	494580	FUEL(POWER &OIL REFINING)	204069.6	41.26
		ELECTRICAL EQUIP.	98025.76	19.82
		METALLURGICAL INDUSTRIES	37884.83	7.66
		DRUGS & PHARMACETUTICALS	47106.82	9.52
		PAPER & PLUP INC.PAPER IND.	22107.73	2.47
		REMAINING SECTOR SHARE	98941.04	20.01
		CONSULTANCY SERVICE	855.71	0.17
DELHI	380375.49	TELECOMUNICATION	201202.9	52.90
		TRANSPORTATION INDUSTRY	36255.78	9.53
		ELECTRICAL EQUIP.	28565.16	7.51
		SERVICE SECTOR	27004.4	7.10
		HOTEL & TOURISM	17890.33	4.70
		CONSULTANCY SERVICE	592.65	0.16
		DRUGS & PHARMACETUTICALS	904.35	0.24
		MISC.MECHANICAL & ENGG.	1456.06	0.38
		REMAINING SECTOR SHARE	67375.28	17.71
GUJARAT	188586.84	FUEL(POWER &OIL REFINING)	102316.1	54.25
		TRANSPORTATION INDUSTRY	17632.41	9.35
		CHEMICALS	14468.56	7.67
		TELECOMUNICATION	10990.19	5.83
		SUGAR	9343.51	4.95
		ELECTRICAL EQUIP.	1195.62	0.63
		SERVICE SECTOR	250.49	0.13
		DRUGS & PHARMACETUTICALS	1408.47	0.75
		REMAINING SECTOR SHARE	30954.58	16.41
HARYANA	36192.63	FUEL(POWER &OIL REFINING)	10738.48	29.67
		ELECTRICAL EQUIP.	5552.196	15.34
		TRANSPORTATION INDUSTRY	2985.452	8.25
		PAPER & PLUP INC.PAPER IND.	2445.324	6.76
		SERVICE SECTOR	10	0.03
		TELECOMUNICATION	23	0.06
		FOOD PROCESSING INDUSTRIES	1607.34	4.44

		REMAINGING SECTOR SHARE	12830.81	35.45
KARNATAKA	251687.19	FUEL(POWER & OIL REFINING)	71458.39	28.39
		ELECTRICAL EQUIP.	53764.18	21.36
		SERVICE SECTOR	30427.79	12.09
		TRANSPORTATION INDUSTRY	23559.79	9.36
		METALLURGICAL INDUSTRIES	10410.69	4.14
		CONSULTANCY SERVICE	1152.59	0.46
		TEXTILES (INC. DYED, PRINTED	798.85	0.32
		REMAINING SECTOR SHARE	53514.94	21.26
KERALA	17650.56	FUEL(POWER & OIL REFINING)	8411.94	47.66
		HOTEL & TOURISM	1458.09	8.26
		ELECTRICAL EQUIP.	1131.96	6.41
		TRANSPORTATION INDUSTRY	5421.06	30.71
		FOOD PROCESSING INDUSTRIES	931.38	5.28
		REMAINING SECTOR SHARE	2702.03	15.31
MAHARASHTRA	507726.63	TELECOMUNICATION	94612.08	18.63
		FUEL(POWER &OIL REFINING)	82050.82	16.16
		TRANSPORTATION INDUSTRY	69389.57	13.67
		SERVICE SECTOR	72318.18	14.24
		ELECTRICAL EQUIP.	44264.91	8.72
		CONSULTANCY SERVICE	1613.16	0.32
		FOOD PROCESSING INDUSTRIES	891.05	0.18
		REMAINING SECTOR SHARE	155213.7	30.57
RAJASTHAN	30630.38	FUEL(POWER &OIL REFINING)	14015.06	45.76
		ELECTRICAL EQUIP.	6277.445	20.49
		CHEMICALS	2488.14	8.12
		INDUSTRIAL MACHINERY	1328.21	4.34
		METALLURGICAL INDUSTRIES	1275	4.16
		REMAINING SECTOR SHARE	5246.53	17.13
TAMIL NADU	219002.74	FUEL(POWER &OIL REFINING)	99847.57	45.59
		TELECOMUNICATION	15107.04	6.90
		SERVICE SECTOR	14769.95	6.74
		ELECTRICAL EQUIP.	13052.44	5.96
		TRANSPORTATION INDUSTRY	10931.62	4.99
		DRUGS & PHARMACETUTICALS	2775.72	1.27
		CONSULTANCY SERVICE	582.53	0.27

		REMAINING SECTOR SHARE		61914.88	28.27
WEST BENGAL	92389.55	FUEL(POWER &OIL REFINING)		35328.99	38.24
		CHEMICALS		22087.32	23.91
		ELECTRICAL EQUIP.		7650.23	8.28
		HOTEL & TOURISM		4316.185	4.67
		TELECOMUNICATION		3439.975	3.72
		FOOD PROCESSING INDUSTRIES		493.54	0.53
		REMAINING SECTOR SHARE		19073.3	20.64
PUNJAB	25802.5	TEXTILES (INC. DYED, PRINTED		7246.176	28.08
		PAPER & PLUP INC.PAPER IND.		4374.864	16.96
		CHEMICALS		3884.832	15.06
		TELECOMUNICATION		2200.12	8.53
		SERVICE SECTOR		538.3	2.09
		DRUGS & PHARMACETUTICALS		885.6	3.43
		REMAINING SECTOR SHARE		10667.7	41.34

Source: Computed from DIPP, SIA New Letter September 2004.

Conditions of FDI inflow

Determinants of FDI inflow in a particular country is widely studies and debated issue in the academia worldwide. However, there are hardly any studies in India looking at the conditions or determinants of FDI in Indian states. Many studies have tries to analyise the determinants of FDI inflow in a particular region (see Morris, 2004; Accolley, 2003; Ali et. al., 2005; Biswasm, 2002; Globerman et. al., 2003; Singh et. al., 1995). However, there is no unanimity on most probable (common) conditions or determinants of FDI inflow. Conditions explaining FDI inflow in a particular region might not be responsible for FDI inflow in another region. Yet according to literature most common factors are structural component like GDP, growth rate of GDP, investment in core sectors and industrial investment, growth of industries in the region, role of central government and state government and their policies.

Based on literature we have identified following variables which can have

a bearing on the FDI inflow in a state – Growth of Net State Domestic Product (NSDP), Share of services sector in NSDP, Per capita Rs 100 invested on energy, Bank offices per 1000 population, National Highway (NH) per 1000 square kilometer area, and Percentage of working population in the state. Using these variables we have analysed the state wise conditions of FDI inflow in India.

Per capita FDI inflow in Delhi is highest (see figure 4.4 and table 4.3), this can be affect of high Growth of NSDP, greater share of services sector in NSDP, higher per capita Rs 100 invested on energy, Bank offices per 1000 population, NH per 1000 sq km area, and percentage of working population in the state. Chandigarh has the second place in terms of per capita FDI inflow; this could be the reason of high growth rate of NSDP, large number of bank offices and higher percentage of working population. Karnataka has the fifth higher per capita FDI inflow. This could be the reason of high growth rate of NSDP, greater share of services sector in NSDP, higher per capita investment on energy, good road network and higher parentage of working population. In case of Andhra Pradesh per capita FDI inflow is accompanied by higher percentage of working population, good road network, good banking facilities, and good power generation capacity. However, Punjab, Pondicherry and Maharashtra which are the third, fourth and sixth states in terms of per capita FDI inflow respectively show no bearing of growth of NSDP, share of services sector, investment on energy, bank offices and percentage of working population on amount of per capita FDI inflow. For states like Kerala, Goa and Tamil Nadu, higher per capita FDI inflow is accompanied by higher share of services sector, greater percentage of working population and good road network. West Bengal, Haryana, Rajasthan and Uttar Pradesh have the lowest per capita FDI inflow.

There is wide variation in per capita FDI inflow among state. This is clear with very high coefficient of variation (CV) of 120. Delhi which has Rs 59.59 per capita FDI inflow, which is the top state in FDI inflow, followed by Chandigarh (Rs 50.47 per capita), Punjab (Rs 25.14 per capita), Pondicherry (Rs 23.7 per capita), Karnataka (Rs 16.39 per capita), Maharashtra (Rs 13.55 per capita) and Andhra Pradesh (Rs 13.01 per capita). In contrast Uttar Pradesh has per capita FDI inflow of Rs 0.06 only.

Table 4.3: State wise Determinants of FDI in India

Year	state code	State	FDI (Rs Mil.) 2004	Per Capita FDI Rs	Growth NSDP	Share of Services Sector in NSDP	Per capita Rs 100 invt on energy	Bank Office per 1000 population	NH Kms per 1000 sq km area	% worker in total pop
1	2	3	4	5	6	7	8	9	10	11
1	9	UTTAR PRADESH	9.45	0.06	4.81			20	23.47	32.48
2	8	RAJASTHAN	30.10	0.53	0.37	41.85	0.17	17	16.32	42.06
3	6	HARYANA	11.75	0.56	8.93	39.67	8.93	13	33.2	39.62
4	19	WEST BENGAL	108.14	1.35	7.13	43.73		18	26.2	36.77
5	24	GUJARAT	158.14	3.12	5.39		0.32	14	14.65	41.95
6	33	TAMIL NADU	360.01	5.77	8.97	61.09	0.45	13	32.16	44.67
7	30	GOA	7.85	5.83		54.25	1.46	5	72.66	38.8
8	32	KERALA	234.61	7.37	9.24	50.16	6.57	10	37.05	32.3
9	28	ANDHRA PRADESH	991.28	13.01	6.38	52.30	0.01	15	16.26	45.79
10	27	MAHARASHTRA	1312.33	13.55	8.07	39.43		15	13.57	42.5
11	29	KARNATAKA	866.31	16.39	10.73	75.61		11	20.03	44.53
12	34	PONDICHERRY	23.08	23.70	9.36	50.94	17.49	14		35.22
13	3	PUNJAB	612.25	25.14	5.87			9	30.92	37.47
14	4	CHANDIGARH	45.46	50.47	10.97	32.88		5	16.15	37.74
15	7	DELHI	825.19	59.59	12.05	61.03	9.83	10	48.55	32.82
		CV		120.46						

Source: Computed. (FDI data from DIPP News Letter, Growth of NSDP, Share of Services sector in NSDP, Per capita Rs 100 investment on energy from EPW Research Foundation Database, Bank office per 1000 population from RBI, NH kms per 1000 sq km of area from Department of Road Transport and Highways, Government of India, % worker in total population from planning commission. Population figures are for Census 2001.

Determinants of FDI inflow (Top 7 States)

Legend:
- Per Capita FDI Rs
- Growth NSDP
- Share of Services Sector in NSDP
- Per capita Rs 100 invt on energy
- Bank Office per 1000 population
- NH Kms per 1000 sq km area
- % worker in total pop

States: ANDHRA PRADESH, MAHARASHTRA, KARNATAKA, PONDICHERRY, PUNJAB, CHANDIGARH, DELHI
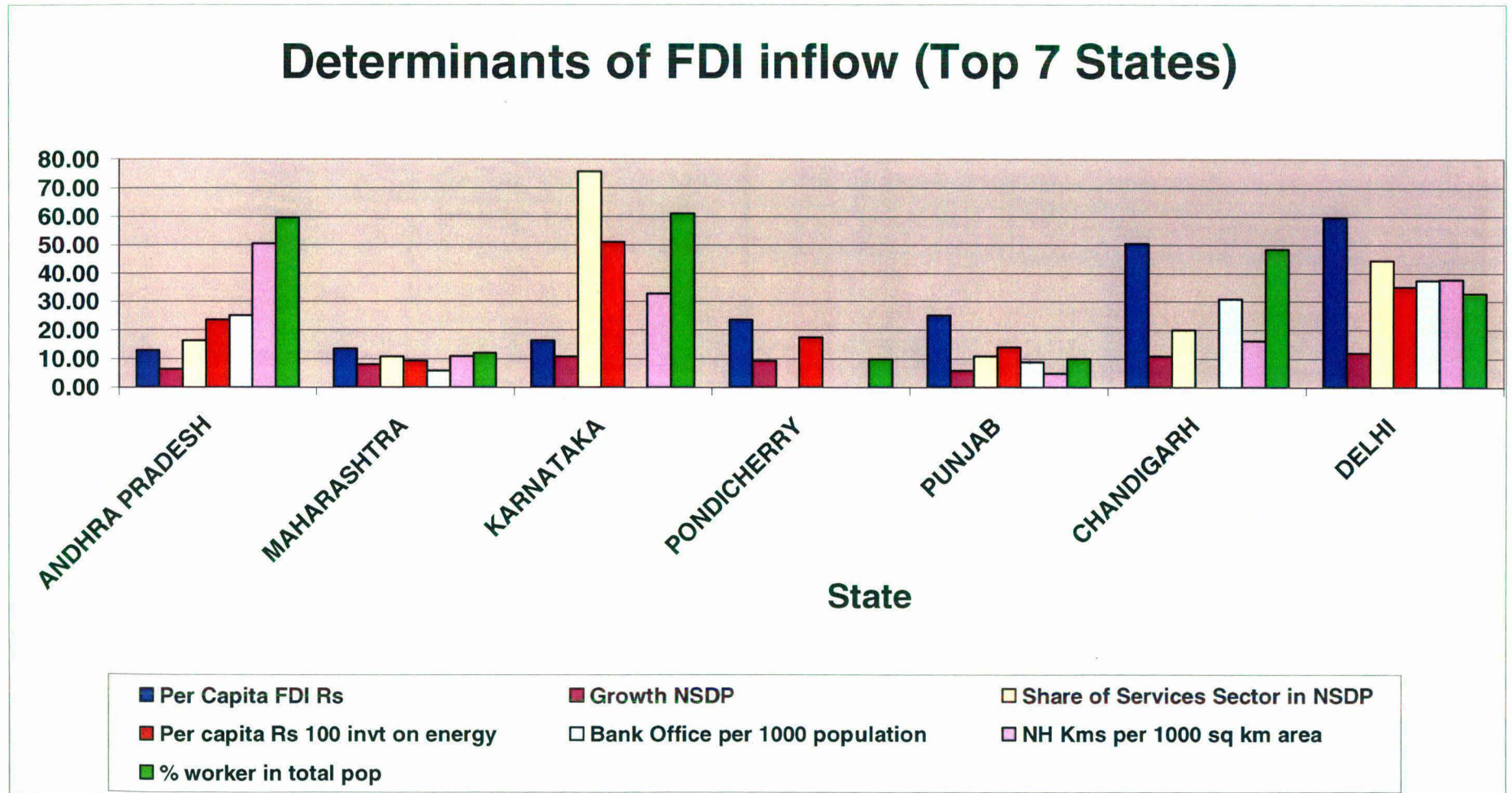
State

Figure 4.5: State wise Determinants of FDI

Determinants of FDI inflow

Legend:
- Per Capita FDI Rs
- Growth NSDP
- Share of Services Sector in NSDP
- Bank Office per 1000 population
- NH Kms per 1000 sq km area
- % worker in total pop
- Per capita Rs 100 invt on energy

X-axis (State): UTTAR PRADESH, RAJASTHAN, HARYANA, WEST BENGAL, GUJARAT, TAMIL NADU, GOA, KERALA
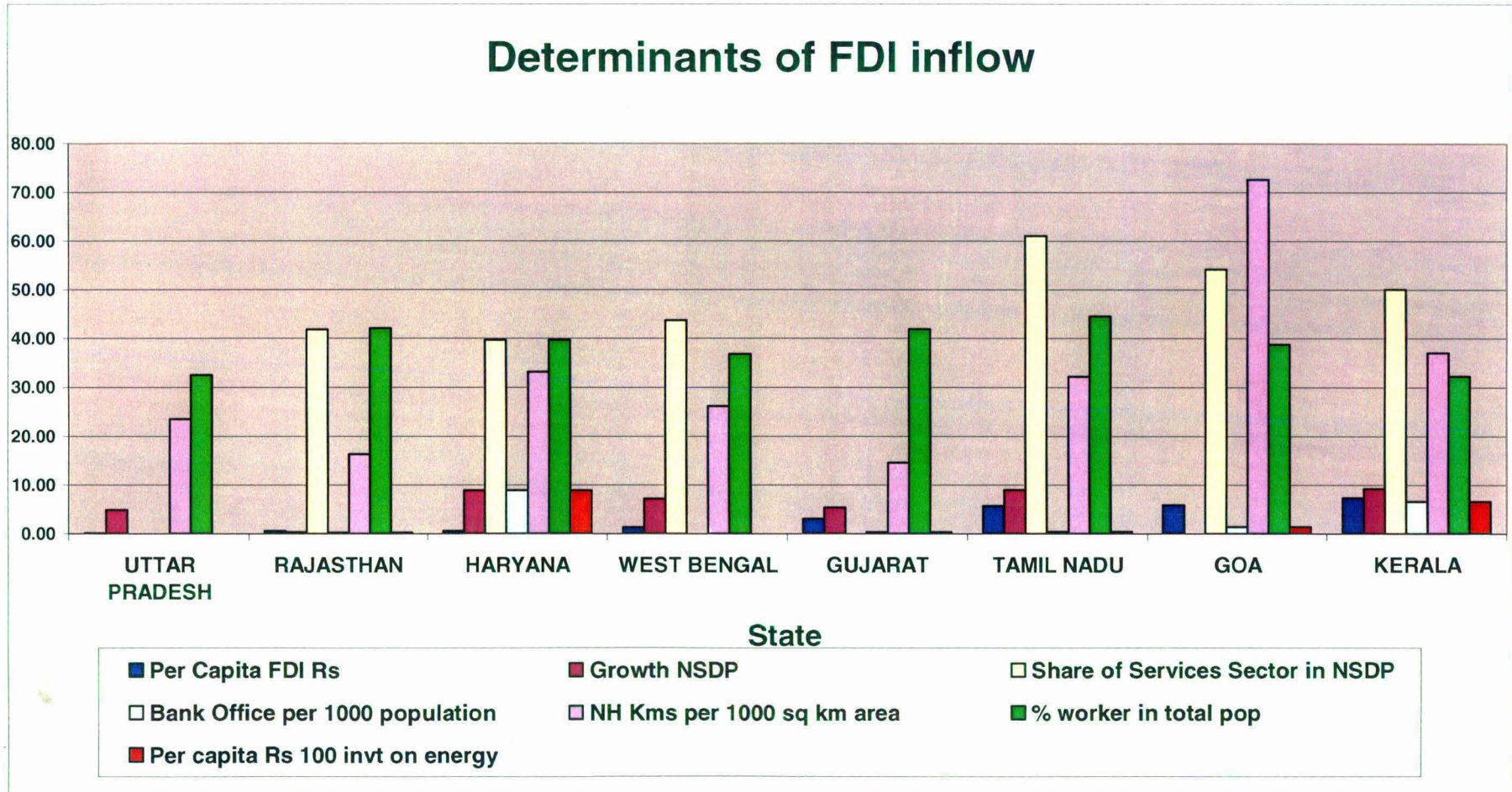
Conclusion

1. In State level, distribution of foreign direct investment shows inter-state disparity of Industrialization and location of projects. From 1991 to 2004, Maharashtra stands at top rank with approved FDI amount of Rs. 366024.15 millions (14.78 % of total FDI) and number of foreign financial approvals 3655 (73.51%) and technical approvals 1317(26.41%). Second is Delhi with Rs. 303037.96 (12.24% of total FDI, technical approvals 306 and foreign approvals 2457). More than sixty percent of the total FDI is concentrated in southern and western region of India especially in Maharashtra, Tamil Nadu, Karnataka, Gujarat and Andhra Pradesh states. In northern region, it concentrates in Delhi with the share of 12.4% and in Haryana with the share of 1.56%. In out of There regions of foreign financial approvals only six states came under top three foreign financial (Maharashtra, Tamil Nadu, Karnataka, Delhi, Gujarat and Uttar Pradesh).Percentage wise distribution of FDI, Maharashtra, Tamil Nadu and Delhi show more than eight percentage of FDI and rest of the states show very less share of FDI. This section explains that FDI in India concentrated highly only in few states.

2. Fuel and Power had major share in all states except Delhi and Maharashtra. In Maharashtra in Telecommunications sector had received the highest share of FDI with the Rs 94612.08 millions (18.03%) followed by Fuel and Power sector Rs 82050.82 millions (16.16%), Transport Industry Rs 69389.57 millions (13.67%). This shows that in Maharashtra more than 47.86% of FDI concentrate in only three sectors.

3. Analysis reveals that there is wide inter state variation in FDI inflow. Presence of good infrastructure facilities like bank office, road network, and energy has positive bearing on FDI inflow in states. High growth of NSDP, higher percentage of working population and greater share of services sector also attract FDI.

Chapter IV

Conclusion

The aim of this study is to explain the flow of foreign direct investments in India. First an attempt has been made to explore the historical perspective of policy elements of FDI in India.

1. In response of the New Economic Policy (NEP) formulation, the amount of foreign direct investments (FDI) in India has continuously increased from 1991 to 2007 from Rs. 3,534.80 to Rs. 7, 97,356.60 millions respectively. Out of the total Foreign Direct Investment of Rs. 29, 02,443.70 millions, 34.20 percent was accounted by the Automatic route, 32.14 percent by FIPB and 22.34 percent by SIA and share acquisition. Trends of these flows from the boards show that, in the initial year of the New Economic Policy, maximum share of foreign direct investment was received through SIA, but now it has shifted to FIPB board. This may be because of easy and the short process of FDI approval through FIPB.

2. Total number of foreign approvals in India from 1991 to 2004 was 26419. Foreign Financial Approvals accounted for a higher share of 70% (18,548) compared to Technical Foreign Approvals which stand at 29.8% (7,871). After Independence, government policy supported the Technological approvals but after New Economic Policy, foreign approvals shifted towards financial foreign approvals. It's clear from trends that in year 1991, number of approvals in Technical and financial sectors have been 661(69.58%) and 289(30.2%), but in 2003, the number of the Financial Foreign Approvals have increased to 1550(92.15%) and Technical Foreign Approvals decreased to 321 (7.85 %).

3. There are mainly three boards who grant approvals to the foreign collaboration in India. Among these boards between 1991 to 2004, the

highest share is granted by FIPB 45.12% with 11,914 numbers, followed by RBI and SIA with 36.93% and 17.94 % (9751 and 4739) respectively. Year wise trends of foreign collaboration show that in 1991 the highest share was approved by SIA 80% (760), followed by RBI 19.79% (188), but FIPB accounted for only two of the foreign collaborations. In recent years, RBI's share has been always higher than other boards. In terms of the foreign investment, FIPB approved the highest foreign investment of Rs.2396.8 billions with 88.49% share followed by RBI, which accounted for Rs. 240.3 billions (8.9%) and rest 2.27% is accounted from SIA (Rs. 61.5 billions). After NEP, foreign financial approvals from 1991 to 2004 (18548) have always been higher than the technical foreign approvals. Highest board wise approval of foreign financial collaboration in 1996 was under FIPB 1,232 (73.99%) and in 1998 was 1428 (82.73%). Year wise trend of foreign financial approvals shows that in the initial years, higher number of financial approvals was granted by SIA, but recently FIPB and RBI show the highest position in granting foreign financial approvals.

4. Total foreign technical collaboration approvals in India from 1991 to 2004 have been 7,871. Out of these total approvals, the highest 4580 (58.19%) are granted by RBI, followed by SIA with 3162 (40.17%) and rest are granted by FIPB. Till 1991, trend of the foreign technical approval show that, SIA grants the highest number of technical approvals followed by the RBI. FIPB has not been impressive in granting foreign technical approvals. From 1991 to 2003, there has been a fivefold (289 to 1550) increase in foreign financial collaboration but technical collaboration has actually come down to half (661 to 321).

5. At the macro level, it is imperative to know as to which sector enjoys the maximum benefit from our economic policy. From 1991 to 2004, the highest foreign direct investment was recorded in the fuel and power sector viz., Rs. 697471.46 millions (28.16 % of total FDI). It received 993 foreign approvals. Out of the total approval in fuel and power, 164 (29.54%) were technical foreign approvals and the rest 779 (70.46%) were

foreign financial approval collaborations. Telecommunication has received the second highest FDI of Rs. 413682.76 millions (16.7% of total FDI). Out of the total approvals in the telecommunications sector, 779 (86.06%) are financial foreign approvals and 164 (13.96%) are technical approvals. Transportation industry ranks as the third highest FDI receiving sector with an amount of Rs. 207669.8 millions (8.39% of total share). Total number of foreign approvals in transport industry was 1777 (technical approvals 687 with 48.77% and financial approvals were 1090 with 61.33% share. Electrical equipment received Rs. 187261.1 millions (7.56% share of the total). Total numbers of approvals were the highest in this sector with 5902 number of approvals. Out of these, technical number of approvals accounted for 1244 (21.07%) and financial approvals accounted for the remaining 78.93%. Further, services sector received Rs. 165820.8 millions, accounting for 6.7% of the total share. Out of the 1378 approvals in this sector, 69 (5.01%) were technical approvals and 1309 (94.49%) were financial approvals. It shows that at the macro level, the sector-wise distribution of foreign direct investment has been highly concentrated in mainly six sectors – Fuel and Power, Transport Industry, Telecommunication, Electrical equipment, Service Sector and Metallurgical Industry. They all contribute around 65% of the total Foreign Direct Investment in India. Another point to note is that the financial collaborations are higher than technical collaborations in these sectors.

6.   Mauritius, surprisingly, has the highest share in the FDI, with the amount of Rs. 696533.4 million (42.78%) and is followed by the U.S.A. accounting for 14.40%, U.K. with 9.70%, Netherlands 9.70%, and Japan with total FDI share of 5.63%. The financial approvals are the major source of FDI in India. The main source of technical foreign collaboration comes from the countries of U.S.A., Japan, U.K., Germany, France and Italy.

7.   At the State level, the distribution of foreign direct investment shows

significant inter-state disparity. From 1991 to 2004, Maharashtra topped as the favourite FDI destination in India. Within this period, it registered an approved FDI inflow of Rs. 366024.15 millions (accounting for 14.78% of the total FDI) with the total number of foreign financial approvals being 3655 (73.51%) and technical approvals being 1317 (26.41%). Second most favourite FDI destination has been Delhi, registering a total FDI inflow of Rs. 303037.96 million (12.24% of total FDI) with the technical approvals being 306 and foreign approvals being 2457. Tamil Nadu ranks third with Rs. 225826.4 million (9.12% of the total) FDI inflows with the technical and foreign financial approvals being 615 and 2041 respectively. Fourth in line is the state of Karnataka with a total FDI inflow of Rs. 188184.32 million (7.6% of the total FDI). The technical and foreign financial approvals were 501 and 2085 respectively. With a total FDI inflow of Rs.116091.37 million (accounting for 4.69% of the total FDI), Andhra Pradesh ranks fifth in terms of the size of the FDI inflows. It has total registered technical approvals of 266 and foreign approvals of 1010 in the above mentioned period. Further, sixth is the state of Gujarat attracting a total inflow of Rs. 111765.07 million (representing 4.51% of the total FDI); with the technical and foreign financial approvals being 566 and 658 respectively. *Thus, more than 60 percent of the total FDI is concentrated in the southern and western region of India especially in Maharashtra, Tamil Nadu, Karnataka, Gujarat and Andhra Pradesh. In northern region, it concentrates in Delhi with a share of 12.4% and in Haryana with a share of 1.56%.* Infact, there are only five states in India (Maharashtra, Tamil Nadu, Karnataka, Delhi, and Gujarat), each accounting for more than 5 percent of the total FDI inflow in India. Maharashtra, Tamil Nadu and Delhi, each have more than eight percent of the total FDI and the rest of the states show very low share. This indicates that FDI in India is highly concentrated in only few states.

8. Analysis of the sector-wise distribution of FDI in thirteen most leading states clearly show that the Fuel and Power sector accounts for the major share in all the states in India except in Delhi and Maharashtra. In

Maharashtra, the Telecommunications sector received the highest share of the FDI with a total FDI flow of Rs 94612.08 millions (18.03%) followed by the Fuel and Power sector representing a total inflow of Rs 82050.82 millions (16.16%). The transport industry follows close with Rs 69389.57 millions inflows accounting for a share of 13.67%. This shows that in Maharashtra more than 47.86% of FDI is concentrated in only three sectors. In Delhi, out of the total FDI of Rs. 380375.49 millions, the highest FDI was accounted by the telecommunications sector (with a total FDI inflow of Rs 201202.9 millions or 52.90% of the total share). The second in line is the transportation industry with Rs. 36255.78 million inflows, accounting for 9.53% of the total share. This shows that in Delhi 62.43% of the FDI is concentrated in only two sectors. Further, in fuel and power sector, Tamil Nadu received the highest share of FDI (45.59%) followed by Karnataka (28.39%), Gujarat (54.25%) and Andhra Pradesh (41.26%). The second highest FDI inflow in Tamil Nadu goes to the telecommunications sector with an inflow of Rs 15107.04 millions (representing 6.90% share of the total), while in other states like Karnataka and Andhra Pradesh, the second position was acquired by the Electrical Equipment representing FDI inflow of Rs 53764.18 millions (21.36%) and Rs 98025.76 millions (19.82%) respectively. Punjab received the highest FDI in the textiles industry representing a share of 28.08% of the total FDI in the state. In hotel and tourism, only Kerala accounted for the highest FDI inflow of Rs 1458.09 (8.26%). This indicates that the spatial distribution of FDI is highly uneven in India and it is concentrated in only few major sectors.

9.   There are wide inter-state variations in FDI inflows in India. States with high growth rate of NSDP, higher percentage of working population and with greater share of services sector, show a higher proportion of per capita FDI inflows. Furthermore, factors like availability of better financial facilities, good road and transport network and availability of energy also facilitate in attracting higher per capita FDI inflows in the state.

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Appendix

Table 3A.1: Sector and year-wise growth rate of FDI Amount(2001-07)

S.No	Sector	2001	2002	2003	2004	2005	2006
1	ELECTRICALS EQUIPMENT (INCL S/W & ELEC)	71.27	55.15	-57.53	192.74	15.81	101.34
2	MISCELLANEOUS INDUSTRIES	-42.46	-47.06	19.92	-8.02	31.10	329.77
3	TRANSPORTATION INDUSTRY	13.46	53.71	-28.76	-46.72	19.79	89.50
4	TELECOMMUNICATIONS	522.45	-78.70	-20.00	-16.29	58.33	351.71
5	FUELS (POWER & OIL REFINERY)	259.73	78.48	-76.13	-3.49	-61.38	311.56
6	SERVICE SECTOR	340.63	88.14	-9.90	-17.61	174.49	467.92
7	CHEMICALS (OTHER THAN FERTILIZERS)	-45.13	96.46	-50.87	204.56	4.24	98.50
8	FOOD PROCESSING INDUSTRIES	28.45	231.41	-67.51	19.96	-51.69	38.15

9	DRUGS AND PHARMACEUTICALS	96.25	-38.49	11.26	462.46	-67.49	91.05
10	METALLURGICAL INDUSTRIES	129.56	39.17	-30.59	490.15	-26.35	26.43
11	CONSULTANCY SERVICES	1298.52	-65.68	147.27	377.51	-86.26	241.33
12	MISCELLANEOUS MECHANICAL & ENGINEERING	217.74	-61.73	43.24	-62.45	210.17	5.44
13	TRADING	77.80	-17.25	-54.42	-17.96	84.37	206.99
14	TEXTILES (INCLUD DYED, PRINTED)	147.35	1000.15	-61.97	112.93	93.98	52.16
15	PAPER AND PULP INCLUDING PAPER PRODUCT	-80.71	8.62	-37.99	-48.01	600.11	-81.64
16	CEMENT AND GYPSUM PRODUCTS	95.74	-82.26	-60.09	-98.34	269737.95	-51.67
17	HOTEL & TOURISM	-10.01	374.59	15.92	-41.13	83.31	192.00
18	GLASS	-74.24	473.23	-88.33	53.31	-91.50	104.65

19	RUBBER GOODS	-81.02	7122.89	-62.45	141.29	-24.65	-43.91
20	COMMERCIAL, OFFICE & HOUSEHOLD EQUIPMENT	-72.65	-19.00	306.26	-78.17	1339.49	-81.94
21	INDUSTRIAL MACHINERY	496.35	-37.53	-39.03	-9.64	242.36	-20.67
22	MACHINE TOOLS	110.45	200.47	-41.18	588.14	-62.26	57.75
23	MEDICAL AND SURGICAL APPLIANCES	1804.60	-38.86	-91.58	131.26	-68.33	23.30
24	CERAMICS	55.37	-89.18	374.34	1731.22	-77.12	618.39
25	FERMENTATION INDUSTRIES	-28.21	-23.91	-75.75	271.99	6.90	-45.24
26	LEATHER, LEATHER GOODS AND PICKERS	141.46	-98.91	9091.71	-93.67	110.17	735.55
27	SCIENTIFIC INSTRUMENTS	-8.22	-95.81	-91.92	85.14	228.47	-24.44

Source: SIA, newletters, various issues.(2000-2006).

Table 3A.2 : Sector Wise Distribution of FDI in India (1991-2004)

S.No	sector	Total	Tech.	Fin.	FDI	(%) Tot
1	**METALLURGICAL INDUSTRIES**					
	Ferrous	377	216	161	71033.21	2.87
	Non-Ferrous	75	34	41	7824.2	0.32
	Special Alloys	131	59	72	19472.13	0.79
	Mining Service	101	15	86	43060.38	1.74
	Misc. (other Items)-Metallurgy	105	41	64	12660.41	0.51
	Sector Total	**789**	**365**	**424**	**154050.3**	6.22
2	**FUELS (POWER & OIL REFINERY)**					
	POWER	296	22	274	381907.2	15.42
	OIL REFINERY	267	112	155	182442.5	7.37
	Power (Other)	110	15	95	54782.15	2.21
	Oil Refinery (Other)	138	76	62	44397.88	1.79
	Others(Fuels)	191	71	120	33941.71	1.37
	Sector Total	**1002**	**296**	**706**	**697471.5**	28.16
3	BOILERS AND STEAM	87	50	37	1471.58	0.06
4	PRIME MOVERS	61	38	23	917.24	0.04
5	**ELECTRICALS EQUIPMENT (INCL S/W & ELEC)**					
	Electrical Equipment	1813	959	854	57453.81	2.32
	Computer Software Industry	3355	92	3263	92711.24	3.74
	Electronics	615	165	450	31520.1	1.27
	Computer Hardware	34	4	30	3815.52	0.15
	Others(S/W)	87	24	63	1760.47	0.07
	Sector Total	**5904**	**1244**	**4660**	**187261.1**	7.56
6	**TELECOMMUNICATIONS**					
	Telecommunications	463	103	360	127590	5.15
	Radio Paging	51	4	47	12488.95	0.5
	Cellular Mobile	206	12	194	233714	9.44
	Telecommunication (I&B)	140	5	135	31405.82	1.27
	Others(Telecom)	66	5	61	8484.01	0.34
	Sector Total	**926**	**129**	**797**	**413682.8**	16.7
7	**TRANSPORTATION INDUSTRY**					
	Automobile Industry	831	425	406	51229.57	2.07
	Air/Sea Transport	267	20	247	17327.8	0.7
	Passenger Cars	85	6	79	83171.05	3.36
	Auto Ancillaries/Parts	384	183	201	26007.23	1.05
	Ports	33	0	33	15588.42	0.63
	Others(Transport)	177	53	124	14345.77	0.58
	Sector Total	**1777**	**687**	**1090**	**207669.8**	8.39
8	INDUSTRIAL MACHINERY	1527	858	669	15873.49	0.64
9	MACHINE TOOLS	234	91	143	4137.55	0.17
10	AGRICULTURAL MACHINERY	50	32	18	4577.85	0.18
11	EARTH-MOVING MACHINERY	81	47	34	2489.25	0.1
12	MISCELLANEOUS MECH.& ENGG.	1079	432	647	18607.21	0.75
13	COMM., OFF. & H.HOLD EQUIPMENT	119	40	79	11654.41	0.47
14	MEDICAL AND SURGICAL APP	143	36	107	3897.08	0.16
15	INDUSTRIAL INSTRUMENTS	226	120	106	1673.56	0.07
16	SCIENTIFIC INSTRUMENTS	48	17	31	658.09	0.03

17	MATHEMATICAL, SURVEYING AND DRAWING	6	2	4	383.7	0.02
18	FERTILIZERS	72	59	13	1476.53	0.06
19	CHEMICALS (OTH.FERTILIZERS)	1923	855	1068	117129.4	4.73
20	PHOTOGRAPHIC RAW FILM	33	12	21	2382.49	0.1
21	DYE-STUFFS	24	5	19	1233.5	0.05
22	DRUGS AND PHARMACEUTICALS	622	263	359	27530.67	1.11
23	TEXTILES (INCLUD DYED, PRINTED)	813	168	645	29374.57	1.19
24	PAPER AND PU	201	65	136	31131.26	1.26
25	SUGAR	16	1	15	10634.28	0.43
26	FERMENTATION INDUSTRIES	87	25	62	15366.19	0.62
27	**FOOD PROCESSING INDUSTRIES**					
	Food products	814	140	674	93439.87	3.77
	Marine products	101	22	79	989.27	0.04
	Miscellaneous(Food prod)	28	2	26	1028.24	0.04
	Sector Total	**943**	**164**	**779**	**95457.38**	**3.85**
28	VEGETABLE OILS AND VANASPATI	64	4	60	3081.68	0.12
29	SOAPS, COSMETICS AND TOILET	70	24	46	3817.9	0.15
30	RUBBER GOODS	251	114	137	14200.86	0.57
31	LEATHER, LEATHER GOODS	225	44	181	5760.03	0.23
32	GLUE AND GELATIN	5	1	4	19.33	0
33	GLASS	155	44	111	25223.03	1.02
34	CERAMICS	243	61	182	6376.54	0.26
35	CEMENT AND GYPSUM PRODUCTS	119	43	76	19571.36	0.79
36	TIMBER PRODUCTS	23	3	20	364.44	0.01
37	DEFENCE INDUSTRIES	9	9	0	0	0
38	**CONSULTANCY SERVICES**					
	Design & Eng. Services	417	70	347	12654.46	0.51
	Management Services	371	27	344	9105	0.37
	Marketing	71	9	62	587.62	0.02
	Construction	20	2	18	575.1	0.02
	Others(CONSULTANCY SERVICE)	71	12	59	1606.91	0.06
	Sector Total	**950**	**120**	**830**	**24529.09**	**0.99**
39	**SERVICE SECTOR**					
	Financial	477	9	468	76083.46	3.07
	Non-Financial Services	385	26	359	34833.64	1.41
	Banking Services	38	0	38	5908.9	0.24
	Insurance	33	0	33	4803.58	0.19
	Hospital & Diagnostic Centres	169	17	152	12371.29	0.5
	Outsourcing	22	0	22	1788.75	0.07
	Research & Development	50	4	46	8200.94	0.33
	Education	103	0	103	12497.29	0.5
	Other Services	101	13	88	9332.93	0.38
	Sector Total	**1378**	**69**	**1309**	**165820.8**	**6.7**
40	**HOTEL & TOURISM**					
	Hotel & Restaurants	522	181	341	37827.76	1.53
	Tourism	179	27	152	8549.41	0.35
	Others(Hotel & Tourism)	48	10	38	2704.99	0.11
	Sector Total	**749**	**218**	**531**	**49082.15**	**1.98**

41	**TRADING**					
	TRADING	265	7	258	4696.58	0.19
	Trading (For Exports)	256	4	252	4015.35	0.16
	Trading(Activities)	243	9	234	21854.35	0.88
	E-COMMERCE	44	0	44	2114.93	0.09
	Sector Total	**808**	**20**	**788**	**32681.21**	1.32
42	**MISCELLANEOUS INDUSTRIES**					
	Horticulture	118	38	80	1568.66	0.06
	Agriculture (Hybrid Seeds & Plantation)	189	67	122	4371.98	0.18
	Floriculture	185	70	115	2909.96	0.12
	Diamond	20	1	19	1519.7	0.06
	Ornament & Gold	34	2	32	1270.94	0.05
	Construction Activities & Real Estate	181	9	172	23188.29	0.94
	Tea/Coffee	11	2	9	720.7	0.03
	Cigarettes	6	3	3	127.3	0.01
	Printing of Books etc.	23	2	21	355.82	0.01
	COIR	11	2	9	49.69	0
	Others (Misc Industries)	1497	564	933	31838.84	1.29
	Sector Total	**2275**	**760**	**1515**	**67921.87**	2.74
	Grand Total	**26117**	**7635**	**18482**	**2476643**	

Source: SIA,newletters,various issues,Sept.2004.

Table 4A.1: SECTOR-WISE DISTRIBUTION OF APPROVED FDI IN INDIA-2003(RS IN MILLION)

SECTOR & STATE	FDI AMI.	SECTOR SHARE(%)	STATE	FDI AMT.	% SECTOR
FUEL(POWER & OIL REFINING)	5135.88	9.64	TAMIL NADU	3286.7	63.99
			RAJASTHAN	211.28	4.11
			ANDHRA PRADESH	1337.08	26.03
			MAHARASHTRA	213.68	4.16
			REMAINING STATE'S SHARE	87.14	1.70
SERVICE SECTOR	12407.23	23.28	KARNATAKA	5557.44	44.79
			MAHARASHTRA	1839.21	14.82
			DELHI	1439.54	11.60
			TAMIL NADU	517.55	4.17
			REMAINING STATE'S SHARE	3053.49	24.61
OTHER,INCUDING MISCELLANEOUS	10859.27	20.37	ANDHRA PRADESH	940.97	8.83
			MAHARASHTRA	2302.23	21.60
			PUNJAB	5000	46.91
			DELHI	1366.03	12.82
			REMAINING STATE'S SHARE	1250.4	11.73
TELECOMMUNICATIONS	5685.62	10.67	MAHARASHTRA	4602.2	80.94
			KARNATAKA	294.48	5.18
			DELHI	87.83	1.54
			REMAINING STATE'S SHARE	701.11	12.33
DRUGS & PHARMACEUTICALS	4975.68	9.34	ANDHRA PRADESH	2775.72	55.79
			GUJARAT	1408.25	28.30
			MAHARASHTRA	530.67	10.67
			REMAINING STATE'S SHARE	261.04	5.25
CONSULTANCY SERVICES	3071.88	5.76	MAHARASHTRA	1613.16	52.51
			ANDHRA PRADESH	459.29	14.95
			TAMIL NADU	441.51	14.37
			DELHI	278.22	9.06
			REMAINING STATE'S SHARE	279.7	9.11
TRANSPORT EQUIPMENT	2677.85	5.02	KERALA	2250	84.02
			WEST BENGAL	119.53	4.46
			DELHI	36.53	1.36
			REMAINING STATE'S SHARE	271.79	10.15
ELETRICAL EQUIPMENT	1989.98	3.73	UTTAR PRADESH	439.1	22.07
			GUJARAT	106.28	5.34

			MAHARASHTRA	147.73	7.42
			DELHI	106	5.33
			ANDHRA PRADESH	94.89	4.77
			REMAINING STATE'S SHARE	1095.98	55.07
CEMENT & GYPSUM PRODUCT	1586.27	2.98	DELHI	621.24	39.16
			WEST BENGAL	452.19	28.51
			MAHARASHTRA	245.19	15.46
			TAMIL NADU	195.21	12.31
			REMAINING STATE'S SHARE	75.44	4.76
FOOD AND PROCESSING INDUSTRIES	1504.6	2.82	MAHARASHTRA	632.45	42.03
			DELHI	50.5	3.36
			ANDHRA PRADESH	38.37	2.55
			TAMIL NADU	210.99	14.02
			REMAINING STATE'S SHARE	572.29	38.04
HOTEL AND TOURISM	2498.89	4.69	DELHI	1593.54	63.77
			WEST BENGAL	392.54	15.71
			MAHARASHTRA	298.89	11.96
			KARNATAKA	26.76	1.07
			REMAINING STATE'S SHARE	187.16	7.49
METALURGICAL INDUSTRIES	756.03	1.42	KARNATAKA	541.54	71.63
GLASS & GLASS PRODUCTS	562.96	1.06	GUJARAT	66.3	11.78
TEXTILES(INCLUDING DYED,PRINTED)	495.46	0.93	DELHI	222.3	44.91
PAPER & PLUP INCLUDING PAPER PRD.	84.66	0.16	TAMIL NADU	52	61.42

Source: SIA,New Letter, various issues,Sept.2006.