

FDI in India and its Growth Linkages

Sponsored by:

Department of Industrial Policy & Promotion

(Ministry of Commerce & Industry, Government of India)

August	2009
--------	------

FDI IN INDIA AND ITS GROWTH LINKAGES

Sponsored by

**DEPARTMENT OF INDUSTRIAL POLICY & PROMOTION
(MINISTRY OF COMMERCE & INDUSTRY, GOVERNMENT OF INDIA)**

**National Council of Applied Economic Research
11 I.P. Estate, New Delhi – 110 002 (INDIA)**

© National Council of Applied Economic Research, 2010

All rights reserved, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording and/or otherwise, without the prior written permission of the publisher.

Published by

N.J. Sebastian, Secretary, for and on behalf of the National Council of Applied Economic Research, Parisila Bhawan,
11, Indraprastha Estate, New Delhi-110 002
www.ncaer.org

Printed at

M/s. Cirrus Graphics Pvt. Ltd., B-62/14, Phase II, Naraina Industrial Area, New Delhi-110 028
www.cirrusgraphics.com

PROJECT TEAM

Study Team

Project Leaders

Rajesh Chadha
Geethanjali Nataraj

Anjali Tandon
K Elumalai
Prabhu Prasad Mishra
Bornali Bhandari
Ashwani
Geetha Mohan

Support Team

Praveen Sachdeva
Sudesh Bala
B. B. Chand
Rakesh Srivastava
J. S. Punia

Foreword

Foreign direct investment (FDI) plays a multidimensional role in the overall development of the host economies. It may generate benefits through bringing in non-debt-creating foreign capital resources, technological upgrading, skill enhancement, new employment, spill-overs and allocative efficiency effects. While FDI is expected to create positive outcomes, it may also generate negative effects on the host economy. The costs to the host economy can arise from the market power of large firms and their associated ability to generate high profits. Much of the existing empirical evidence suggests that the positive effects offset negatives, thus providing net economic benefits for the host economies.

While empirical and econometric work on testing various theoretical hypotheses is embedded in the extant literature on FDI, there is lack of information on the plant-level spatial and sectoral spread of FDI-enabled production facilities in India and their linkages with rural and suburban areas. The majority of the population, both urban and rural, is expected to gain, indirectly and differentially, from FDI. While FDI may benefit the economy at both macroeconomic and microeconomic levels, it is equally important to probe whether people in the rural and suburban areas get affected through such benefits. FDI in relatively labour-intensive sectors including food processing, textiles and readymade garments, leather and leather products, and light machine tools, with plants set up in small cities close to rural and suburban areas, would tend to have relatively high employment-generating potential.

The present study aims at providing a detailed understanding of the spatial and sectoral spread of the FDI-enabled production facilities in India and their linkages with the rural and suburban areas. The corresponding impact on output, value-added, capital and employment in the regions receiving FDI has also been worked out.

FDI-enabled plants in India are spread across various states with relatively high concentration in Maharashtra, Gujarat, Tamil Nadu, Karnataka and West Bengal. A significant proportion of manufacturing plants are located in small cities (population less than 5,00,000). More than two-fifth of the market capitalisation originates in small cities. FDI-enabled service facilities have a relatively high concentration in Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu. The proportion of service facilities located in small cities is relatively less significant vis-a-vis manufacturing plants.

About half the total output, valued-added (output minus inputs) and wages paid in the FDI-enabled manufacturing firms originate in small cities in sectors including non-metallic mineral products; building and construction parts; mining of iron ores; textiles; and growing and processing of crops. The share of value-added in output is relatively high in sectors including software and publishing; mining of iron ore; growing and processing of crops; non-metallic mineral products; special purpose machinery; tobacco products; and footwear.

FDI-enabled firms in manufacturing sectors provide employment to about 15.6 lakh persons accounting for about 4 to 5 per cent of the total employment in the organised sector. Small cities provide employment to about 7.9 lakh workers. Sectors providing a relatively high share of employment in small cities include transport equipment; growing and processing of crops; construction parts; textiles; and non-metallic mineral products.

The study concludes that the FDI in manufacturing sectors has significant reach in small cities, thus generating linkages with suburban and rural regions of India. The major FDI-receiving sectors have strong backward and / or forward

linkages with the economy. The sectors with strong backward and forward linkages include construction; fuels; chemicals; and metallurgical industries. The sectors with strong backward linkages include electrical equipment; drugs and pharmaceuticals; food processing; and textiles, among others. Service sectors, telecommunications, and consultancy services have strong forward linkages.

This study has been commissioned by the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India. I would like to place on record our sincere thanks to Shri Gopal Krishna, Joint Secretary, DIPP and his colleagues for having interacted with the NCAER research team during the course of this study. Their suggestions have been very useful in shaping the present version of the Report.

Suman Bery
Director-General, NCAER

ACKNOWLEDGEMENTS

This study has been commissioned by the Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce & Industry, Government of India. We would like to put on record our sincere thanks to Shri Gopal Krishna, Joint Secretary, DIPP for providing sustained support and inputs during the course of this study.

We received very useful comments and suggestions from Shri Gopal Krishna and Shri Ajay Shankar, former Secretary, DIPP during interactive meetings on work-in-progress. We owe our gratitude to them for having taken time off from their busy schedules.

Thanks are also due to Shri Deepak Narain, Director and Ms. Pramila Raghavendran, former Under Secretary, DIPP for their helpful participation in this work.

Dr. Shashanka Bhide, Senior Research Counsellor, NCAER has provided cooperation and useful suggestions at various stages of this study. We would like to convey our earnest thanks to him.

We wish to convey sincere thanks to our Director-General, Mr. Suman Bery for his encouragement and support during the course of the study.

The study has used data from a number of published sources which have been acknowledged as far as possible.

We would like to acknowledge contribution of the editor in making this report more readable. The team, however, remains responsible for any errors.

Contents

Executive Summary

Chapter 1: Introduction	1
Chapter 2: FDI Scenario in India: Trends and Policies	9
Chapter 3: Mergers & Acquisitions and Greenfield FDI	25
Chapter 4: Special Economic Zones (SEZs) and FDI in India	31
Chapter 5: FDI: Linkages with the Economy	49
Chapter 6: Secondary Data-Based Analysis	57
Chapter 7: Primary Survey: Analysis and Results	73
Chapter 8: FDI Data Reporting and Classification	91
Chapter 9: Maps of Spatial Spread of FDI-Enabled Firms	117
Chapter 10: Key Findings and Salient Conclusions	133
References	141
Chapter 6 (Tables)	145
Questionnaires	241

List of Tables and Annexes

Chapter 2: FDI Scenario in India: Trends and Policies

Table 2.1:	FDI Inflows (August 1991 –November 2008)	12
Table 2.2:	India's FDI Outflows (Debit)	13
Table 2.3:	Revised FDI Inflows Data (Equity + Additional Components) (amount in US\$ million)	13
Table 2.4:	Route-wise FDI Inflows (in US\$ million)	14
Table 2.5:	Sector-wise Break-up of FDI Inflows (August 1991 – October 2008)	17
Table 2.6:	FDI inflows by Sector and Year (Manufacturing) (US\$ million)	18
Table 2.7:	FDI in India in the Service Sector (US\$ million)	19
Table 2.8:	Share of Service Sector FDI Inflows in Total FDI Inflows to India (%)	19
Table 2.9:	RBI's Region-wise Break-up of FDI Inflows (January 2000 –March 2009)	20
Table 2.10:	Share of Top Investing Countries (in US\$ million)	20
Table 2.11:	Number of Cumulative Foreign Technology Collaboration Approvals	23
Table 2.12:	Sector-Wise Technology Transfer Approvals	23
Table 2.13:	Country-Wise Technology Transfer Approvals	23

Chapter 3: Mergers & Acquisitions and Greenfield FDI

Table 3.1:	Differences between Mergers and Acquisitions	26
Table 3.2:	Short-term effects of FDI through Greenfield vs. M&A	27
Table 3.3:	FDI by Entry Mode	27
Table 3.4:	M&A Deals in India	29
Table 3.5:	Top 10 Acquisitions in India	30

Chapter 4: Special Economic Zones (SEZs) and FDI in India

Table 4.1:	Total Physical Exports by SEZs	35
Table 4.2:	Export Performance of the 8 functional SEZs (Rs. crore)	35
Table 4.3:	Total Investment in SEZs	36
Table 4.4:	Summary of Investment in SEZ Set Up Prior to SEZ Act, 2005 (Rs. crore)	36
Table 4.5:	Government SEZs (EPZs Converted to SEZs) (Rs. crore)	36
Table 4.6:	Total Employment in SEZ	38
Table 4.7:	Employment in SEZs Set Up Prior to SEZ Act, 2005	38
Table 4.8:	Government SEZs (EPZs Converted to SEZs)	38
Table 4.9.	Area permits for different types of SEZs	44
Annex 4.1:	Comparison of Special Economic Zones with Export Processing Zones	46
Annex 4.2:	Investment in State/Private SEZs Notified Prior to SEZ Act, 2005 (Rs. crore)	47
Annex 4.3:	Employment in State/Private SEZs Notified Prior to SEZ Act, 2005	48

Chapter 5: FDI: Linkages with the Economy

Table 5.1:	List of Key Sectors	51
Table 5.2:	Backward-Oriented Sectors	52
Table 5.3:	Forward-Oriented Sectors	53
Table 5.4:	Non-Key Sectors	54
Table 5.5:	Sector-wise FDI in India (US\$ million)	55

Chapter 6: Secondary Data-Based Analysis

(The set of tables is provided after the section of References)	145
---	-----

Chapter 7: Primary Survey: Analysis and Results

Table 7.1a:	Distribution of Surveyed Firms by Zone and Sector	79
Table 7.1b:	Distribution of Surveyed Firms by Zone and Sector (%)	79
Table 7.2a:	Zone-wise Foreign Equity Capital Holding	80
Table 7.2b:	Zone-wise Distribution of Foreign Equity Capital Holding (%)	81
Table 7.3a:	Listing Status of FDI-enabled Firms by Zone	82
Table 7.3b:	Zone-wise Distribution of Listing Status of FDI-enabled Firms (%)	83
Table 7.4:	Distribution of FDI-enabled Service Firms by Zone and Sector	84
Table 7.5:	Zone-wise Resource Category of Surveyed Manufacturing FDI-enabled Firms	84
Table 7.6a:	Number of Employees in Surveyed FDI-enabled Firms by Zone	85
Table 7.6b:	Number of Employees per Firm in Surveyed FDI-enabled Firms: Zone-wise	86
Table 7.7a:	Mode of Transport from FDI-enabled Firms to Nearest Metro/ Urban Centre (in numbers)	87
Table 7.7b:	Quality of Transport from FDI Firm to Nearest Metro/Urban Centre	87
Table 7.7c:	Infrastructure Facilities available within 10 km	88
Table 7.8a:	Number of FDI-enabled Firms Facilitating Improvement in Infrastructure	89
Table 7.8b:	Distribution of FDI-enabled Firms Facilitating Improved Infrastructure	90

Chapter 8: FDI Data Reporting and Classification

Table 8.1:	Trends in FDI Inflows to India	97
Table 8.2:	FDI inflows by sector and year (US\$ million)	98
Table 8.3:	Trends in FDI Inflows by Country of Origin (US\$ Million)	101
Table 8.4:	FDI distribution by Country and Sector (Jan 2000 – June 2007) (\$ million)	102
Table 8.5:	DIPP Classification of FDI by Economic Activity	103
Table 8.6:	Concordance between DIPP Classification and NIC 2-digit (2008)	106
Table 8.7:	Concordance between DIPP Classification and NIC 3-digit (2008)	110

List of Figures

Chapter 2: FDI Scenario in India: Trends and Policies

Figure 2.1. FDI inflows: Global Trends (1999-2007)	10
Figure 2.2: Sector-wise FDI Inflows (Aug. 1991-Dec. 1999)	15
Figure 2.3: Sector-wise FDI Inflows (Jan. 2000-March 2009)	16
Figure 2.4: Country-wise FDI Inflows (Aug. 1991-Dec. 1999)	21
Figure 2.5: Country-wise FDI Inflows (Jan. 2000-March 2009)	21

Chapter 3: Mergers & Acquisitions and Greenfield FDI

Figure 3.1 FDI in India	28
-------------------------	----

Chapter 7: Primary Survey: Analysis and Results

Figure 7.1: FDI firms by Zone and Sector	75
Figure 7.2: Zone-wise Equity Holdings	76

Chapter 9: Maps of Spatial Spread of FDI-Enabled Firms

Map 1: Spatial Spread of FDI-enabled Manufacturing Plants	122
Map 2: FDI-enabled Plants Mapped with Population: District Level	123
Map 3: FDI-enabled Plants Mapped with Population Density: District Level	124
Map 4: FDI-enabled Plants Mapped with Literacy Rates: District Level	125
Map 5: FDI-enabled Plants Mapped with Poverty Levels: District Level	126
Map 6: Spatial Spread of FDI-enabled Service Facilities in India	127
Map 7: FDI-enabled Service Facilities Mapped with Population: District Level	128
Map 8: FDI-enabled Service Facilities Mapped with Population Density: District Level	129
Map 9: FDI-enabled Service Facilities Mapped with Literacy Rates: District Level	130
Map 10: FDI-enabled Service Facilities Mapped with Poverty Levels: District Level	131

Executive Summary

Foreign direct investment (FDI) has played an important role in the process of globalisation during the past two decades. The rapid expansion in FDI by multinational enterprises since the mid-eighties may be attributed to significant changes in technologies, greater liberalisation of trade and investment regimes, and deregulation and privatisation of markets in many countries including developing countries like India.

Capital formation is an important determinant of economic growth. While domestic investments add to the capital stock in an economy, FDI plays a complementary role in overall capital formation and in filling the gap between domestic savings and investment. At the macro-level, FDI is a non-debt-creating source of additional external finances. At the micro-level, FDI is expected to boost output, technology, skill levels, employment and linkages with other sectors and regions of the host economy.

The present study aims at providing a detailed understanding of the spatial and sectoral spread of FDI-enabled production facilities in India and their linkages with the rural and suburban areas. The corresponding impact on output, value added, capital and employment in the regions receiving FDI has also been worked out.

The analysis is based on primary as well as secondary data. While the primary survey provides limited information for the requisite analysis, the secondary database has been a major source of detailed firm- and plant-level analysis. The secondary database provided a rich source of plant-level data which has been used extensively in the analysis. The Capitaline database provides data on more than 14,000 Indian listed and unlisted companies classified under more than 300 industries. The information used is based on FDI actually received.

All firms with foreign equity participation of 10 per cent and above have been considered to be FDI-enabled firms or "FDI firms". All other firms, with less than 10 per cent foreign equity, are referred to as "domestic firms". The analysis of the secondary data has been undertaken to cover the issues of a) spatial spread and reasons thereof; b) sectoral clustering; c) depth of value added; d) employment-generating effects; e) labour and capital intensity; f) comparative performance of FDI and domestic firms; and g) export potential.

Based on the population data compiled in the Population Census 2001, the cities / towns of FDI-enabled production facilities have been grouped into three classes of cities based on their size, viz., Class-1, Class-2 and Class-3 cities. Class-1 cities are towns with a population of 1,00,000 (one million) and above, Class-2 cities are towns with a population between 5,00,000 and 1,00,000, and Class-3 cities are towns with a population of less than 5,00,000. It is assumed that Class-3 cities (also referred to as small cities) are likely to be towns which are suburban and closer to rural areas of the country. The purpose of introducing city-size classes is to locate the movement and final plant location of FDI firms. The more the FDI moves into Class-3 cities, the higher its linkage with suburban/rural regions of the country.

The data of 351 FDI firms with 1,171 plants spread over 275 cities have been used to gauge the current economic performance of these plants during the period April 2006 to March 2008. This information has been used to study agglomeration / clustering issues, as well as other performance indicators of firms and plants and NIC 3-digit sectors across



states and cities. These indicators include FDI equity, net fixed capital, output, employment, value added, output-capital ratio and FDI sectoral intensity. The FDI-specific indicators have also been compared with corresponding domestic indicators.

We provide information on the top 25 NIC sectors based on the sectoral share of market capitalisation for the FDI firms. Information is also provided for net fixed capital and equity (foreign and domestic). In the case of FDI firms, the top 25 NIC sectors exhaust about 91 per cent of the total market capitalisation, 83 per cent of foreign equity and 84 per cent of net fixed capital. Market capitalisation of FDI firms accounts for 15 per cent of the total capitalisation (domestic plus FDI firms). The top 25 NIC sectors account for 92 per cent of the total market capitalisation in small cities. The corresponding shares are 74 per cent for foreign equity and 78 per cent for net fixed capital.

FDI-enabled plants are spread across various states with a relatively high concentration in Maharashtra, Gujarat, Tamil Nadu, Karnataka and West Bengal. A significant proportion (54 per cent) of manufacturing plants is located in Class-3 cities. FDI-enabled service facilities have a relatively high concentration in Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu. The proportion of service facilities located in Class-3 cities is relatively less significant (35 per cent) vis-a-vis manufacturing plants.

Foreign equity in FDI-enabled manufacturing sectors has relatively significant penetration (44 per cent) in Class-3 cities compared with that in service sectors (8 per cent). The same is true for market capitalisation and net fixed capital. Sectors with relatively high share of market capitalisation in Class-3 cities include non-ferrous metals; non-metallic mineral products; dairy products; basic iron and steel; and transport equipment. States with relatively high share of market capitalisation in Class-3 cities include Andhra Pradesh, Assam, Haryana, Rajasthan and Uttar Pradesh.

About half the total output, valued-added and wages paid in the FDI-enabled manufacturing firms originate in Class-3 cities. Class-3 cities account for relatively high shares of output, value-added and wages paid in sectors including non-metallic mineral products; building and construction parts; mining of iron ores; textiles; and growing and processing of crops. The share of value-added in output is relatively high in sectors including software and publishing; mining of iron ore; growing and processing of crops; non-metallic mineral products; special purpose machinery; tobacco products; and footwear.

More than two-fifth of the market capitalisation originates in Class-3 cities. FDI-enabled firms in manufacturing sectors provide employment to about 15.6 lakh persons, accounting for about 4 per cent to 5 per cent of the total employment in the organised sector. Class-3 cities provide employment to about 7.9 lakh workers (more than 50 per cent of the total). Sectors providing a relatively high share of employment in Class-3 cities include transport equipment; growing and processing of crops; construction parts; textiles; and non-metallic mineral products.

Class-3 cities have relatively high scale of production, market capitalisation, value-added, wages paid, output and employment per plant vis-à-vis medium and large cities. Information on the skill composition of workers employed in manufacturing plants is not available.

FDI-enabled manufacturing firms pay higher wage per rupee of net fixed capital compared to domestically invested manufacturing firms. Within FDI firms, the value is relatively high in sectors including footwear; medical appliances; electricity distribution and control apparatus; general purpose machinery; and building of construction parts.

Output-capital ratio is also higher in FDI firms than in domestic firms. Within FDI-enabled firms, the output-capital ratio is relatively high in sectors such as medical appliances; electricity distribution and control apparatus;



petroleum products; mining of iron ore; and transport equipment. The corresponding values in these sectors are much lower in the case of domestically invested firms. Data for comparison with firms of the parent companies located outside India is not available.

The overall net foreign exchange earning is negative for FDI-enabled as well as domestically invested firms mainly due to a deficit in the manufacture of petroleum products. Sectors with positive net foreign exchange earnings include chemicals; mining of iron ores; textiles; and software and publishing.

The top FDI receiving sectors, as per the DIPP 4-digit classification, have strong backward and / or forward linkages with the economy. The sectors with strong backward and forward linkages include construction; fuels; chemicals; and metallurgical industries. The sectors with strong backward linkages include electrical equipment; drugs and pharmaceuticals; food processing; and textiles. Services sectors, telecommunications, and consultancy services have strong forward linkages.

The market capitalisation of the FDI-enabled service firms is less than two-fifth the combined market capitalisation of manufacturing and service firms. However, it has insignificant reach in Class-3 cities compared with the impressive presence of FDI-enabled manufacturing firms in Class-3 cities. Only one-tenth of output and value-added of the FDI-enabled service sectors originates in Class-3 cities.

The secondary database does not have information on the amount of FDI or the number of FDI-enabled firms/plants in Special Economic Zones (SEZs). However, we do have information on the number of FDI plants located in cities having SEZs but not on whether these firms are within or outside a particular SEZ in a specified city. The FDI component accounts for about 8 per cent of the total investment in SEZs.

FDI-enabled manufacturing firms account for 12 per cent of total exports by FDI-enabled and domestically invested manufacturing firms taken together. About 13 per cent of total sales by FDI-enabled firms are exported. This implies that FDI has entered India mainly to seek domestic markets. Mining of iron ore; non-ferrous metals; special purpose machinery; textiles; and software and publishing have relatively high export-to-sales ratios.

The database does not provide information on firm-wise FDI equity into greenfield and M&A components. However, DIPP data indicates that one-fifth of FDI equity inflows are acquisitions.

Total FDI inflows are estimated at US\$90 billion during April 2000 to March 2009. The services sector; computer hardware & software; telecommunications; real estate; construction; automobiles; power; metallurgical industries; petroleum and natural gas; and chemicals received the highest FDI. Mauritius is the main source followed by Singapore, the US, the UK, the Netherlands and Japan.

To compile the FDI statistics, DIPP follows the methodology proposed by the Technical Monitoring Group (TMG). The sectoral FDI data reporting by DIPP follows the modified sectoral classification of the Industrial Development and Regulation Act, 1951. The current industrial classification available is the National Industrial Classification (NIC) 2004. NCAER has provided a concordance between DIPP and NIC 2- and 3-digit sectors to facilitate adaptation and adoption for the DIPP data reporting according to the NIC-2004 classification.

One important concern in India's industrial policy is the dispersal of industrial plants across the states of the country. There are two types of agglomeration forces, viz., spill-overs and natural advantage. Natural advantage refers to factors



of production which provide enabling conditions for producing certain goods, e.g., tea, wine, photographic films, etc. Locational spillovers refer to physical as well as intellectual spillovers.

It is observed that 10 out of the top 25 FDI employment sectors have relatively high agglomeration and 9 are relatively dispersed; six sectors are moderately agglomerated. Some of the highly agglomerated sectors with high employment in FDI-enabled production units include growing of crops; motor parts; general purpose machinery; medical appliances and transport equipment, among others.

In the case of output, 6 out of the top 25 FDI sectors have relatively high agglomeration and 11 are relatively dispersed; eight sectors are moderately agglomerated. Some of the highly agglomerated sectors with high output in FDI-enabled production units include motor parts, general purpose machinery, transport equipment, and medical appliances, among others.

While agglomeration estimates have been based on state-level data, the determinants of locational choice are analysed at the state as well as at the city level. Apart from this, one may also consider variations across geographical regions like north, east, west and south. Firm-level characteristics may also be considered; while firms are generally headquartered in relatively large cities, the plants may be located in large as well as small (Class-3) cities.

Multiple factors are likely to play a simultaneous role in helping a firm decide on plant location. The decision would primarily be based on the nature of the plant under consideration. For example, it is more likely that an integrated iron and steel plant would be located close to regions producing primary inputs (iron ore and coal) and a cement plant close to limestone quarries. State-level factors may include the number of SEZs, energy deficit, per capita income, and the number of workers' unions, among others. City-level factors may include congestion in a city, presence of a port / airport / SEZ, distance from the nearest major city, and the share of FDI plants in total plants, among others. The share of FDI plants in total plants in a city may be taken as a proxy for FDI plant density / FDI agglomeration.

It was observed that the alternative econometric specifications make some independent variables consistent in terms of sign and significance, whereas other variables provide fragile results with respect to sign / significance. Variables including the share of FDI plants in a city and electricity deficit to availability ratio in a state are robust across various model specifications. One variable that shows less robust results is per capita income. However, we have included this in the final specification of the model as a proxy for level of development of a state.

Regions do not have an influence on FDI plants to locate in Class-3 cities. In general, FDI firms prefer to locate in Class-3 cities which are relatively far from the nearest Class-1 city. However, in the southern region, the probability of an FDI firm being located 100 to 500 km from the nearest Class-1 city is less than that in the northern region. In the case of the eastern region, the probability of an FDI firm being located beyond 100 km from the nearest Class-1 city is greater than that in the northern region. The western region does not indicate any significant difference in terms of FDI plant location in Class-3 cities based on distance from the nearest Class-1 city vis-à-vis the location pattern in the northern region. ●

Chapter 1: Introduction

1.1 Backdrop

Capital formation is an important determinant of economic growth. While domestic investments add to the capital stock in an economy, foreign direct investment (FDI) plays a complementary role in overall capital formation by filling the gap between domestic savings and investment.

FDI has played an important role in the process of globalisation during the past two decades. The rapid expansion of FDI by multinational enterprises (MNEs¹) since the mid-eighties may be attributed to significant changes in technologies, liberalisation of trade and investment regimes, and deregulation and privatisation of markets in many countries including developing countries like India. Fresh investments, as well as mergers and acquisitions, (M&A) play an important role in the cross-country movement of FDI. However, various qualitative differences have been identified between fresh FDI (greenfield FDI) and M&A.

An important question that arises is whether FDI merely acts as filler between domestic savings and investment or whether it serves other purposes as well. At the macro-level, FDI is a non-debt-creating source of additional external finances. This might boost the overall output, employment and exports of an economy. At the micro-level, the effects of FDI need to be analysed for changes that might occur at the sector-level output, employment and forward and backward linkages with other sectors of the economy. There are fears that foreign firms might displace domestic monopolies, and replace these with foreign monopolies which may, in fact, create worse conditions for consumers. Thus, it is important to have an efficient competition policy along with sector regulators in place.

While the quantity of FDI is important, equally important is the quality of FDI. The major factors that might provide growth impetus to the host economy include the extent of localisation of the output of the foreign firm's plant, its export orientation, the vintage of technology used, the research and development (R&D) best suited for the host economy, employment generation, inclusion of the poor and rural population in the resulting benefits, and productivity enhancement.

1.2 Literature Survey

FDI plays a multidimensional role in the overall development of host economies. It is widely discussed in the literature that, besides capital flows, FDI generates considerable benefits. These include employment generation, the acquisition of new technology and knowledge, human capital development, contribution to international trade integration, creation of a more competitive business environment and enhanced local/domestic enterprise development, flows of ideas and global best practice standards and increased tax revenues from corporate profits generated by FDI (Klein et al., 2001; Tambunan, 2005). While FDI is expected to create positive outcomes, it may also generate negative effects on the host economy. The costs to the host economy can arise from the market power of large firms and their associated ability to generate very high profits or by domestic political interference by multinational corporations. But the empirical evidence shows that the negative effects from FDI are inconclusive, while the evidence of positive effects is overwhelming, i.e., its net positive effect on economic welfare (Graham, 1995).

1. MNEs, MNCs, and TNCs are used synonymously. They are corporations or enterprises that manage production or deliver services in more than one country.



FDI in manufacturing is generally believed to have a positive and significant effect on a country's economic growth (Alfaro, 2003). However, based on empirical analysis of data from cross-country FDI flows for 1981-1999, Alfaro (2003) points out that the impact of FDI on growth is ambiguous. FDI in the primary sector tends to have a negative impact on growth, while investment in manufacturing has a positive effect, and the impact of FDI in services is ambiguous. In general, multinational enterprises have increasingly contributed to capacity addition and total sales of manufacturing. Further, FDI plays an important role in raising productivity growth in sectors in which investment has taken place. In fact, sectors with a higher presence of foreign firms have lower dispersion of productivity among firms, thus indicating that the spill-over effects had helped local firms to attain higher levels of productivity growth (Haddad and Harrison, 1993). Besides being an important source for diffusion of technology and new ideas, FDI plays more of a complementary role than of substitution for domestic investment (Borenstein et al., 1998). FDI tends to expand the local market, attracting large domestic private investment. This "crowding in" effect creates additional employment in the economy (Jenkins and Thomas, 2002). Further, FDI has a strong relation with increased exports from host countries. FDI also tends to improve the productive efficiency of resource allocation by facilitating the transfer of resources across different sectors of the economy (Chen, 1999).

Little empirical evidence is available on the impact of FDI on the rural economy, in general, and on poverty, in particular. However, in recent times, there has been increasing interest in studying the linkage between growth and poverty. FDI inflows are associated with higher economic growth (Jalilian and Weiss, 2001; Klein et al., 2001), which is critically important for poverty reduction. But the pattern and nature of the growth process in an economy also assumes importance. It has been found that FDI had a positive impact on poverty reduction in areas where the concentration of labour-intensive industries was relatively high (Doanh, 2002).

It has been shown by Bajpai (2004) that India's labour-intensive manufacturing can potentially absorb a major section of the labour force and it holds the key to achieve dynamic growth in the country. Further, Aggarwal (2001) showed that high-tech industries are not attracting efficiency-seeking FDI; medium- and low-tech industries with foreign stakes seem to have performed better, indicating that India's comparative advantage in exports lies with low-tech industries. However, Siddharthan and Nollen (2004) showed that in the information technology sector, exports by MNE affiliates are greater when they have larger foreign equity stakes.

Though it is expected that growth tends to benefit the poor, this has not happened in many countries. There is no clear picture whether growth reduces poverty (World Bank, 2000). It is believed that increased flow of capital raises capital intensity in production, resulting in lower employment generation. However, a higher level of investment accelerates economic growth, showing wider positive effects across the economy. Tambunan (2005) found that FDI has positive effects on poverty reduction mainly through three important ways, viz., labour-intensive growth with export growth as the most important engine; technological, innovation and knowledge spill-over effects from FDI-based firms on the local economy; and poverty alleviation programmes or projects financed by tax revenues collected from FDI-based firms. However, the host country's policies and institutions, the quality of investment, the nature of the regulatory framework and the flexibility of labour markets are important to attain the expected benefits from FDI (De Melo, 1999; Klein et al., 2001). The impact of FDI has been found to be the strongest in countries with higher education levels (Borenstein et al., 1998; Jalilian and Weiss, 2001). However, FDI may indirectly benefit the poor by creating better employment and earning opportunities for the unskilled workforce in developing countries (ODI, 2002).

India-specific studies on FDI have dealt with determinants of FDI, technology spill-overs, export growth and good governance practices transferred from foreign to domestic firms (Banga, 2003; Kumar, 2002, 2003; Pant, 1995; Siddharthan and Nollen, 2004). These effects have been estimated through firm-level case studies and through cross-

section industry data. However, the impact of FDI on the economy is still not clear and there is little evidence on the economy-wide impact of FDI in India. However, there is great interest among academics and policy makers to critically examine the impact of FDI on the different sectors of the economy and various regions of the country.

In India, FDI equity flows are concentrated in a few states (Morris, 2004). Of the total approved FDI flow, Maharashtra accounted for the largest proportion with 46 per cent, followed by Gujarat with 15 per cent, and Delhi with 7.7 per cent. Other states with significant and large investments were Andhra Pradesh, Karnataka and Tamil Nadu. Among these states, only a few cities were involved in a significant amount of FDI. These included Ahmedabad, Bangalore, Kolkata, Chennai, Coimbatore, Goa, Hyderabad, Jamnagar, Kancheepuram, Mumbai, Pune and Raigarh, indicating that the geographical flow of FDI in India is skewed in favour of relatively large cities. However, for all investments, it is regions with metropolitan cities that have the advantage in headquartering the country operations of MNEs, thereby attracting the bulk of FDI. The study suggests that there are vast gains to be made by attracting FDI, especially in services and high-tech skilled labour-seeking industries.

Aggarwal (2007) has shown that there are wide variations in the FDI inflow across the states of India. Only seven states² accounted for over 97 per cent of the total amount of export-oriented FDI and 83 per cent of total FDI approvals during 1991-2001. The presence of Export Processing Zones was found to be a relevant pull factor in attracting export-oriented FDI. Further, while explaining the sensitivity of FDI to labour market conditions, the study revealed that labour market rigidities and labour costs are more pronounced for export-oriented FDI than for domestic market-seeking FDI. Infrastructure and regional development are found to be key factors in attracting higher FDI, both in the export and domestic market-seeking sectors.

FDI plant location is a complicated phenomenon. By utilising plant-level data across 100 of the largest cities in 17 states of India, Goldar (2007) established that the inter-state and inter-city distribution of plants of foreign firms is almost identical to that of domestic firms. This indicates that the factors influencing the location of plants of foreign companies are, by and large, the same as those for domestic companies. But the number of plants of foreign companies in a city is positively related to the size of the city, civic amenities in the city, size of the largest city in the state and investment climate in the state. The presence of a metropolitan city in the state probably captures the advantage in headquartering the country operations of multinational companies.

Examining industry-specific spill-over effects, Bergman (2006) has shown that pharmaceutical MNCs in India made a positive contribution to the growth and development of the industry. Spill-over effects through imitation, industrial management skills and competition were explicitly observed in the industry. Such effects were generated not only in product development, but also in marketing and documentation techniques. The foreign firms' presence has indirectly encouraged domestic firms to increase their managerial efforts and to adopt some of the marketing techniques used by MNCs. Further, the presence of foreign firms has intensified competitive pressure in the industry and stimulated domestic firms to use accessible resources more efficiently. India's comparative advantage in pharmaceuticals has boosted the Indian pharmaceutical enterprises to move and operate abroad.

FDI benefits the host country in a number of ways. However, most of the studies conducted in India and abroad have been confined to firm/industry-level analyses that focus on determinants and spill-overs from MNEs to domestic firms. In the Indian context, there is a perception that the flow of FDI, either through greenfield investment or mergers and acquisitions, and their associated benefits are concentrated only in urban/metropolitan areas. It is thus important to know whether and by how much FDI has reached relatively small cities/ towns since many of these are likely to have

2. Andhra Pradesh, Tamil Nadu, Maharashtra, Gujarat, West Bengal, Uttar Pradesh and Kerala.



neighbouring rural clusters. The present study is a modest attempt to quantify the linkage of benefits that FDI in India has provided to its rural population.

1.3 FDI in India

There have been significant changes in the growth models of developing economies during the past two decades. Many of these economies, including India, have moved away from inward-oriented import substitution policies to outward-oriented and market-determined export-oriented strategies. The scepticism about the role of FDI in reinforcing domestic growth has given way to greater openness to FDI, with a view to supporting investment and productivity of the host countries. While developing countries have started accepting FDI inflows with some caution, which is obvious, the developed countries have moved their investments to foreign locations, subject to safety and profitability of their business operations in foreign lands.

FDI plays an important role in the transmission of capital and technology across home and host countries. Benefits from FDI inflows are expected to be positive, although not automatic. A facilitating policy regime with minimal interventions may be ideal to maximise the benefits of FDI inflows. The debate on its pros and cons has not yet been settled and is likely to continue. It is not possible to reach a decisive value judgement on whether FDI is good or bad for the developing country/host economy. It may or may not have the desired and expected growth-enhancing impact on the host economy. Even more difficult is the question of whether it brings about equity along with growth effects. FDI might enter a labour-abundant country with capital-intensive technologies; however, if the labour laws are not flexible, this would have a relatively small impact on employment generation. On the other hand, the entry of FDI in labour-intensive firms would have a positive impact on equity and poverty reduction if the FDI-enabled firms choose to locate close to suburban/rural areas.

The history of capital flows shows that large amounts of FDI criss-crossed the high-income countries and benefited their economies. The newly industrialised economies (NIEs) constitute important case studies.

Many developing countries, including India, have started receiving significant amounts of FDI in the past two decades. A large quantum of such FDI originates from high-income countries including the United States and the EU, while south-south FDI flows have also been increasing.

However, nothing comes for free. Mere openness to FDI inflows may be a necessary but insufficient condition and the host economy needs to provide a sufficiently enabling environment to attract foreign investors. In order to fulfil sufficient conditions, the host country has to ensure that it creates absorptive capability to make the best use of the FDI it receives. It needs to create a level playing field through developing an efficient, competitive and regulatory regime, such that both domestic and foreign invested companies play a mutually reinforcing role within a healthy competitive environment.

1.4 Investment Outlook

A number of studies in the recent past have highlighted the growing attractiveness of India as an investment destination. According to Goldman Sachs (2003), the Indian economy is expected to continue growing at the rate of 5 per cent or more until 2050.

According to the A.T. Kearney (2007), India continues to rank as the second most attractive FDI destination, between China at number one and the United States at number three. India displaced the United States in 2005 to gain the second position, which it has held since then. FDI inflows in 2006 touched \$19.6 billion and in 2007, total FDI inflows



in India stood at \$23 billion, showing a growth rate of 43.2 per cent over 2006. In 2008, total FDI inflows into India stood at \$33 billion.

1.5 FDI Performance and Potential Index

UNCTAD ranks countries by their Inward FDI Performance³ and Inward FDI Potential Indices.⁴ While India is the second most attractive country in terms of the foreign investors' confidence index, it does not rank high on either the performance or potential indices. UNCTAD (2008) provides a matrix of four groups of countries based on their FDI performance and potential:

- a) Front runners: countries with both high FDI potential and performance
- b) Above potential: countries with low FDI potential but strong performance
- c) Below potential: countries with high FDI potential but low performance
- d) Under-performers: countries with both low FDI potential and performance

While countries like Chile, Hong Kong, Malaysia, Singapore and Thailand are “front runners”, and China is below potential, all the major South Asian countries, viz., Bangladesh, India, Nepal, Pakistan and Sri Lanka are “under-performers”.

India's FDI Performance Index in 2007 ranked at 106 (China was 88) out of 141 countries. However, it has a relatively high FDI Potential Index at 84 (China is 32). India's outward FDI Performance Index in 2007 is also high at the 50th position (China was 59th).

1.6 Global Competitiveness of India's FDI

Another method of assessing the investment potential of an economy is its rank on global competitiveness.⁵ The Global Competitiveness Index (GCI) is a comprehensive index developed by the World Economic Forum (WEF) to measure national competitiveness and is published in the Global Competitiveness Report (GCR). It takes into account the micro- and macro-economic foundations of national competitiveness, in which competitiveness is defined as the set of institutions, policies and factors that determine the level of productivity⁶ of a country and involves static and dynamic components. The overall GCI is the weighted average of three major components: a) basic requirements (BR)⁷; b) efficiency enhancers (EE)⁸; and c) innovations and sophistication factors (ISF).⁹

Within the information available for 131 countries, the United States is ranked the highest, with an overall index of 5.67, and Chad is ranked the lowest with an overall index of 2.78; the overall index is 107 for Bangladesh, 92 for Pakistan and 70 for Sri Lanka. The overall rank of India at 48 is still below that of China at 35. In terms of the components, India holds a relatively low rank for BR (74), but higher ranks for EE (31) and even higher for ISF (26). Compared to China, India's BR rank is lower, but it is higher than China's on EE and ISF.

3. The UNCTAD Inward FDI Performance Index is computed as the ratio of a country's share in global FDI inflows to its share in global GDP. For details, refer to UNCTAD (2002), World Investment Report.

4. The UNCTAD Inward FDI Potential Index is computed as the unweighted average of 12 economic and structural variables measured by their respective scores on a range of 0-1 (www.unctad.org/wir). The methodology is discussed in UNCTAD (2002), World Investment Report.

5. World Economic Forum (2008). The Global Competitiveness Report (GCR), 2007-2008.

6. Productivity is one of the central determinants of the returns to investment.

7. BR has four pillars: institutions; infrastructure; macroeconomic stability; and health & primary education.

8. EE has six pillars: higher education and training; goods market efficiency; labour market efficiency; financial market sophistication; technological readiness; and market size.

9. ISF has two pillars: business sophistication; and innovation.



1.7 Objectives of the Current Study

While empirical and econometric work on testing various theoretical hypotheses is embedded in the extant literature on FDI, there has been no comprehensive attempt to examine the spatial and sectoral spread of FDI-enabled production facilities in India and their linkages with rural and suburban areas. The majority of the population, both urban and rural, is expected to gain, indirectly and differentially, from FDI. While FDI may benefit the economy at both macroeconomic and microeconomic levels through bringing in non-debt-creating foreign capital resources, technological upgrading, spill-over and allocative efficiency effects, it is equally important to probe whether people in the rural and suburban areas get affected through such benefits. FDI in relatively labour-intensive sectors including food processing, textiles and readymade garments, leather and leather products, and light machine tools, with plants set up in small cities close to rural and suburban areas, would tend to have relatively high employment-generating potential. The present study makes a modest contribution by providing a comprehensive analysis of the various aspects of the impact of FDI on the Indian economy. The objectives of the study are as follows:

i) Spatial Spread

To take stock of the spatial spread of FDI-enabled production facilities in India during the past five years (2001 to 2006). The production facilities to be studied include manufacturing plants as well as service-providing facilities as these evolved either as greenfield or as M&A processes, located in cities other than metros and Tier 1 cities and in rural areas, in particular.

ii) Sectoral Clustering

To bring out sectoral clustering across the states and sub-state regions (cities, towns and rural areas of districts) in order to assess the types of production facilities that have entered relatively small towns and rural areas outside municipal limits (2006 to 2008).

iii) Depth of Value-Added

To enable a comprehensive understanding of the value-added features of the FDI-linked production facilities and their role in providing employment opportunities.

iv) Employment-Generating Effects

To analyse the impact of FDI on various rural activities, especially in the agriculture and food-processing sectors, and to assess the positive and negative impact of employment through FDI-enabled production activities.

v) Labour and Capital Intensity

To identify FDI-enabled sectors by their levels of skill, scale, capital and labour requirements, to compare these features with domestically invested production facilities that produce similar products and services, and to provide comprehensive documentation of FDI-enabled production facilities by their labour and capital requirements.

vi) Comparative Performance

To compare the efficiency and profit levels of MNC affiliates established in India with firms under their parent companies operating outside India. To make similar comparative analyses in a particular sector between FDI-enabled production facilities and domestically invested production facilities.

vii) FOREX Implications

To understand the implications of repatriation of profits earned in India versus profits retained and invested.

**viii) Backward and Forward Linkages**

To estimate the backward and forward linkages of FDI-enabled sectors by mapping these on the latest available input-output tables for India.

ix) FDI in Service Sectors

To study the impact of FDI in service sectors on the rural economy.

x) Special Economic Zones (SEZs)

To study the concentration of production facilities in SEZs, analyse the relative performance of such plants inside and outside SEZs, and examine the impact of such production on the Index of Industrial Production.

xi) Export Potential

To assess the share of export-seeking FDI in various sectors of production in order to gauge the untapped potential of exports of labour-intensive goods from India.

xii) Greenfield FDI versus FDI through Mergers and Acquisitions

To document the sectoral distribution of FDI through these two routes, and to compare the rural and suburban linkages through these two routes.

xiii) Nationality of FDI: Highlighting the Mauritius Route Riddle

To decompose the nationality of FDI entering through the Mauritius route. This is important to understand the motives of investors from different countries, and helps India when it negotiates bilateral/plurilateral trade and investment agreements with these countries.

xiv) Data Reporting by RBI / Sectoral Classification

Given the comprehensive nature of this study, we will identify the issues of sectoral classification and data-reporting in unison with the ongoing work of the Technical Monitoring Group (TMG) on Foreign Direct Investment, which submitted its First Action Report in June 2003.

1.8 Methodology

The major source of information is the database available at the Department of Industrial Policy and Promotion (DIPP), Department of Industry, Ministry of Commerce and Industry, Government of India. The study has used the Capitaline database of Capital Market that provides information on 14,000 listed and unlisted Indian companies organised under more than 300 industries.

While these sources provide much of the general information on the aspects under focus in this study, primary data would have helped corroborate the findings. A primary survey of a select sample of FDI-enabled production units was also carried out. However, since we could not get adequate number of responses, we had to base our analysis on the secondary data.

Econometric tools have been used to understand issues relating to determinants of plant location and agglomeration of industries. As a follow-up to our discussion with DIPP, the major focus of our analysis has been the manufacturing sectors. However, we have also provided descriptive features of FDI-enabled firms in service sectors.



1.9 Structure of the Report

In Chapter 2, we highlight trends and policies with reference to the current FDI scenario in India. The modes through which FDI enters India are discussed in Chapter 3. The role of Special Economic Zones (SEZs) in promoting FDI in India is the subject of Chapter 4. The growth linkages of FDI, based on input-output transactions information, have been computed in Chapter 5. Based on the Capitaline database, a detailed analysis of the reach of FDI across small and large cities in various states of India, along with characteristics including total and foreign equity, market capitalisation, output, value-added, capital and employment is provided in Chapter 6. Chapter 7 brings out the views of some FDI-enabled production units, using primary data collected during the study. Issues relating to the classification of the FDI data as reported by the Department of Industrial Policy and Promotion (DIPP) are discussed in Chapter 8. Chapter 9 provides maps of the spread of FDI plants/facilities across various districts and regions of India. Key findings and salient conclusions are discussed in Chapter 10. ●

Chapter 2: FDI Scenario in India: Trends and Policies

2.1 Introduction

Foreign direct investment (FDI) refers to cross-border investment made by a resident in one economy (the direct investor) with the objective of establishing a lasting interest in an enterprise (the direct investment enterprise) that is resident in a country other than that of the direct investor (OECD 2008). The motivation of the direct investor is strategic “lasting interest” in the management of the direct investment enterprise with at least 10 per cent voting power in decision making.

The host country aspires to receive FDI inflows because of the potential benefits, the most established benefit being that FDI supplements the domestic savings of a nation. Other payoffs include access to superior international technologies, exposure to better management and accounting practices, and improved corporate governance. FDI is likely to expand and/or diversify the production capacity of the recipient country which, in turn, is expected to enhance trade.¹ On the other side, foreign investors are motivated by profits and access to natural resources. Therefore, large and growing domestic markets are likely to receive more FDI. Countries with abundant natural resources such as mines, oil reserves and manpower appear prominently on the investment maps of foreign investors.

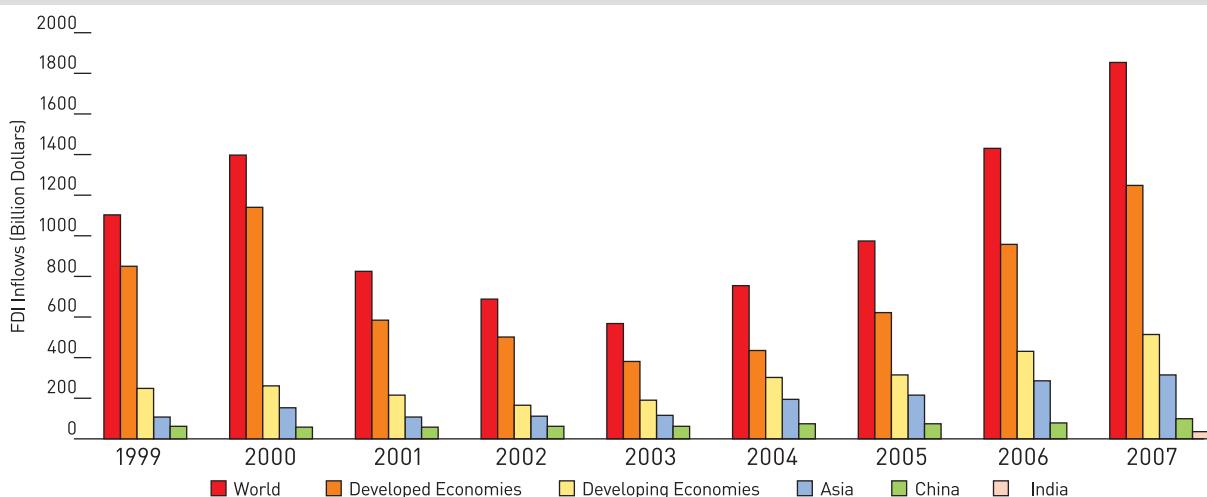
While the objectives of FDI can be different from the home and the host country’s perspectives, one of the major aims of attracting FDI is overall development of the recipient country keeping some specific strategy in view. This can be done by achieving higher FDI inflows (China, Malaysia and Singapore), maximising technology spill-over into the domestic economy (South Korea and Taiwan), or imposing local content requirements (East and South-East Asia).

The year 2007 posted 30 per cent growth in global FDI inflows, which touched \$1,833 billion, i.e., about \$400 billion above the previous record in the year 2000 (Figure 2.1). About two-third of the inflows (\$1,248 billion) was received by developed economies, while developing economies received about \$500 billion FDI inflows – a 21 per cent increase over the year 2006. \$500 billion FDI inflows into developing countries included about \$13 billion for the least developed countries (LDCs). The transition economies of South-East Europe and the Commonwealth of Independent States (CIS) received about \$86 billion worth of FDI. India received \$23 billion of FDI inflows in 2007, up from \$20 billion in 2006.

India has inward FDI stock worth \$76.2 billion (compared with \$327.1 billion in China) and outward FDI stock of \$29.4 billion (compared with \$95.8 billion of China). The FDI inflows received by India accounted for 3 per cent of gross fixed capital formation (GFCF) in 2005, 6.6 per cent in 2006 and 5.8 per cent in 2007. The corresponding figures for China are 7.7, 6.4 and 5.9 per cent, respectively. Thus, the share of FDI in GFCF for India in 2007 was almost the same as that of China. The share of inward FDI stock of India was 0.5 per cent of GDP in 1990, 3.7 per cent in 2000 and 6.7 per cent in 2007. The corresponding figures are much higher for China, viz., 5.1, 16.2 and 10.1 per cent, respectively. The sales of India’s mergers and acquisitions (M&A) reached \$5,580 million in 2007 and stood at \$2,254 million in January–June 2008. Similarly, India’s purchases of M&As reached \$30,414 million 2007 and stood at \$8556 million in January–June 2008.

1. Exports are expected to increase if FDI occurs in an industry with high export potential, while imports would increase if the foreign investor imports inputs for domestic production of goods.

Figure 2.1
FDI inflows: Global Trends (1999-2007)



Source: UNCTAD (various years), World Investment Report.

2.2 FDI Policy Framework

Prior to 1991, the FDI policy framework in India was highly regulated. The government aimed at exercising control over foreign exchange transactions. All dealings in foreign exchange were regulated under the Foreign Exchange Regulation Act (FERA), 1973, the violation of which was a criminal offence. Through this Act, the government tried to conserve foreign exchange resources for the economic development of the nation. Consequently the investment process was plagued with many hurdles including unethical practices that became part of bureaucratic procedures. Under the deregulated regime, FERA was consolidated and amended to introduce the Foreign Exchange Management Act (FEMA), 1999. The new Act was less stringent and aimed at improving the capital account management of foreign exchange in India. The Act sought to facilitate external trade and payments and to promote orderly development and maintenance of the foreign exchange market in India. It resulted in improved access to foreign exchange.

FDI-related Institutions

There are three primary institutions in India that handle FDI-related issues: the Foreign Investment Promotion Board (FIPB), the Secretariat for Industrial Assistance (SIA), and Foreign Investment Implementation Authority (FIIA).

Foreign Investment Promotion Board (FIPB)

The Foreign Investment Promotion Board (FIPB), Department of Economic Affairs (DEA), Ministry of Finance is the nodal single-window agency for all matters relating to FDI as well as promoting investment in the country. It is chaired by the Secretary, Industry (Department of Industrial Promotion and Policy). Its objective is to promote FDI in India:

- i) by undertaking investment promotion activities in India and abroad;
- ii) by facilitating investment in the country by international companies, non-resident Indians and other foreign investors;
- iii) through purposeful negotiations/discussions with potential investors;
- iv) through early clearance of proposals submitted to it; and
- v) by reviewing policies and putting in place appropriate institutional arrangements, transparent rules and procedures and guidelines for investment promotion and approvals.



Secretariat for Industrial Assistance (SIA)

The Secretariat for Industrial Assistance (SIA) has been set up by the Government of India in the Department of Industrial Policy and Promotion, Ministry of Commerce & Industry to provide a single-window service for entrepreneurial assistance, investor facilitation, receiving and processing all applications which require government approval, conveying government decisions on applications filed, assisting entrepreneurs and investors in setting up projects (including liaison with other organisations and state governments) and monitoring the implementation of projects. It also notifies all government policy decisions relating to investment and technology, and collects and publishes monthly production data for select industry groups. The SIA website² provides chat time during fixed hours when all questions are answered. During other times, investors are encouraged to write e-mails and the Secretariat assures a reply within 24 hours.

Foreign Investment Implementation Authority (FIIA)

The Government of India has set up the Foreign Investment Implementation Authority (FIIA) to facilitate quick translation of Foreign Direct Investment (FDI) approvals into implementation, and to provide a pro-active one-stop after-care service to foreign investors by helping them obtain necessary approvals, sort out operational problems and meet with various government agencies to find solutions to their problems. The proforma for making a reference to the Foreign Investment Implementation Authority (FIIA) can be downloaded from the website.³ The Secretariat for Industrial Assistance (SIA) in the Department of Industrial Policy & Promotion (DIPP) functions as the Secretariat of the FIIA.

2.3 Foreign Investment Policy

Foreign investment is permitted in virtually every sector, except those of strategic concern such as defence (opened up recently to a limited extent) and rail transport. Foreign companies are permitted to set up 100 per cent subsidiaries in India. No prior approval from the exchange control authorities (RBI) is required, except for certain specified activities. According to the current policy, FDI can come into India in two ways.

Automatic route: FDI in sectors/activities to the extent permitted under the automatic route does not require any prior approval either by the government or the Reserve Bank of India (RBI). The investors are only required to notify the concerned regional office of the RBI within 30 days of receipt of inward remittances and file the required documents with that office within 30 days of issue of shares to foreign investors.

Prior Government Approval route: In the limited category of sectors requiring prior government approval, the proposals are considered in a time-bound and transparent manner by the Foreign Investment Promotion Board (FIPB) under the Department of Economic Affairs, Ministry of Finance. Approvals of composite proposals involving foreign investment/foreign technical collaboration are also granted on the recommendations of the FIPB.⁴

Legal Framework

Foreign Direct Investments under Automatic Approval and Government Approval are regulated by the Foreign Exchange Management Act, 1999 (FEMA vide Reserve Bank's Notification FEMA. 20/2000-RB dated May 3, 2000 as amended from time to time).

If a foreigner or foreign company or a person resident outside India wants to invest in India either in the manufacturing sector or service sector, including the housing sector, insurance, banking, telecommunications, etc., the foreigner, foreign

2. http://siadipp.nic.in/publicat/pub_mn.htm

3. <http://siadipp.nic.in/sia/fiiia.htm>

4. See RBI Master Circular No. 5/2005-06: Foreign Investments in India, Section 6.1.1.



company or a person resident outside India has to pay due attention to the conditions, regulations and procedures which are laid down in different notifications by the Reserve Bank of India issued in terms of Section 6 of FEMA.

2.4 Trends in FDI inflows into India

FDI inflows grew steadily through the first half of the 90s but stagnated between 1996-97 and 2003-04 (Table 2.1). The year-on-year fluctuations until 2003-04 make it difficult to identify a clear trend; however, inflows have been increasing continuously since 2004-05. During 2008-09, India registered FDI inflows of \$33.6 billion and total cumulative inflows from August 1991 to March 2009 have been to the tune of \$155 billion.

Table 2.1
FDI Inflows (August 1991 – November 2008)

Year	Amount of FDI inflows		Annual Growth \$ Value
	Rs. crore	US\$ million	
1991-92	375	129	
1992-93	1051	315	144.2
1993-94	2041	586	86.0
1994-95	4241	1314	124.2
1995-96	7317	2144	63.2
1996-97	10170	2821	31.6
1997-98	13317	3557	26.1
1998-99	10550	2462	-30.8
1999-00	9409	2155	-12.5
2000-01	18404	4029	87.0
2001-02	29269	6130	52.1
2002-03	24681	5035	-17.9
2003-04	19830	4322	-14.2
2004-05	27234	6051	40.0
2005-06	39730	8961	48.1
2006-07	103037	22826	154.7
2007-08 (P)+	137935*	34362	50.5
2008-09 (P)+	159354^	33613	-2.2
August 1991 – March 2000	58471	15483	
April 2000 – March. 2009	559474	125329	
August 1991 – March 2009	617945	140812	

Source: Secretariat for Industrial Assistance, various FDI Fact Sheets.

Note: + RBI has included the amount of US\$ 92 million for the month of April 2007.

* Partially Revised

^ Preliminary

P Provisional

2.4.1 FDI outflows from India

Indian companies are reaching overseas destinations to tap new markets and acquire technologies. While some of the investment has gone into greenfield projects, a major portion of Indian overseas investment went into acquiring companies abroad. Acquisitions bring with them major benefits such as existing customers, a foothold in the destination market and the niche technologies they require. Due to the rapid growth in Indian companies' M&A activity, Indian companies are acquiring international firms in an effort to acquire new markets and maintain their growth momentum, buy cutting-edge technology, develop new product mixes, improve operating margins and efficiencies, and take worldwide competition head-on. It has emerged as the most acquisitive nation in emerging nations, according to global consultancy KPMG (2008) in their Emerging Markets International Acquisitions Tracker.



Table 2.2 shows that FDI outflows from India have increased consistently since 2000 at US\$18.5 billion in 2008-09, compared to only US\$1.4 billion in 2001-02.

Table 2.2

India's FDI Outflows (Debit)

Year	FDI Outflows (US\$ million)
2000-01	829
2001-02	1,490
2002-03	1,892
2003-04	2,076
2004-05	2,309
2005-06	6,083
2006-07	15,810
2007-08PR	21,312
2008-09P	18,596

Source: Reserve Bank of India (2007, 2008). Handbook of Statistics on Indian Economy; RBI Bulletin July, 2009.

Note: P: Preliminary, PR: Partially Revised

2.4.2 FDI: Definition Issues

FDI statistics in India are officially monitored and published by the Reserve Bank of India (RBI) and the Secretariat for Industrial Assistance (SIA), Ministry of Commerce and Industry. While the IMF's definition of FDI incorporates equity capital, reinvested earnings (retained earnings of FDI companies) and 'other direct investment capital' (intra-company loans or intra-company debt transactions), FDI statistics compiled by the RBI in the Balance of Payments prior to 2000 included only equity capital. This led to an underestimation of FDI inflows. The accounting system was

Table 2.3

Revised FDI Inflows Data (Equity + Additional Components) (amount in US\$ million)

Year	Equity	Equity capital for incorporated bodies	Equity capital of unincorporated bodies #	Re-invested earnings +	Other capital ++	Total FDI Inflows
2000-01	2,400	2,339	61	1,350	279	4,029
2001-02	4,095	3,904	191	1,645	390	6,130
2002-03	2,764	2,574	190	1,833	438	5,035
2003-04	2,229	2,197	32	1,460	633	4,322
2004-05	3,778	3,250	528	1,904	369	6,051
2005-06	5,975	5,540	435	2,760	226	8,961
2006-07	16,481	15,585	896	5,828	517	22,826
2007-08 (P)	26,867	24,575	2,292	7,168	327	34,362
2008-09 (P)	27,973	27,307	666	6,426	747	35,146
Cumulative Total	92,562	87,271	5,291	30,374	3,926	126,862
(April 2000 – March 2009)						

Source: RBI Bulletin, July 2009.

Note: # Figures for equity capital of unincorporated bodies for 2006-07 and 2007-08 are estimates.

+ Data for 2006-07 and 2007-08 are estimated as average of previous two years.

++ Data pertain to inter-company debt transactions of FDI entities.

(P) Provisional.



revised in 2000 in order to align the FDI data-reporting system with international best practices. Table 2.3 presents the revised inflows from the year 2000-01.

The revised practice of reporting FDI statistics addressed the issue of underestimated FDI flows into India. Following the new exercise that included figures on reinvested earnings and other capital, the additional FDI in a given year was found to be as high as 72 per cent for the year 2000-01 and 57 per cent in 2001-02 (Table 2.3).

The equity inflows have been differentiated under equity inflows of incorporated bodies and equity inflows of unincorporated bodies. A comparison between the earlier period of 2000-01 and the latest available period of 2008-09 shows that the equity capital inflows of incorporated bodies continue to dominate the scene. The share increased to 86 per cent of total FDI inflows in 2008-09, as against 58 per cent in 2000-01. The reinvested earnings are the second most important component, though their significance has declined almost continuously over the period. In 2008-09, reinvested earnings constituted 14 per cent of the total FDI inflows compared to 33.5 per cent in 2000-01. Inflows through other capital (which include short-term and long-term inter-corporate borrowings, trade and supplier credit, financial leasing, financial derivatives, debt securities, and land and buildings) constituted 3.2 per cent in 2008-09 as against 6.9 per cent during 2000-01. The equity capital inflows of incorporated bodies continue to be nearly the same,

Table 2.4
Route-wise FDI Inflows (in US\$ million)

Year (Jan-Dec)	FIPB & SIA route	RBI's Automatic Route	Inflows through acquisition of existing shares #	RBI's Various NRI schemes*	Total
1991 (Aug-Dec)	78	-	-	66	144
1992	188	18	-	59	264
1993	340	79	-	189	608
1994	511	116	-	365	992
1995	1264	169	-	633	2065
1996	1677	180	88	600	2545
1997	2824	242	266	290	3621
1998	2086	155	1028	91	3359
1999	1474	181	467	83	2205
2000	1474	395	479	81	2428
2001	2142	720	658	51	3571
2002	1450	813	1096	2	3361
2003	934	509	637	-	2079
2004	1055	1179	980	-	3213
2005	1136	1558	1661	-	4355
2006	1534	7121	2465	-	11120
2007	2586	8889	4447	-	15921
2008	3209	23651	6169		33029
2009 (Jan-Mar)	1992	3528	635		6155
Total	27867	48343	21012	2509	99732
(as on March 31, 2009)					

Source: SIA Newsletter April, 2009. <http://siadipp.nic.in/publicat/newsltr/aug2008/index.htm>

Note:

1. Inflows through ADRs/GDRs/FCCBs against FDI approvals have not been included.

2. # Data prior to 1996 not provided by the RBI.

3. From 2003, RBI's various NRI schemes inflows included under the heading RBI's Automatic Route.

at about 2 per cent or less of the total FDI inflows. Therefore, inflows through equity capital of the unincorporated bodies are the most significant component for India.

When the components of FDI inflows are studied over a period of time, we find that the value of equity inflows of incorporated bodies declined between 2001-02 and 2003-04, but have been on an uptrend thereafter (Table 2.3). Inflows through reinvested earnings increased continuously through this period, with only 2003-04 as an exceptional year. Annual fluctuations were observed for the inflows under equity capital of unincorporated bodies. However, the value of inflows through other capital stagnated during this period.

There are two main channels for the entry of FDI into India: the SIA/FIPB Route and the RBI Automatic Approval Route. From the inception of economic reforms in India in 1991 until the year 2000, most of the FDI came through the government route as there was strict monitoring of the approvals; therefore, FDI coming through the SIA/FIPB route was greater than the FDI coming through the RBI route (Table 2.4). However, there has been a dilution of this trend in the past five years. With the investment boom in India and different states competing for FDI, the government has eased foreign investment regulations leading to a spurt in FDI coming through the RBI route, which is a positive sign.

During 1991, as much as 54.1 per cent of total FDI was channelled through the SIA/FIPB route in contrast to 45.9 per cent through the RBI route. No inflows on account of acquisition of existing shares were recorded for this year. The route-wise FDI inflows fluctuated till 1998. During 1998, the FDI inflows through the SIA/ FIPB route accounted for 62.1 per cent of the total FDI inflows, while those through the RBI's automatic route touched an all-time low of only 7.3 per cent. However, by this year, inflows through acquisition had gained a significant share of 3.06 per cent in total FDI inflows. The following period until 2007, for which the latest figures are available, recorded an increase in share of inflows through the RBI's automatic route, a decrease in the shares of inflows through the SIA/FIPB, while the share of inflows through acquisitions remained banded between 30 to 20 per cent.

2.5 Sector-wise FDI inflows

Over the recent past, the sector-wise inflows of FDI have undergone a change. This is clear from the variation in the sector ranks based on their share in total FDI inflows. For comparison, we divide the period from August 1991 to March 2009 into two sub-periods of approximately the same length: the initial period of August 1991 to December 1999 and the second sub-period of 2000 to the latest available (which is the reference period of this study).

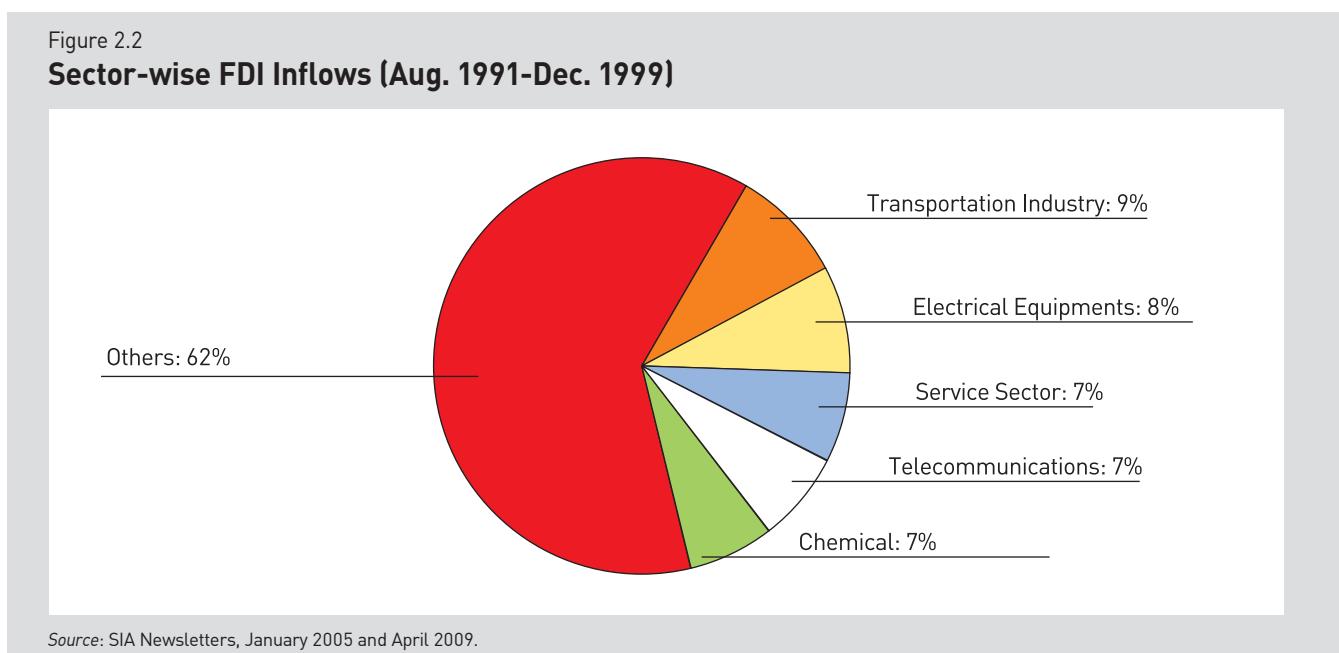
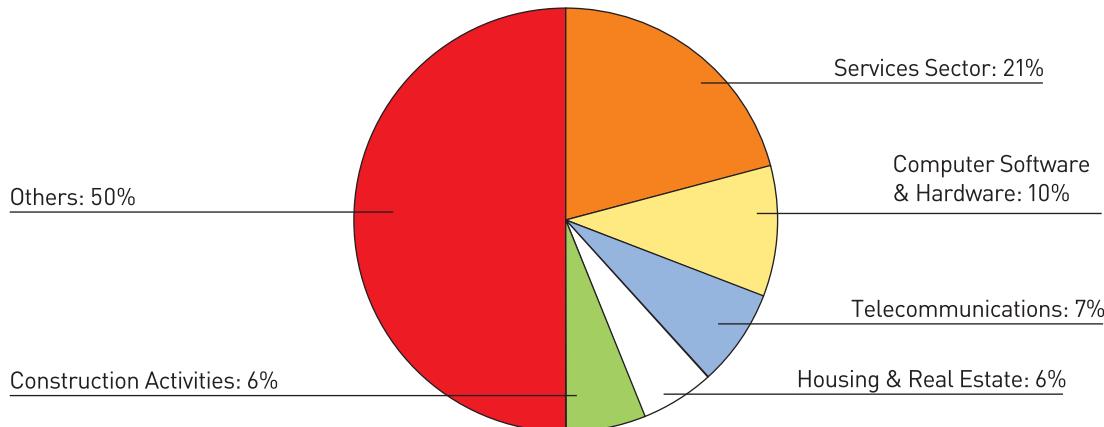


Figure 2.3
Sector-wise FDI Inflows (Jan. 2000-March 2009)



Source: SIA Newsletters, January 2005 and April 2009.

Table 2.5 presents the ranks, names and shares of FDI inflows for the top 20 sectors and miscellaneous industries (and, therefore, 21 industries in total), as reported in SIA publications. The figures are reported for the two cumulative periods and the year 2008 for which the latest information is available. The FDI inflows appear to be concentrated among the 21 industries. During the initial sub-period, namely, August 1991 to December 1999, the 21 sectors constituted 69.3 per cent of total FDI inflows, whereas during the second sub-period, namely, January 2000 to March 2009, these sectors constitute 84.3 per cent of the total FDI inflows. The emergence of the service sector is clear from a comparison of the shares over the two sub-periods. Other new sector entrants in the list of top five recipient sectors include computer software & hardware, construction activities and housing & real estate. The changing significance of the top five recipient sectors is shown in Figures 2.2 and 2.3.

2.5.1 FDI inflows in Manufacturing

The manufacturing sector plays a significant role in the Indian economy, contributing nearly 17 per cent to the GDP (in 2008-09). Encouraged by the increasing presence of multinationals, the scaling up of operations by domestic companies and an ever-expanding domestic market, the Indian manufacturing sector has been averaging 9 per cent growth in the past four years (2004-08), with a record 12.3 per cent in 2006-07. Industry and manufacturing were the major contributors to the economy, having a consistently high GDP growth rate in the past two years, making India one of the fastest growing economies in the world. India has all the requisite skills in product, process and capital engineering, due to its long manufacturing history and higher education system. India's cheap, skilled manpower is attracting a number of companies across diverse industries, making India a global manufacturing powerhouse. FDI inflows into manufacturing have been computed based on FDI records provided by DIPP.

Table 2.6 shows that the share of FDI inflows in the manufacturing sector was as follows: electrical equipment (including s/w & elec.) occupied the highest share, i.e., 30.6 per cent during 2000-2007, followed by the transportation industry (9.9 per cent), fuels (power & oil refinery) (7.7 per cent), chemicals (other than fertilisers) (4.8 per cent) and drugs and pharmaceuticals (4.0). The remaining sectors have a share of less than 4 per cent in total FDI inflows in manufacturing. However, the share of manufacturing in total FDI inflows of India was 34.02 per cent in 2007.



Table 2.5

Sector-wise Break-up of FDI Inflows (August 1991 – October 2008)

Rank	Sector (Share as % of total investment)		
	Aug 1991-Dec 1999	Jan 2000-March 2009	2008
1	Transportation industry (8.9)	Services sector (21.2)	Services sector (24.3)
2	Electrical Equipment (including S/W & Elec) (8.0)	Computer Software & Hardware (9.9)	Telecommunications (8.3)
3	Service sector (7.0)	Telecommunications (7.1)	Housing & Real Estate (including Cineplex, Multiplex, Integrated Townships & Commercial Complexes) (8.1)
4	Telecommunications (6.9)	Housing & Real Estate (including Cineplex, Multiplex, Integrated Townships & Commercial Complexes, etc.) (6.1)	Construction Activities (7.4)
5	Chemicals (other than fertilisers) (6.9)	Construction Activities (5.7)	Computer Software & Hardware (5.6)
6	Fuels (Power & Oil Refinery) (6.3)	Automobile industry (3.9)	Metallurgical industries (4.5)
7	Food-Processing industries (4.1)	Power (3.6)	Ports (4.0)
8	Paper and Pulp (including Paper Products (1.5)	Metallurgical industries (3.0)	Petroleum & Natural Gas (4.0)
9	Miscellaneous Mechanical & Engineering (1.4)	Petroleum & Natural Gas (2.6)	Power (3.9)
10	Textiles (including Dyed, Printed) (1.4)	Chemicals (other than fertilisers) (2.4)	Automobile industry (3.4)
11	Drugs and Pharmaceuticals (1.4)	Cement and Gypsum Products (1.9)	Cement and Gypsum Products (2.1)
12	Trading (1.1)	Ports (1.7)	Trading (2.0)
13	Metallurgical industries (1)	Trading (1.7)	Chemicals (other than fertilisers) (1.9)
14	Glass (0.9)	Drugs & Pharmaceuticals (1.7)	Information & Broadcasting (including Print Media) (1.6)
15	Commercial, Office & Household Equipment (0.9)	Electrical Equipment (1.6)	Hotel & Tourism (1.6)
16	Industrial Machinery (0.6)	Information & Broadcasting (including Print Media) (1.5)	Fermentation industries (1.1)
17	Rubber Goods (0.5)	Hotel & Tourism (1.4)	Consultancy Services (1.1)
18	Hotel & Tourism (0.5)	Consultancy Services (1.4)	Hospital & Diagnostic Centres (1.0)
19	Agricultural Machinery (0.3)	Food-Processing industries (0.9)	Electrical Equipment (0.8)
20	Ceramics (0.2)	Electronics (0.8)	Drugs & Pharmaceuticals (0.8)
21	Miscellaneous industries (9.5)	Miscellaneous industries (5.0)	Miscellaneous industries (4.9)

Source: SIA Newsletters, January 2005 and November 2008.

2.6 FDI in Services

Table 2.7 presents FDI inflows in the service sector in India during 2005-08. It can be seen that FDI inflows into the service sector have shown tremendous growth during this period. Of the total cumulative FDI in different categories of the service sector, financial services constitutes almost half the total foreign direct investment, followed by banking and other services with 10% and 21.5%, respectively. Due to the increase in FDI in services, its share in total FDI inflows in India increased from 16.4 per cent in 2005 to an astounding 35.4 per cent in 2006, but this share declined in 2007 to 18 per cent, yet maintaining the net increase over the period 2005-08. Surprisingly, the share of services in total FDI



Table 2.6
FDI inflows by Sector and Year (Manufacturing) (US\$ million)

S. No.	Sector code	Sector Name	2000	2001	2002	2003	2004	2005	2006	2007	Total	% Share
1	100	Metallurgical Industries	15.3	33.4	43.6	31.6	186.6	142.3	175.7	102.5	731.0	3.0
2	200	Fuels (Power & Oil Refinery)	112.6	387.4	647.5	161.3	155.6	62.6	259.6	113.1	1899.6	7.7
3	300	Boilers and Steam-Generating Plants	0.0	0.0	0.0	0.0	0.0	0.5	3.3	0.0	3.8	0.0
4	400	Prime Movers (other than Electrical)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.0
5	500	Electrical Equipment (incl S/W & Elec)	279.2	455.9	664.6	295.0	861.9	1023.2	2035.8	1949.4	7565.2	30.6
6	700	Transportation Industry	283.3	308.1	442.5	328.9	175.2	218.6	402.3	298.3	2457.4	9.9
7	800	Industrial Machinery	4.9	27.3	16.3	10.4	9.4	33.8	25.9	16.6	144.4	0.6
8	900	Machine Tools	2.4	4.8	13.7	8.4	57.7	23.0	34.6	7.2	151.7	0.6
9	1000	Agricultural Machinery	3.6	0.0	14.5	0.0	0.0	61.6	56.3	0.0	136.1	0.6
10	1100	Earth-Moving Machinery	2.1	0.1	13.8	0.0	0.1	50.9	1.0	0.0	67.9	0.3
11	1200	Miscellaneous Mechanical & Engineering	25.5	77.4	27.8	41.5	15.6	50.4	51.0	62.4	351.7	1.4
12	1300	Commercial, Office & Household Equipment	12.8	3.4	2.5	10.8	2.4	35.6	6.2	41.7	115.4	0.5
13	1400	Medical and Surgical Appliances	2.3	42.8	24.5	2.1	4.9	1.7	2.0	11.9	92.2	0.4
14	1500	Industrial Instruments	0.0	6.1	0.9	1.3	1.1	0.0	0.4	0.0	9.7	0.0
15	1600	Scientific Instruments	5.5	4.9	0.2	0.0	0.0	0.1	0.1	0.0	10.8	0.0
16	1800	Fertilisers	0.1	0.0	16.4	21.6	13.5	4.2	5.0	0.3	61.0	0.2
17	1900	Chemicals (other than Fertilisers)	125.2	65.6	120.8	61.9	188.7	147.9	400.0	76.1	1186.2	4.8
18	2000	Photographic Raw Film and Paper	0.0	0.0	0.4	0.5	0.3	6.0	2.7	0.1	10.0	0.0
19	2100	Dye-Stuffs	1.1	0.0	0.2	0.4	1.2	0.0	0.0	0.0	2.8	0.0
20	2200	Drugs and Pharmaceuticals	48.4	90.7	52.3	60.7	341.4	116.3	216.1	72.0	997.9	4.0
21	2300	Textiles (including Dyed, Printed)	1.9	4.5	45.9	18.2	38.8	79.0	117.5	40.1	345.8	1.4
22	2400	Paper and Pulp (including Paper Products)	60.5	11.1	11.4	7.3	3.8	27.4	5.0	2.1	128.6	0.5
23	2500	Sugar	0.0	0.0	4.0	0.1	2.9	3.0	15.7	0.8	26.5	0.1
24	2600	Fermentation Industries	16.0	11.0	7.8	2.0	7.4	171.6	4.3	43.9	264.0	1.1
25	2700	Food-Processing Industries	51.7	63.5	197.3	66.9	80.7	40.7	54.0	54.9	609.5	2.5
26	2800	Vegetable Oils and Vanaspati	0.0	0.0	0.0	1.2	5.9	13.7	4.4	14.3	39.6	0.2
27	2900	Soaps, Cosmetics and Toilet Preparations	0.0	0.0	0.0	0.0	0.9	87.3	1.6	5.7	95.4	0.4
28	3000	Rubber Goods	3.8	0.7	46.3	18.1	43.8	34.2	18.4	4.1	169.3	0.7
29	3100	Leather and leather products	3.1	7.1	0.1	7.0	0.4	1.0	7.8	0.8	27.3	0.1
30	3200	Glue and Gelatine	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	6.2	0.0
31	3300	Glass	33.9	8.3	44.8	5.5	8.4	0.8	1.5	0.5	103.6	0.4
32	3400	Ceramics	1.9	2.9	0.3	1.4	26.3	6.2	44.5	13.5	96.9	0.4
33	3500	Cement and Gypsum Products	73.9	138.3	23.0	9.6	0.2	452.1	209.7	38.3	944.9	3.8
34	3600	Timber Products	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.6	0.0
35	3700	Defence Industries	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
36	4200	Miscellaneous Industries	927.6	508.3	254.0	311.1	283.4	396.9	1659.3	1532.0	5872.6	23.8
37		Total	2098.6	2263.6	2743.6	1484.9	2518.6	3293.1	5821.7	4502.9	24726.0	100.0

Source: Classified by NCAER using DIPP data.

inflows stood at 24.4 per cent for the year 2008. The 24.6 per cent share of the service sector's FDI is dominated by the financial sector (12.1), non-financial services (2.6), banking services (1.9), and other services (3.3).

India's strengths as an investment destination rest on strong fundamentals which include a large and growing market; world-class scientific, technical and managerial manpower, cost-effective and highly skilled labour; an abundance of natural resources; a large English-speaking population; and an independent judiciary. This is now recognised by a number of global investors who have either already established a base in India or are in the process of doing so. Ongoing initiatives, such as further simplification of rules and regulations and improvement in infrastructure, are expected to provide the necessary impetus to increase FDI inflows in future. There is no doubt that there is renewed optimism about India as an emerging investment destination.



Table 2.7

FDI in India in the Service Sector (US\$ million)

Category	2005	2006	2007	2008	Cumulative FDI*	Share (per cent)
Financial	344.2	1912.2	1345.9	3982.9	7585.2	47.0
Non-Financial Services	0.4	47.4	576.9	689.0	1313.7	8.1
Banking Services	82.9	131.8	552.0	847.2	1613.8	10.0
Insurance	69.7	74.6	276.8	636.9	1057.9	6.6
Outsourcing	11.4	32.0	126.7	372.8	542.9	3.4
Research & Development	22.0	36.9	73.0	433.3	565.2	3.5
Other Services	184.0	1704.0	493.9	1081.5	3463.4	21.5
Sector Total	714.6	3938.8	3445.1	8043.6	16142.1	100.0

Source: SIA Newsletters (various issues); *(2005-2008).

Table 2.8

Share of Service Sector FDI Inflows in Total FDI Inflows to India (%)

Category	2005	2006	2007	2008
Financial	7.9	17.2	7.0	12.1
Non-Financial Services	0.0	0.4	3.0	2.6
Banking Services	1.9	1.2	2.9	1.9
Insurance	1.6	0.7	1.4	2.1
Outsourcing	0.3	0.3	0.7	1.1
Research & Development	0.5	0.3	0.4	1.3
Other Services	4.2	15.3	2.6	3.3
Sector Total	16.4	35.4	18.0	24.4

Source: SIA Newsletters (various issues).

With financial services having the highest share in total FDI in the service sector, it shows consistency in its shares in the sense that its share, along with banking services, is continuously increasing (Table 2.8).

2.7 State-wise Distribution of FDI

The state-wise trends in FDI show that the RBI's regional offices at Maharashtra, New Delhi, Karnataka, Tamil Nadu and Gujarat have been the largest recipients of FDI in terms of cumulative FDI inflows from January 2000 to October 2008 (Table 2.9). These states are either known for their strong industrial base (like Gujarat) or as software hubs (like Karnataka and Delhi). This could also be attributed to their better resources, infrastructure like roads and power, investor-friendly policies like single-window clearances and investment promotion schemes like special economic zones. However, the competition among the states to promote their own state in attracting FDI has led to an increasing trend in FDI in other states.

2.8 Country-wise FDI Inflows

Among the countries heading the list of FDI inflows into India is Mauritius (Table 2.10, Figures 2.4 and 2.5). This could be attributed to the double taxation treaty that India has signed with Mauritius and also to the fact that most US investment into India is being routed through Mauritius. However, Singapore is the second largest investor in India followed by the US and other developed countries like the UK and the Netherlands, which are India's major trading partners. Table 2.10 shows the share of the top investing countries in India's FDI for the two sub-periods



Table 2.9

RBI's Region-wise Break-up of FDI Inflows (January 2000 – March 2009)

S.No.	Regional Offices of RBI	States Covered	Share in Total FDI inflows
1	Mumbai	Maharashtra, Dadra & Nagar Haveli, Daman & Diu	34.2
2	New Delhi	Delhi, part of Uttar Pradesh and Haryana	14.2
3	Bangalore	Karnataka	6.5
4	Ahmedabad	Gujarat	6.2
5	Chennai	Tamil Nadu, Pondicherry	5.3
6	Hyderabad	Andhra Pradesh	3.9
7	Kolkata	West Bengal, Sikkim, Andaman & Nicobar Islands	1.4
8	Jaipur	Rajasthan	0.5
9	Chandigarh`	Chandigarh, Punjab, Haryana, Himachal Pradesh	0.4
10	Panaji	Goa	0.3
11	Kochi	Kerala, Lakshadweep	0.2
12	Bhopal	Madhya Pradesh, Chhattisgarh	0.2
13	Bhubaneshwar	Orissa	0.1
14	Guwahati	Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura	0.1
15	Kanpur	Uttar Pradesh, Uttarakhand	0.0
16	Patna	Bihar, Jharkhand	0.0
17	Region not indicated		20.6

Source: SIA Newsletter, April 2009.

Note:

1. The sector-specific amount only includes inflows received through the SIA/FIPB route, acquisition of existing shares and RBI's automatic route.
2. Inflows through ADRs/GDRs/FCCBs against FDI approvals have not been included.
3. Inflows include Equity Capital Components only.

Table 2.10

Share of Top Investing Countries (in US\$ million)

Rank	Country (share as % of total investment)		
	Aug 1991-Dec 1999	Jan 2000-March 2009	2008
1	Mauritius (21.6)	Mauritius (42.8)	Mauritius (40.9)
2	U.S.A. (14.4)	Singapore (11.3)	Singapore (8.6)
3	Japan (5.1)	U.S.A. (5.4)	U.S.A. (7.2)
4	Germany (4)	U.K. (5.0)	U.K. (5.8)
5	U.K. (3.8)	Cyprus (4.2)	Netherlands (4.0)
6	Netherlands (3.7)	Netherlands (3.1)	Japan (2.9)
7	Korea (South) (3.6)	Germany (2.4)	Cyprus (2.5)
8	Singapore (2.1)	France (1.5)	Germany (2.4)
9	Hong Kong (1.6)	Japan (1.2)	France (1.4)
10	France (1.6)	Russia (1.1)	U.A.E.(1.0)

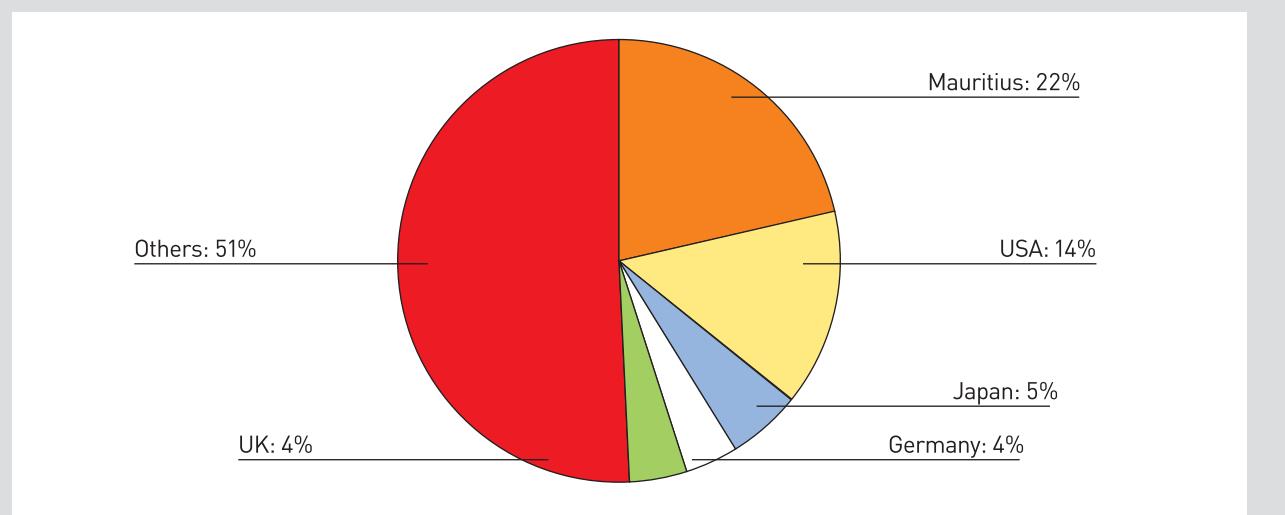
Source: SIA Newsletters, January 2005 and April 2008.

defined earlier. While the significance of Germany and Japan has declined in terms of their share in FDI inflows into India, Cyprus and the UAE have entered the list of top 10 investing countries during the recent cumulative period.⁵

5. The changes in the top five FDI-investing countries for the periods August 1991- December 1999 and January 2000 - October 2008 are presented in Figures 2.4 and 2.5.

Figure 2.4

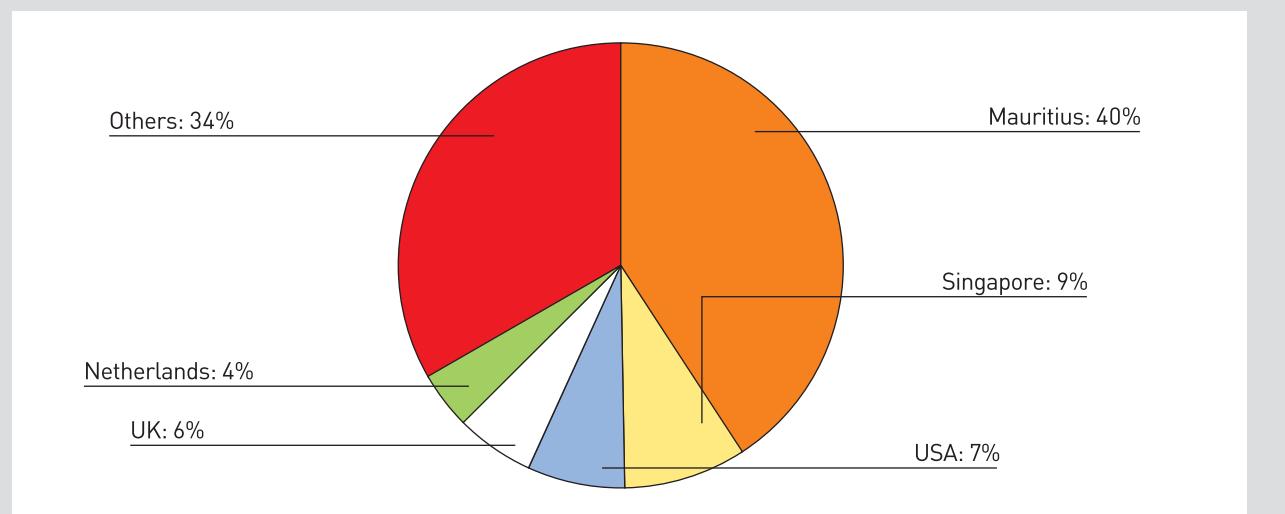
Country-wise FDI Inflows (Aug. 1991-Dec. 1999)



Source: SIA Newsletters, January 2005 and April 2009.

Figure 2.5

Country-wise FDI Inflows (Jan. 2000-March 2009)



Source: SIA Newsletters, January 2005 and April 2009.

2.9 Double Taxation Treaty: FDI through Mauritius

The India-Mauritius Double Taxation Avoidance Agreement (DTAA) was signed in 1982 and has played an important role in facilitating foreign investment in India via Mauritius. It has emerged as the largest source of foreign direct investment (FDI) in India, accounting for 50 per cent of inflows between August 1991 and 2008.

A large number of foreign institutional investors (FIIs) who trade on the Indian stock markets operate from Mauritius. According to the DTAA between India and Mauritius, capital gains arising from the sale of shares are taxable in the country of residence of the shareholder and not in the country of residence of the company whose shares have been sold. Therefore, a Company resident in Mauritius selling shares of an Indian company will not pay tax in India. Since there is no capital gains tax in Mauritius, the gain will escape tax altogether. The DTAA has, however, recently been in the



news, with Indian left-wing parties demanding a review of the treaty. They argue that businessmen are misusing the provisions of the treaty to evade taxes.

The Mauritius stock market was opened to foreign investors following the lifting of foreign exchange controls in 1994. No approval is required for the trading of shares by foreign investors, unless investment is for the purpose of legal and management control of a Mauritian company or for the holding of more than 15 per cent in a sugar company. Incentives to foreign investors include free repatriation of revenue from the sale of shares and exemption from tax on dividends and capital gains.

Mauritius has an active offshore financial sector, which is a major route for foreign investments into the Asian sub-continent. Foreign direct investment transiting through the Mauritian offshore sector to India amounted to US\$1.19 billion during the Indian financial year April 2007–March 2008, according to figures released by the Indian Ministry of Commerce and Industry. Major US corporations use the Mauritius offshore sector to channel their investment to India.

2.9.1 India Mauritius DTAA: Issues

The Foreign Investment Promotion Board (FIPB) seems to have laid to rest the controversy surrounding FDI investments routed via Mauritius. FIPB, recently, has given the nod to several FDI proposals, and rejected the Revenue Department's argument about treaty shopping and round-tripping.⁶ The board unanimously agreed that FDI proposals should not be held up unless there is concrete evidence to prove loss of revenue. Since the 1990s there has been an ongoing debate on the India-Mauritius treaty because it provides two benefits: it exempts capital gains tax in India on sale of shares in Indian companies, and the 1992 offshore tax regime in Mauritius exempts offshore Mauritius resident companies from tax in Mauritius. Further, the treaty does not include a limitation of benefit (LOB) clause, which is like a "look through" provision in tax treaties to ensure that only residents of treaty countries who are beneficiaries avail such benefits. The Apex court held that a Mauritius resident holding a valid tax residency certificate (issued by the regulators in Mauritius) would be eligible for benefits under the India-Mauritius treaty in the absence of an LOB clause.

The debate on this topic continues. The key change to the treaty being pushed by India is to move from a 'residence-based system of taxation' to a 'source-based' system, which means that investors from Mauritius would need more than a proforma and a registered office in the island to qualify for tax breaks. Concerted negotiations were conducted at Port Louis, the island's capital city, between government representatives of both countries on February 29, 2008, which was three weeks before the Union Budget 2008-09 was presented in Parliament.

The attempt to plug the misuse of the Mauritius double-taxation avoidance agreement was made in response to a specific promise set out in the National Common Minimum Programme drawn up by the United Progressive Alliance when it came to power in May 2004. While some progress has since been made to tighten similar agreements with other countries, the Mauritius treaty is important because from April 2000 to December 2007, FDI equity inflows from the tax haven stood at US\$20.1 billion, almost 40 per cent of total inflows of nearly US\$51 billion during the period.⁷ To date, India has signed comprehensive double taxation avoidance agreements with 72 countries. Indian tax authorities have managed to tighten the clauses in many of these treaties. Only 12 treaties have the residence-based taxation, of which seven have been revised and the remaining are in the process of being revised. The only ones left are the treaties with Mauritius and Singapore, but the latter has safeguards.

6. <http://www.itatindia.com/datafolder/News/News4756.htm>. This is the Income Tax Appellate Tribunal of India.

7. DIPP Fact sheet, December 2007.



2.10 Foreign Technology Transfers

Along with the increase in FDI inflows, there has also been an increase in Foreign Technology Transfer approvals into India (Table 2.11). This could be attributed to India's increasing quest for advanced technology to modernise its industrial sectors (Table 2.12). The majority of the foreign technology transfers have been from the US, followed by Germany and other European countries (Table 2.13).

FDI trends in India show that the FDI environment has undergone a major change since the inception of economic

Table 2.11

Number of Cumulative Foreign Technology Collaboration Approvals

1991 to 1999	6541
2000 to 2006	418
2000	336
2006	1555
1991 to February 2009	8049

Source: SIA Newsletters.

Table 2.12

Sector-wise Technology Transfer Approvals

Rank	Sector	No. of Technical Collaborations approved (August 1991- 1991 – Feb. 2009)	% age with total technical approvals
1	Electrical Equipment (including computer software & electronics)	1,258	15.62
2	Chemicals (other than fertilisers)	902	11.20
3	Industrial Machinery	872	10.83
4	Transportation Industry	755	9.38
5	Misc. Engineering Industry	444	5.51
6	Other sectors	3,818	47.43
7	Total of all sectors	8,049	100.00

Source: DIPP Fact Sheet, April 2009.

Table 2.13

Country-Wise Technology Transfer Approvals

Rank	Country	No. of Technical Collaborations approved (August 1991- 1991 – Feb. 2009)	% age with total technical approvals
1	USA	1,819	22.60
2	Germany	1,113	13.82
3	Japan	878	10.90
4	UK	870	10.80
5	Italy	486	6.03
6	Other countries	2,883	35.81
	Total	8,049	100.00

Source: DIPP Fact Sheet, April 2009.



reforms in 1991. The positive changes can be attributed to the government, which has been instrumental in encouraging FDI in the country. The government now acts as a 'facilitator' of private investment by creating an enabling environment, it is a 'provider' of gaps in critical infrastructure to encourage investment, it acts as a 'partner' to the private sector in 'public-private' partnerships, and it acts as an 'investor' in social sectors such as health and education to serve the needs of society.

2.11 Concluding Remarks

India has been receiving increasing amounts of FDI since 1991-92. It received about \$129 million FDI in 1991-92, which went up to \$613 million in 2001-02 and further up to \$35.1 billion in 2008-09. The government has facilitated inflows of FDI by making its policies relatively liberal since 1991-92. FDI inflows have complemented domestic investment and hence contributed to capital formation as well as to bringing in new technologies and global linkages. Despite the global financial crisis and economic slowdown, it is expected that FDI inflows during 2008-09 would touch the amounts received during 2007-08. ●

Chapter 3: Mergers & Acquisitions and Greenfield FDI

3.1 Introduction

The choice of entry mode is considered a strategic decision by the foreign investor. The key driving forces in such decisions depend on the investor's interest in seeking resources, markets, and efficiency or strategic asset ownership in the host country. While the major motive of any investment is profit, a firm may opt for a particular entry strategy best suited to its short- or long-term interests.

3.2 Concepts and Definitions

Foreign direct investment (FDI) constitutes three components; viz., equity; reinvested earnings; and other capital. Equity FDI is further sub-divided into two components, viz., greenfield investment; and acquisition of shares, also known as mergers and acquisitions (M&A).¹ Reinvested earnings represent the difference between the profit of a foreign company and its distributed dividend and thus represents undistributed dividend.² Other capital refers to the inter-company debt transactions of FDI entities.

Equity FDI may also include "brownfield investment", a term often used in the FDI literature. This represents a hybrid of greenfield and M&A foreign investment. Such investment formally appears as M&A, though its effect resembles greenfield investment. In brownfield investment, the foreign investor acquires a firm and undertakes near-complete renovation of plant and equipment, labour and product lines (UNCTAD 2000).

The motives behind cross-border M&As include: the search for new markets, increased market power and market dominance; access to proprietary assets; efficiency gains through synergies; greater size; diversification (spreading of risks); financial motivations; and personal (behavioural) motivations.

In a cross-border *merger*, the assets and operations of two different firms belonging to two different countries join together to form a new legal entity. The stocks of the companies are surrendered during the amalgamation process and the new company's stocks are issued in the process. One such example is the merger of Essar and Hutchison to form Hutchison Essar. As another example, Daimler-Benz and Chrysler ceased to exist when the two firms merged, and a new company, DaimlerChrysler, was created.

In a cross-border *acquisition*, the control of assets and operations is transferred from a local to a foreign company. The local company ceases to exist and becomes an affiliate of the foreign company. An acquisition can be forced through a majority interest in the management, by purchasing shares in the open market, or by offering a take-over proposal to the general body of the shareholders (Beena, 2000). For instance, Ranbaxy Laboratories as part of its expansion strategy in the US market acquired the New Jersey-based Ohm Laboratories in 1995. Vodafone's acquisition of Hutchinson Essar and Lenova's takeover of IBM's PC business are more recent examples.

1. In India, the acquisition of shares of Indian companies by non-residents is subject to Section 6 of FEMA, 1999. Data on such acquisitions have been included as part of FDI since January 1996.
2. At the economy level, reinvested earnings represent the difference between reinvested earnings of domestic direct investment abroad and of foreign direct investment at home.



Mergers are generally differentiated from acquisitions by the way in which the deal is financed and partly by the relative size of the companies. Most mergers are executed in a consensual manner where the managements of two relatively same-sized firms decide to combine into a new legal entity, which is worth more than the sum of its parts. The shareholders of the merging firms get their shares exchanged for an equal number of shares in the newly merged firm. In contrast, an acquisition can be forced or hostile, where a smaller company gets purchased by a larger one. In this case, the acquiring firm offers a cash price per share to the acquired company's shareholders. Sometimes, the acquiring firm offers shares according to a specified conversion ratio. In both cases, the purchasing company finances the deal through an outright purchase of the target company for its shareholders. Such differences may be summarised as shown in Table 3.1.

There has been a continuing, though unresolved, debate between the impact of greenfield investment versus M&A on the host economy. While these two modes of entry for direct investment are generally considered to be alternatives, there may be situations where only M&As appear to be the realistic option. For instance, in the absence of any domestic buyers for a large firm that has been declared sick, a cross-border M&A is the only viable choice. However, concerns have been

Table 3.1
Differences between Mergers and Acquisitions

Characteristics	Merger	Acquisition
Key decision	Usually by consensus	May be forced
Firm size	Generally between firms of equal size	Generally by a large-sized firm
Source of finance	Jointly financed by the combining firms	Completely financed by the acquiring firm, which is generally large in size
Executed by	Exchanging shares of the new legal entity for an equal number of shares in the partner companies or stock swaps	Paying cash or by issuing shares in a specified proportion
Result	Formation of a new legal entity	Target firm ceases to exist

expressed in political circles as well as in academia, about the negative impact of M&A (vis-à-vis greenfield) for the host economy, at least at the time of entry. This may happen even if an M&A succeeds from a corporate viewpoint. These differences have been discussed at length in UNCTAD (2000) and are summarised in Table 3.2.

Greenfield FDI may not necessarily have a positive impact on the host economy if the development objectives of the host country do not coincide with the commercial motives of the foreign investor. Also, the sharp differences between the impact of FDI through these modes appears to diminish in the long term as discussed in the Table 3.1.

However, it goes without saying that under normal circumstances with the two entry modes as plausible alternatives, greenfield FDI is more useful to developing countries. Ceteris paribus, greenfield FDI is more likely to furnish the host country with financial assets, technology and skill resources, enhance productive capacity and generate additional employment.

3.3 Global Trends

Much of the FDI is realised either through the greenfield or the M&A route. According to the information provided in UNCTAD (2008), the number of greenfield investments is far ahead of the M&A deals realised during any year (Table 3.3). This clearly indicates the preference for a new establishment as against choosing from the acquisition of an existing one or a merger. However, the greenfield investment itself may be used to set up a new unit altogether or to



Table 3.2

Short-term effects of FDI through Greenfield vs. M&A

Characteristics	Greenfield	M&As
Capital	Adds to productive capacity of the host country	<ul style="list-style-type: none"> Initially, marked by a change of assets from domestic to foreign hands In the long term, more sequential investments may follow
Transfer of Technology & Skills	Likely to transfer new or better technologies or skills	<ul style="list-style-type: none"> Less likely to transfer technology or skill. May bring in technology and skills as part of restructuring efforts in later stages
Existing Assets	Does not directly reduce technology assets and capabilities in the host economy	May lead to closure/ downgrading/ relocation of domestic facilities
Employment	Creates employment	<ul style="list-style-type: none"> Does not generate employment at the time of entry M&A could conserve employment if the acquired firm is on the verge of closure Over time, employment generation may occur as a result of sequential investments and retained or strengthened linkages
Market Structure	Increases the number of firms in an industry	<ul style="list-style-type: none"> Can lead to increased concentration in the host economy

Source: Based on UNCTAD (2000). World Investment Report.

fund the expansion of an existing unit. While information is available for a number of greenfield projects, the value of these projects is not reported by UNCTAD in its World Investment Report, because the investment for a new or expansion activity could materialise in the following year(s). The value of cross-border M&A sales touched \$1,637 billion in 2007, posting a growth of 46.42 per cent over 2006.² During Jan-Jun 2008, the value of cross-border M&A sales amounted to \$621 billion. The number of cross-border M&As touched 10,145 in 2007, compared to 9,075 in 2006. In 2008 (Jan-Jun), as many as 66 cross-border M&A deals were reported. The average size of the M&A sales increased from \$123.2 million in 2006 to \$161.3 million in 2007. In the case of India, the value of cross-border M&A sales touched \$5.5 billion in 2007, posting 17.72 percent growth over 2006. In 2008 (Jan-Jun), the value of cross-border M&A sales amounted is \$2.3 billion and the average size of the M&A sales increased from \$29.44 million in 2006 to \$33.41 million in 2007.

Table 3.3

FDI by Entry Mode

	Number of			
	Greenfield FDI projects		Cross-border M&A deals	
	World	India	World	India
2003	9469	453	4562	83
2004	10254	699	5113	80
2005	10632	594	8560	121
2006	12441	1026	9075	161
2007	11703	682	10145	167

Source: UNCTAD (various years). World Investment Report.

2. Cross-border M&A statistics are based on information reported by Thomson Financial as given in Annex Tables B.4-B.7 of UNCTAD (2008), World Investment Report. Such M&As conform to the FDI definition as far as the equity share is concerned. However, the data also include via domestic and international markets, which should not be considered as FDI flows. These data are tabulated based on the ultimate country principle. If a domestic Indian company acquires a French company operating in India, then India becomes the acquiring country and France the target country.

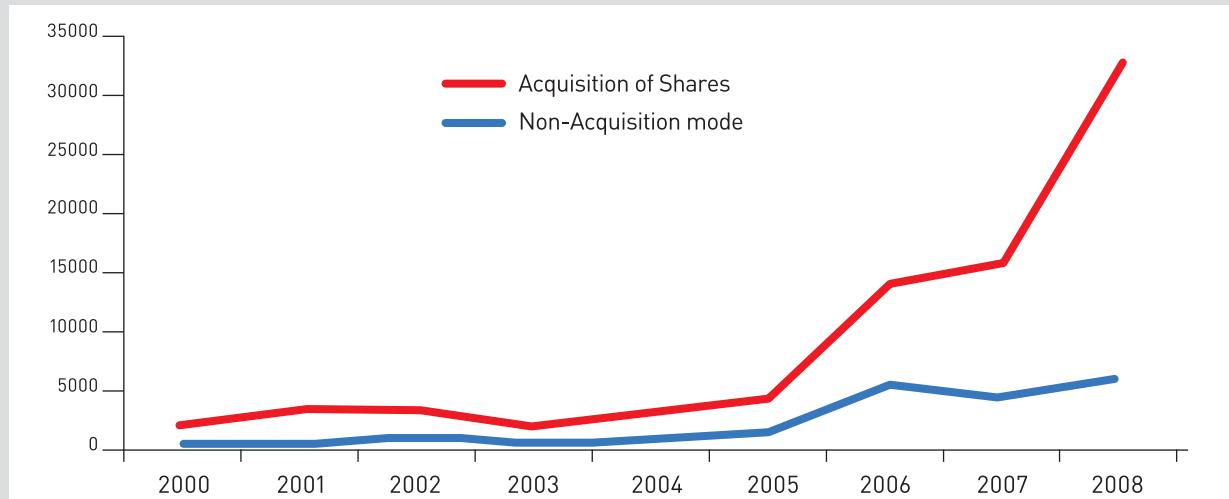
3.4 FDI in India

In India any inflow of FDI is recorded with the RBI and is reported by the DIPP in the form of Fact sheets, newsletters or annual issues. However, there is a complete absence of government reporting of the FDI statistics with comparable information on greenfield vis-à-vis M&A investments in numbers or in values. Information is available from OCO Consulting Ltd. in its LOCO-Monitor FDI Database that reports the greenfield investments in India, and information on M&As is available from Bureau van Dijk in its Zephyr Mergers and Acquisition database. While these non-government sources provide a profile of FDI inflows, their reported figures are not comparable with those furnished in the official records. The inconsistencies can be due to a number of reasons such as the inclusion of approved FDI along with actual FDI; the inability to track FDI that reaches India piecemeal as against being approved as a whole; the failure to separate the Indian partner's stake from that of a foreign investor resulting in an inflated FDI figure; and that some transactions may not even have reported values.

According to the available detailed route-wise FDI compiled by the DIPP, equity investment excluding acquisition of shares may be considered as greenfield investment in India. Thus, foreign equity inflows under the SIA/FIPB and RBI route, along with the equity capital of unincorporated bodies, represent the fresh arrival of FDI into India. The DIPP reports a separate category of FDI under inflows through acquisition of existing shares.

While information on acquisition of shares is compiled and provided by the DIPP, there is no explicit information on cross-border mergers occurring in India; however, cross-border mergers effected by swapping of stocks may be included in the stock swaps provided by the DIPP. But another component of the stock swap, which is simply equity swaps between an Indian and a foreign company, is believed to be much higher.³ Therefore, in the absence of such a break-up, it is not possible to analyse any trends in the cross-border mergers in India.

Figure 3.1
FDI in India



The figures for FDI through acquisitions of shares and the non-acquisition modes indicate the clear continuous dominance of fresh foreign investments over investments made to acquire existing shares (Figure 3.1). However, the relative significance of new investments declined until 2006. While the non-acquisition investments accounted for 83 cent of equity investments during the year 2000, their share decreased to 72 per cent by 2006. On the other hand, the



proportion of foreign investment in acquisition of shares increased from 17 per cent in 2000 to 28 per cent in 2006. The value of fresh investments has increased from \$2.3 billion during 2000 to \$33 billion during 2008. Over the same period, the investment through acquisition of shares increased from \$0.5 billion to \$6.2 billion. A much stronger growth in inflows through acquisitions is observed due to relatively lower figures in the initial years. Though investment in new projects always exceeds the investment in acquisitions by at least two and a half times, the gap between these two modes widened in 2007 and 2008. In 2008, foreign investment in newer facilities was almost five times the expenditures incurred in acquisitions. This brings forward a clear preference of the foreign investor to start a new business set-up or fund an expansion through infusing fresh capital in India compared to purchasing or attaining a stake in an existing one.

3.5 Profile of Greenfield FDI – India

The number of greenfield investments in India increased from 247 projects in 2000 to 980 projects in 2006, but declined to 682 projects in 2007. According to OCO Consulting (cited in Bloodgood, 2007, pp. 2-6), greenfield investment in India is largely destined for new facilities rather than for expansion of existing units. The share of expansion projects has been declining steadily over the period, from 22 per cent of the reported projects in 2002 to 11 per cent in 2006. During the period 2002 to 2006, 15 of the 300 greenfield projects that were reported exceeded \$1 billion in their worth. These investment projects were concentrated in heavy industries, property, tourism and leisure, and electronics. Further, a classification based on their business function indicates their spread among manufacturing, construction, resource extraction and R&D. The investor countries included Canada, Germany, Japan, Luxembourg, the Netherlands, Singapore, South Korea, Venezuela, the UAE, the UK and the US. The beneficiary industries of these greenfield investments included a wide range of industries such as steel, electronic components and semiconductors, construction, mining, real estate and machinery.

3.6 Profile of Cross-border M&A investments – India

The growth in number of M&A deals in India has been less impressive than the number of greenfield investments (Table 3.4). Based on the Zephyr Mergers and Acquisition database, Bloodgood (2007) found that 167 M&A deals in India accounted for investment worth \$5.6 billion during 2007. Of 15 M&A transactions during 2002-06, several were made with US firms, as well as with firms from Mauritius, the UK, Switzerland and the British Virgin Islands. These 15 most significant deals were spread across manufacturing sectors, such as electronics, cement, pharmaceuticals and food-processing. The service sector included computer software services, investment-banking services, BPO, insurance and port services.

Table 3.4
M&A Deals in India

Years	Number of deals	\$ million
2004	80	1760
2005	121	3754
2006	161	4740
2007	167	5580
2008*	66	2254

Source: UNCTAD (various years). World Investment Report.

Note: * Number of cross-border M&As refers to the first half of 2008.

According to information in UNCTAD's World Investment Report (2008), the value of cross-border M&A sales by India increased from \$4,740 million in 2006 to \$5,580 million in 2007 and purchases from \$6,586 million in 2006 to \$30,414 million in 2007. The number of sales deals increased from 161 to 167 and purchases from 162 to 194. This implies that the average sales deal size increased from \$29.4 million in 2006 to \$33.4 million in 2007. The



increase in average purchase deal size was extremely large – from \$40.7 million in 2006 to \$156.8 million in 2007.

As mentioned before, explicit information on mergers executed in India is not available. The only sources of such information are either private databases or individual researchers. In addition to the databases on greenfield investments previously mentioned, Ramakrishnan (2008) analysed financial data pertaining to 87 pairs of merged firms; the mergers were executed between 1996 and 2002. He found that 64 of these mergers belonged to related industries, while the remainder were in unrelated industries. For as many as 76 of these mergers, stock was the predominant mode of payment for the acquired firm, while corporate control was transferred in 37 mergers. Moreover, 14 of the acquired companies had been declared sick at the time of the merger.

The inflows through acquisition of shares registered an average growth of 55.7 per cent from 2001 to 2008. Such inflows registered positive growth throughout the period except in the years 2003 and 2007. Details of the 10 most significant acquisitions are presented in Table 3.5. Most of these acquiring foreign companies belonged to Mauritius, Singapore, the US and Japan.

Table 3.5
Top 10 Acquisitions in India

S. No.	Top 10 Indian Companies	Country	Foreign Collaborator	Items of Manufacture	FDI Received (in Rs.)	FDI Received (in US\$)
1	iflex Solutions	Mauritius	Oracle Global Mauritius Ltd.	IT to financial services industry	25788.8	563.9
2	Flextronics Software Systems Limited	Mauritius	Flextronics Sales & Marketing	Communications solutions	4659.3	104.0
3	Blue Dart Express Ltd.	Singapore	DHL Express (SGP) Private Limited	Logistics and courier business	4253.0	97.2
4	Colgate Palmolive India Limited	Singapore	Colgate Palmolive Asia India Limited	Manufacturing/marketing of cosmetics/toilet soap/toothpaste	3803.0	86.7
5	United Breweries	Country not indicated	Scottish and New Castle India Limited	Alcoholic products	2482.1	56.8
6	Crisil Limited	USA	S&P India LLC		2418.7	55.6
7	Telco Constructions Equipments Company	Japan	Hitachi Constructions Machinery Company Limited	Manufacturing/sale of construction equipment/earth-moving machinery	2043.0	44.8
8	Jubilant Organosy Ltd	Cyprus	GA European Investments Ltd.	Manufacturing chemicals/adhesives	1292.2	29.7
9	Tata Honeywell Limited	USA	Honeywell Asia Pacific Inc.	Manufacturing	1256.9	28.6
10	Binani Cement Ltd.	Mauritius	Silver Peak Investment (Mauritius) Ltd.	Cement, concrete	1200.0	26.8

Source: SIA Newsletter, Annual Issue 2005.

Chapter 4: Special Economic Zones (SEZs) and FDI in India

4.1 Introduction

India was one of the first countries in Asia to recognise the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ being set up in Kandla in 1965. With a view to overcome the shortcomings experienced on account of the multiplicity of controls and clearances, absence of world-class infrastructure, and an unstable fiscal regime, and with a view to attracting larger foreign investments in India, the Special Economic Zones (SEZs) Policy was announced in April 2000. This policy intended to make SEZs an engine for economic growth, supported by quality infrastructure and complemented by an attractive fiscal package, both at the Centre and the State level, with the minimum possible regulations. SEZs in India functioned from November 1, 2000 to February 9, 2006 under the provisions of the Foreign Trade Policy and fiscal incentives were made effective through the provisions of relevant statutes.

The key characteristics of the Indian SEZ are highlighted through simplified procedures for development, operation, and maintenance of the Special Economic Zones and for setting up units and conducting business in SEZs. The main objectives of the SEZ Act, May 2005 are the generation of additional economic activity, promotion of exports of goods and services, promotion of investment from domestic and foreign sources, creation of employment opportunities and development of infrastructure facilities.¹

4.2 Backdrop: Policy of Moving from EPZs to SEZs

During the past four decades many developing countries have been creating special zones to promote their exports and earn foreign exchange. The term 'export-processing zone' (EPZ) was first coined to identify the Shannon zone set up in Ireland in 1958. Many EPZ variants have appeared since then, such as free economic zones, special economic zones, investment promotion zones and maquiladoras, which differ on various parameters, including location and organisation.

India established its first EPZ in 1965 in Kandla (Gujarat) followed by the Santa Cruz Electronic Export Processing Zone (SEEPZ) in Bombay (now Mumbai) in 1972. In 1984 EPZs were established in Cochin (Kerala), Falta (Calcutta, now Kolkata), Madras (now Chennai) and NOIDA (Uttar Pradesh). The Visakhapatnam EPZ (Andhra Pradesh) was established in 1989 and the Surat EPZ (Gujarat) in 1997. These eight EPZs were distributed over India such that there were three each in the south and west of India, but only one each in the north and east.

By the end of the 1990s, it was found that India's EPZs were not performing as well as China's SEZs. India's approach to export zones, at least until the year 2000, has been one of neglect rather than support. The zones were not able to emerge as effective instruments for export promotion on account of multiplicity of controls and clearances, the absence of world class infrastructure and an unstable fiscal regime. The other major reasons behind poorer Indian performance included:²

1. Limited scale and overcrowding of EPZs;
2. Insufficient logistical links with airports and seaports;

1. www.sezindia.nic.in

2. Bajpai, Nirupam (2004). *Foreign Direct Investment in China's provinces: Lessons for the state of Gujarat*. (CGSD Working Paper No. 13). Center on Globalization and Sustainable Development, Columbia University.



3. Poor infrastructure in areas surrounding the zones (e.g., unpaved roads and poor physical security);
4. Government ambivalence and red tape regarding inward foreign direct investment;
5. Unclear incentive packages governing inward investment; and
6. Lack of interest and authority of state and local governments, and the private sector, compared with the central government, in the design, set up, and functioning of the zones.

With the intention to emulate the Chinese model of promoting exports, India decided to replace its EPZ model with an SEZ model in the Export and Import (EXIM) Policy announcement made in 2000-01 (with effect from April 1, 2000). This was done with a view to providing an internationally competitive and hassle-free environment for exports. A comparison of EPZs with SEZs in India is provided in Annex I. The other objectives included earning foreign exchange, attracting foreign investment, generating employment, attracting the latest technology into the country, backward and forward linkages by way of sourcing of raw materials from and supply of finished goods to DTAs (Domestic Tariff Areas), upgrading skills and creating a source of skilled manpower, and developing backward areas.

4.3 Definition and Key Features

The Special Economic Zone is a special export promotion scheme and therefore has a specific definition. A Special Economic Zone (SEZ) is defined as a deemed foreign territory with special rules for facilitating FDI for export-oriented production, and for purposes of trade and custom duties. The key implication of being deemed foreign territory is that individual units within the SEZ are allowed operational freedom in routine activities and not supervised by customs authorities.

Units may be set up in an SEZ for the manufacture of goods and rendering of services. All import/ export operations of the SEZ units would be on a self-certification basis. The units in a SEZ would have to be net foreign exchange earners, but these shall not be subject to any pre-determined value addition or minimum export performance requirements. Sales in the DTA by SEZ units would be subject to payment of full customs duty and the import policy in force.

The Indian SEZ Policy has the following distinguishing features:

- i. The zones would be set up by the private sector or by the state government in association with the private sector. The private sector is also invited to develop infrastructure facilities in the existing SEZs.
- ii. The state governments would play a lead role in setting up the SEZs.
- iii. Creating special windows under the existing rules and regulations of the central and the respective state governments for the SEZs being set up.

All existing eight EPZs have now been converted into SEZs, and another 27 EPZs have already been approved and are under the process of establishment. In fact, the EPZ Scheme was discontinued with effect from April 1, 2003. Further, after the SEZ Act, 2005 came into force, 439 formal approvals have been granted for setting up SEZs, of which 201 SEZs have been notified and were in various stages of operation till February 10, 2006. The fact that the approved SEZs are spread over 19 States and three Union Territories indicates that these are not concentrated in any particular region. The land area involved in the 439 formally approved SEZs is about 60,168 hectares, of which approximately 20,000 hectares are for the 97 approvals given to State Industrial Development Corporations/State Government Ventures. In all these cases either the land was already available with the State Industrial Development Corporations (SIDsCs) or was in the possession of the private companies setting up the SEZs.

4.4 Management of SEZs

SEZs are under the administrative control of the Development Commissioner (DC). There is a single-window clearance for SEZs, and all approvals and clearances for the establishment and operation of units in the SEZ are granted by the Unit Approval Committee which comprises the DC and nominees of the central and state governments. All activities of the SEZ unit, unless otherwise specified, are through self-certification procedures and are monitored by a Committee comprising the Development Commissioner and Customs. If the Board of Approval is of the opinion that any Special Economic Zone is fully developed or the status of duty-free enclave is no longer viable or beneficial to the Zone, it may recommend the closure of the Zone to the Central Government.

The Development Commissioners (DCs) of SEZs accord automatic approval to projects where:

- i. The proposed activity does not attract compulsory licensing or falls in the services sector, except software & IT-enabled services;
- ii. The location conforms to the prescribed parameters;
- iii. Units undertake to achieve positive net foreign exchange earnings; and
- iv. The unit is amenable to bonding by customs authorities.

Conversion of existing DTA units into Export-Oriented Units (EOU) is also permitted under the automatic route, if the DTA unit satisfies the parameters above and there is no outstanding export obligation under any other export-oriented scheme of the Government of India. All proposals for FDI/NRI investments in 100 per cent EOU units in SEZ qualify for approval through the automatic route subject to sectoral norms.³

The Central Government has offered various incentives and facilities both to developers of SEZs as well as industrial units coming up in SEZs. All kinds of units, namely, manufacturing, trading and service activities are permitted in SEZs.

Facilities to Individual Industrial Units

- A designated duty-free enclave to be treated as foreign territory for trade operations and duties and tariffs. No license required for import.
- Exemption from customs duty on import of capital goods, raw materials, consumables, spares, etc.
- Exemption from Central Excise duty on procurement of capital goods, raw materials, consumable, spares, etc. from the domestic market.
- Reimbursement of Central Sales Tax paid on domestic purchases.
- 100 per cent income tax exemption for a block of five years, 50 per cent tax exemption for two years, and up to 50 per cent of the profits ploughed back for the next three years under Section 10-A of the Income Tax Act.
- Supplies from DTA to SEZ to be treated as exports under 80HHC of the Income Tax Act. 100 per cent income tax exemption for three years and 50 per cent for two years under Section 80-LA of the Income Tax Act for offshore banking units.
- External commercial borrowing by SEZ up to US\$500 million a year without any maturity restriction through recognised banking channels.
- Reimbursement of duty paid on furnace oil, procured from domestic oil companies to SEZ units, as per the rate of drawback notified by the Directorate General of Foreign Trade.
- SEZ units may be used for manufacturing, trading or service activity.
- SEZ unit to be positive net foreign exchange earner within three years.
- Performance of the units to be monitored by a Committee headed by Development Commissioner and consisting of Customs.

3. Manual on FDI in India - Policy and Procedures, March 2004.



- 100 per cent Foreign Direct Investment in manufacturing sector allowed through automatic route, barring a few sectors.
- Facility to realise and repatriate exports proceeds within 12 months.
- Commodity hedging by SEZ units permitted.
- No cap on foreign investment for SSI-reserved items.
- Exemption from industrial licensing requirement for items reserved for SSI sector.
- Profits allowed to be repatriated freely without any dividend-balancing requirement.
- Domestic sales on full duty, subject to import policy in force.
- No fixed wastage norms.
- Full freedom for sub-contracting, including sub-contracting abroad.
- Sub-contracting facility available to jewellery units.
- Duty-free goods to be utilised in five years.
- Job work on behalf of domestic exporters for direct export allowed.
- No routine examination by Customs of exports and import cargo.
- No separate documentation required for customs and EXIM Policy.
- Support services like banking, post office clearing agents, etc. provided in zone complex.
- Developed plots and ready to use built-up space.
- Exemption from customs/excise duty on goods for setting up units in the zone.
- The SEZ policies announced by some of the State Governments provide for exemption to SEZ's units and developer from payment of State sales tax and other local levies, electricity duty, and single-window approval for state-level clearances and simplification of return and inspection system.
- Units in the Zone have to export their entire production and are granted certain entitlements such as duty deferment on import & domestic procurement, simplified operational regime, and access to the DTA market. In order to provide self-contained areas supported by world-class infrastructure oriented towards export production, the minimum size of the SEZ shall not be less than 1000 hectares. This, however, does not apply to existing EPZs that were converted into SEZs as such, or for notifying additional area as a part of such SEZ, or to product-specific SEZs, or port/airport-based SEZs, on a case-by-case basis (www.sezindia.nic.in).

Facilities to the Developer

For development, operation and maintenance of infrastructure facilities in SEZs, the developer is eligible for certain entitlements. These include income tax exemption for a block of 10 years under Section 80-IA of the Income Tax Act, import/procurement of goods from the DTA without payment of customs/excise duty or import of specified goods at concessional rates of duty as may be notified by the government for the development of SEZ. Further, supplies of goods from DTAs for development, operation and maintenance of SEZs are exempt from payment of central sales tax (CST) under the CST Act. Also, the developer is exempt from service tax. Even the DTA supplier has some entitlements such as drawback/ DEPB (Duty Entitled Passbook Scheme), CST exemption, exemption from state levies, etc.

4.5 Performance of SEZs: Exports

Exports from Special Economic Zones have been showing a steady increase. Compared to exports of Rs. 34,615 crore made by SEZs in 2006-07, exports to the tune of Rs. 66,638 crore have been effected in the year 2007-08, registering a growth of 92 per cent. Moreover, the growth rate of exports from SEZs has been continuously increasing during the past five years (Table 4.1).

The SEEPZ EPZ in Mumbai, Noida SEZ and Surat SEZ account for about 21, 32 and 23 per cent, respectively, of exports originating from all the eight EPZs, followed by the Visakhapatnam, Kandla and Madras SEZs, which are far behind and accounted for about 2-4 per cent of total SEZ exports in 2007-08. Although the share of the Cochin SEZ



in the eight major SEZ's exports is low, the growth of the exports of this SEZ over a period of time is significantly high (457 per cent in 2007-08 over the year 2006-07); this is in contrast to other SEZs which reported tremendous declines in their exports in 2007-08.

The growth rate of exports from SEZs touched 67 per cent compared with an average of 15 per cent during 2002-03. Exports from the Cochin, Noida and Surat SEZs have performed quite well during the years 2006-07 and 2007-08. Exports from all SEZs except SEEPZ and Visakhapatnam performed well during 2007-08 (see Table 4.2).

The above table shows that exports from SEZs have been increasingly consistently in the past five years with the SEEPZ, Surat and Noida SEZs clocking the highest exports.

Table 4.1
Total Physical Exports by SEZs

Year	Value of Physical Exports from SEZs (Rs. crore)	Growth Rate (over previous year) (per cent)
2003-2004	13854	39
2004-2005	18314	32
2005-2006	22840	25
2006-2007	34615	52
2007-2008	66638	92

Source: www.sezindia.nic.in

Table 4.2
Export Performance of the 8 functional SEZs (Rs. crore)

Zone	2000-01	2002-03	2004-05	2006-07	2007-08
Kandla SEZ	527.9	729.3	710.8	1482.7	1882.0
SEEPZ SEZ	5193.7	6083.2	6589.8	12047.7	11264.7
Cochin SEZ	304.3	270.4	290.0	802.7	4471.0
Noida SEZ	1043.2	1001.2	2479.0	6893.0	16843.4
Madras SEZ	690.8	822.4	979.2	2383.9	3046.5
Visakhapatnam SEZ	219.1	357.3	288.0	749.7	741.3
Surat SEZ	NA	NA	1539.7	5197.4	12294.0
Falta SEZ	520.0	520.5	573.7	998.7	1026.3
Total for SEZs	8499.0	9784.1	13450.2	30555.7	51569.2

Source: www.sezindia.nic.in

4.6 Investment in SEZs

Exports and employment in SEZs largely depend on investment. Promotion of investments from domestic as well as foreign sources is one of the main objectives of the SEZ scheme. In 2007-08, foreign investment, including NRI investment in the setting up of units in SEZs, was Rs. 3899 crore. FDI up to 100 per cent for setting up SEZs is permissible with the clearance of the Board of Approval. See Table 4.3 below for details of investment in SEZs.

Table 4.3 shows investment made in central and private/state government SEZs and it can be seen that investment in notified SEZs is much higher than in both the private/state government SEZs and central government SEZs. Table 4.4 describes the investment made by central government and private/state government SEZs for the year 2007-08; it shows



that investments by private/state government SEZ (Rs. 3,960 crore) is greater than the investment made in central government SEZs (Rs. 3,899.5 crore). Further, Table 4.5 shows the distribution of total investment made in different central government SEZs. In total, investment in central government SEZs stood at Rs. 3,900 crore in 2007-08 and all the central government SEZs get almost equal investment, except for SEEPZ SEZ. Given that SEZs were set up with the objective of attracting FDI into the country, in 2007-08 the seven central government SEZs have attracted FDI to the tune of Rs. 865.8 crore. The MEPZ SEZ has attracted the maximum FDI to the tune of Rs. 237 crore, followed by the SEEPZ SEZ, Mumbai of Rs. 154.3 crore. The total FDI received by SEZs in 2007-08 comprises about 8 per cent of the total FDI inflows into the country. This shows that there is tremendous scope to increase FDI in SEZs across the country. In contrast, the private/state government SEZs do not get an equal distribution of investment. Nokia SEZ has got the most investment (about 50 per cent of the total investment in state government/private SEZs), followed by Indore and Mahindra City SEZ (IT), but the Manikanchan, Jodhpur, Wipro, Mahindra City (Textile) and Surat Apparel Park SEZs get a comparatively low investment. (See Annex 4.1 for proposed and actual investment in other SEZs apart from the eight central SEZs).

Table 4.3
Total Investment in SEZs

Investment in notified SEZs (as of June 30, 2008)	Rs. 73,348 crore (all incremental employment generated after February 2006)
Investment in Private/State Govt. SEZs which came into force prior to SEZ Act, 2005 (as of June 30, 2008)	Rs. 3702 crore (incremental investment generated since Feb. 2006 is Rs. 1,946 crore)
Investment in 7 SEZs established by the Central Government (as of June 30, 2008)	Rs. 4043 crore (incremental investment generated since Feb. 2006 is Rs. 1,764 crore)

Source: www.sezindia.nic.in

Table 4.4
Summary of Investment in SEZ Set up Prior to SEZ Act, 2005 (Rs. crore)

Central Government SEZs	3899.5
State Govt/Pvt. SEZ established prior to SEZ Act, 2005	3960.4
Total	7859.9

Source: www.sezindia.nic.in

Table 4.5
Government SEZs (EPZs Converted to SEZs) (Rs. crore)

Zone	Government Investment	Private Investment by Units (excl. FDI)	FDI Proposed	FDI Made	Total Private Investment made
Kandla SEZ	93.6	238.1	0.0	137.4	375.5
SEEPZ SEZ	57.3	635.1	461.9	154.3	789.4
Noida SEZ	117.7	540.0	0.0	135.0	675.0
MEPZ SEZ	87.5	434.3	252.5	237.4	671.7
Cochin SEZ	104.3	429.0	0.0	76.8	505.8
Falta SEZ	101.1	385.4	-	8.4	393.8
Visakhapatnam SEZ	67.9	371.5	200.0	116.5	488.0
Total	629.7	3033.7	914.4	865.8	3899.5

Source: www.sezindia.nic.in



Foreign Direct Investment in SEZs

Some of the policy measures taken to attract foreign direct investment (FDI) in Special Economic Zones (SEZs) include:

- i. FDI up to 100 per cent under the automatic route for all manufacturing activities, except arms and ammunition, explosives and allied items of defence equipment, defence aircraft and warships, atomic substances, narcotics, psychotropic substances and hazardous chemicals, distillation and brewing of alcoholic drinks, and cigarettes/ cigars and manufactured tobacco substitutes.
- ii. 100 per cent FDI allowed for development of townships including housing, commercial and recreational facilities on a case-by-case basis.
- iii. Facility to foreign companies to set up manufacturing units in SEZs as branch operations on a standalone basis without approval from the RBI.

Further, in the Special Economic Zones notified under the SEZ Act, 2005 and the modified SEZ Act, 2006, a substantial amount of FDI has already been made. Some SEZs with a major FDI component of investment are:

- Apache Sez Development India Private Ltd., Andhra Pradesh
- Brandix India Apparel City Private Ltd., Andhra Pradesh
- Emaar Hills Township Private Ltd., Andhra Pradesh
- Zyndus Infrastructure Private Ltd., Gujarat
- Esar Hazira SEZ Limited, Gujarat
- DLF Limited, Haryana
- Tanglin Development Limited, Karnataka
- M/s Information Technology Park Limited, Karnataka
- Quarkcity India Pvt. Ltd., Punjab
- Flextronics Technologies (India) Private Limited, Tamil Nadu
- SIPCOT SEZ, Tamil Nadu (Foxconn & Motorola as co-developer) – Dell (unit)

Special Economic Zones (SEZs) are set to see major investments after the straightening out of certain regulatory tangles. According to India's Commerce Secretary, Mr. G. K. Pillai, India has approved 513 SEZs till August 2008, of which 250 have been notified. Investments are expected to cross US\$45.73 billion by December 2009, providing incremental employment to 800,000 people. In December 2008, the government cleared 22 proposals for setting up SEZs. The proposals included a major foreign direct investment (FDI) project by a Dubai-based developer.

4.7 Employment in SEZs

The number of jobs created often determines the success of SEZs. In a labour-surplus developing economy such as India, employment is among the top priorities. The number of people employed in SEZs in India from February 2006 to July 2008 is shown below in Table 4.6.

Table 4.6 shows that the total employment provided by Central Government SEZs (199,330 people) is higher than that by private/state government SEZs and notified SEZs (149,873 persons).

Table 4.7 indicates that employment provided by central government SEZs is four times higher than that by the state government/private SEZs for the year 2007-08. Also the number of employed persons per unit are 172 and 111 for central and state government SEZs, respectively. This implies that central government SEZs create more opportunities for employment than the other SEZs. Among the central government SEZs, the highest employment providers are the



Table 4.6

Total Employment in SEZ

Direct employment created in notified SEZs (as of June 30, 2008)	100,885 people (all incremental employment generated after February 2006)
Direct employment in private/state govt. SEZs which came into force prior to SEZ Act, 2005 (as of June 30, 2008)	48,988 persons (incremental employment generated since Feb. 2006: 36,250 people)
Direct employment in 7 SEZs established by the Central Government (as of June 30, 2008)	1,99,330 persons (incremental employment generated since Feb. 2006: 77,094 people)

Source: www.sezindia.nic.in

Table 4.7

Employment in SEZs Set Up Prior to SEZ Act, 2005

	Employment (Persons)	No. of Units
Central Government SEZs	193,474	1,122
State Govt/Pvt. SEZ	44,768	403
Total	238,242	1,525

Source: www.sezindia.nic.in

SEEPZ, Noida and MEPZ SEZs with 43, 17 and 15 per cent shares in total employment, respectively. Also, the employment opportunities for men and women are equally distributed except in the Noida SEZ (Table 4.8).

Table 4.8

Government SEZs (EPZs Converted to SEZs)

Zone	No. of Units Approved	Direct Employment		
		Men	Women	Total
Kandla SEZ	167	9873	9129	19002
SEEPZ SEZ	333	58747	26356	85103
Noida SEZ	200	27080	5920	33000
MEPZ SEZ	106	12706	16489	29195
Cochin SEZ	120	6336	5038	11374
Falta SEZ	154	5612	5988	11600
Visakhapatnam SEZ	42	2342	1858	4200
Total	1122	122696	70778	193474

Source: www.sezindia.nic.in

With respect to employment provided by state government/private SEZs, Surat and Nokia SEZs were the largest employment providers, while Jodhpur and Mahindra City (auto ancillary) SEZS were the lowest employment providers for the year 2007-08. Another noteworthy observation is that these SEZ's also provide majority employment to women (see Annex 4.3).

4.8 Benefits derived from SEZs: Employment and FDI Generation

Currently, 1277 units are functioning in SEZs that were set up prior to the enactment of the SEZ Act, 2005. These units provide direct employment to over 2 lakh people, of which 40 per cent are women. Private investment in these SEZs is over Rs. 7,104 crore.



In a span of a few years, there have been visible gains from SEZs by way of generating employment, creating world-class infrastructure within the zones, and attracting investment, including FDI. Sripurumbudur in Tamil Nadu is a leading global hardware hub with investments from companies like Nokia, Foxconn, Motorola, Ericsson, Samsung and Dell. Nokia SEZ already provides employment to 9,645 people, the majority of whom are women. Mahindra World City SEZ in Tamil Nadu is another SEZ cluster in which three SEZs for IT, auto and apparel have been set up in adjoining areas. Similarly, in Andhra Pradesh, in addition to a large number of IT/ITES SEZs, several successful sector-specific SEZs for the manufacture of textiles, leather items and gem and jewellery are in full operation. Apache shoes in Nellore district employs about 4,500 workers, of which the majority are women from nearby villages, who receive training before being employed. Hyderabad Gems SEZ has employed over 2,000 people, with a projection of employing 30,000 people. These SEZs are new industrial clusters and are not relocated from elsewhere.⁴

4.9 Issues Related to SEZs

Apprehensions have been expressed about the misuse of the scheme and relocation of existing industries into SEZs. However, experience shows that these apprehensions are ill-founded, and fresh investments and employment have been flowing into the Special Economic Zones. The benefits derived from the multiplier effect of the investments and additional economic activity in the SEZs along with the employment generated is estimated to far outweigh the revenue losses on account of tax exemptions given to the SEZs. These SEZs are new industrial clusters that have not been relocated from elsewhere.

Concerns have also been expressed regarding acquisition of agricultural land for setting up SEZs. The state governments have been advised by the Centre that in the case of land acquisition for Special Economic Zones, the first priority should be for acquisition of waste and barren land and, if necessary, single-crop agricultural land could be acquired for the SEZs. If a portion of double-cropped agricultural land has to be acquired to meet the minimum area requirements, especially for multi-product Special Economic Zones, it should not exceed 10 per cent of the total land required for the SEZ. Various issues related to setting up of SEZs in the country, including issues raised by various political parties, have been addressed by the Empowered Group of Ministries (EGOM). Pursuant to the decision taken by EGOM, all state governments have been informed that the Board of Approval will not approve any SEZs where the state governments have carried out or propose to carry out compulsory acquisition of land for such SEZs after April 5, 2007.⁵

4.10 SEZs in China and India: A Comparison

4.10.1 Chinese SEZs

At the centre of China's strategy to attract investors and to develop China as a major platform for labour-intensive manufacturing exports were the SEZs in which favourable export conditions were assured. Urban export-oriented enterprises in China were encouraged by the designation of a growing number of SEZs, coastal open cities and economic and technological development zones, all designed to encourage manufacturing exports.

Starting in 1979, SEZs and other areas were developed through incentives. Five SEZs were established: the whole of Hainan province; three cities in Guangdong province, viz., Shenzhen, Zhuhai and Shantou; and Xiamen city in Fujian province. Another 14 SEZs were added in 1984. Other special economic areas, though much smaller, were also established. These include the Economic and Technological Development Areas (ETDA), High-Technology Industry Development Areas (HTIDA) and Export Processing Zones (EPZs). Some of these policy zones were located within SEZs. ETDAs and HITDAs enjoy tax incentives from the central as well as the local governments. EPZs dealing

4. Ministry of Commerce, Government of India, Annual Report, 2007-08.

5. Government of India, Economic Survey, 2007-08.



exclusively in the processing trade were first established in 2001 and had spread to 26 cities by 2004. EPZs accounted for only 3.5 per cent of China's exports in 2005, with their share being even smaller in the case of processing exports.

It was in the 1990s that the central government commenced the process of developing Shanghai's Pudong District and establishing Suzhou Industrial Park. China has introduced major reforms since the early 1990s. It extended preferential policies and regulations already being enjoyed by Special Economic Zones (SEZs) that were established in the 1980s. SEZs were expanded to include a wider area along the coast and the Yangtze River. Local governments were given the autonomy of facilitating the entry of foreign investment enterprises (FIEs) and extending preferential policies and regulations, along with tax concessions to these firms in an expeditious manner. The FDI attraction was reinforced by providing good infrastructure, simplified procedures, a skilled labour force and favourable geographical locations. The increase in FDI was also enabled by increasing production-sharing by China with ASEAN countries and preference for foreign firms to come into China, particularly after the 1997 financial crisis which affected ASEAN countries but not China. This led to stronger production linkages in this region (Yao, 2008).

Export promotion was facilitated through:

- Duty-free import of intermediate products and capital goods,
- Generous tax holidays, and
- Decent physical infrastructure through the provision of land, power, physical security, transport to the ports within specially created industrial parks, etc.

The first SEZ, Shenzhen SEZ, was set up in 1980. Today, China has five SEZs, of which four were set up 20 years ago – Shenzhen, Shantou, Xiamen and Zhuhai – and the fifth, Hainan, was set up in 1988, thereby promoting the province to Provincial status. Setting up these zones close to internationally reputed commercial destinations was basically for easier access to foreign investments, modern technology and managerial expertise. The location advantage of these SEZs attracted foreign investors that drew FDI into China, with Hong Kong accounting for over 60 per cent of the FDI inflows. As China liberalised, Guangdong Province, which has the largest number of SEZs, became the most attractive foreign investment destination.

Labour Contracts in China

Labour contracts signed between the employer and employee regulate the labour relationship between the contracting parties and define the respective responsibility, rights and interests of both parties, thus introducing a new competitive mechanism in the employment system. However, the nature of the contract is subject to approval by local authorities. Enterprises gain the right to dismiss employees who violate labour discipline. Workers benefit because as more profitable enterprises expand, they bid workers away from the latter with higher wages and/or more generous benefits. A labour contract stands terminated upon the expiration of its term or the emergence of conditions for the termination of the contract as agreed upon by the parties involved. During the period of statutory consolidation, when the employing unit comes to the brink of bankruptcy, or runs into deep difficulties in production and management and if reduction of its personnel becomes really necessary, the unit may make such reductions after it has explained the situation to the trade union or all of its staff and workers 30 days in advance, solicited opinions from them and reported to the labour administrative department. But, if the employing unit recruits personnel within six months after the personnel reduction, the laid-off workers have priority for re-employment.

Source: www.ilo.org

The Chinese SEZs, being very large in size, housed activities such as commerce, tourism, housing, agriculture and industrial production apart from export processing. The zones are in direct competition with one another at both the domestic and the international level. They are typically marked with minimum bureaucracy, good infrastructure,



generous tax holidays for manufacturing units, and unlimited duty-free imports of raw, intermediate and final goods as well as capital goods.

4.10.2 Provision of Infrastructure in SEZs

The provision of infrastructure was done on a regional basis rather than restricting the benefits to the SEZ alone. Cities like Shanghai started a comprehensive programme of resource mobilisation and expenditure management, and built new infrastructure. It set up separate transport and energy funds in municipal revenue collection, guaranteeing much of the funding for the two sectors, and tapped into the international market to lure direct investment. Municipal service departments were given full responsibility for planning, investment, operations, and maintenance. They adopted an independent cost-accounting system to facilitate sector management and financing, and increased user charges for infrastructure services like bus transport, gas supplies, water, waste-water discharge, and sanitation services. The city also raised funds by leasing land, in the process attracting a large volume of FDI into real estate development, including commercial and apartment complexes that catered to foreign companies.

4.10.3 Local Autonomy

The growth process was accompanied by considerable delegation of authority to the provincial governments. Each was allowed to introduce its own legislation to govern investment, approval procedures relating to foreign institutional enterprises and local tax concessions. Local authorities could clear foreign investment proposals without referring to the Centre. They were also permitted to retain a large share of incremental taxes generated as a result of the increased economic activity, which was used to invest in infrastructure as well as equity contributions to joint ventures with foreign investors. The four SEZs and their home provinces, Guangdong and Fujian, were awarded financial benefits in the form of more advantageous fiscal and foreign exchange revenue contracts. Beginning in 1980, Guangdong and Fujian were awarded five-year fiscal contracts permitting them to retain almost all of the taxes and industrial profits generated by firms in their jurisdiction. In contrast, the three provincial-level cities of Beijing, Tianjin and Shanghai were still required to turn over 63 to 88 per cent of their revenues. In terms of foreign exchange retention, the SEZs were allowed to retain all of the hard currency they earned from trade, in contrast to the average of 25 per cent allowed to other localities.

4.10.4 Labour Policies

Under the planned economy system in China, the urban and rural labour forces were separated from each other and deployed strictly according to government plans. Urban job seekers were provided with employment by the government and rural labourers could not be employed in urban areas without the permission of the government. Employees had no right to choose their jobs and the employer had no right to select what they needed either. After the reform, the relationship between the employer and employee underwent a major change. In 1983, certain localities experimented with gradual replacement of permanent employment with contract labour. The government formalised this practice in 1986 and promulgated "Provisional Regulations on Employment in State-owned Enterprises". All the state organs, government institutions and state-owned enterprises had to execute labour contracts for new employees, either on long-term contracts (one year or more) or short-term contracts. In the 1995 Labour Law, contracts were made mandatory in all industrial enterprises, including Town and Village Enterprises (TVEs).

4.10.5 Tax Policy

Chinese SEZs usually did not provide a long tax holiday. Instead, production enterprises attracted a reduced tax rate with a substantial investment tax credit that varied from 100 per cent for investment in export-oriented and high-tech enterprises to 40 per cent for investment in other FIEs. Among the preferential policies for FDI firms in the SEZs were, for example, a reduction of income tax to 15 per cent (FDI firms engaged in production and scheduled to operate for a period of 10 years or more were exempted from income tax in the first and second profit-making years and allowed a 50



Why Did China Set Up SEZs?

The creation of the four SEZs not only symbolised the beginning of China's economic reform but also constituted an integral part of the overall open-door policy. However, the interesting question is whether it was necessary to set up SEZs when China had decided to implement the open-door policy nation-wide. First, there was a strategic plan to resume sovereignty over Hong Kong, adjacent to Shenzhen, by 1997. It was believed that the SEZs could contribute positively to the peaceful handover of Hong Kong to China. Second, the geographic proximity of the SEZs, which are the original home of many overseas Chinese, to Hong Kong, Macau, Taiwan, and ASEAN, made it possible to exploit the overseas Chinese business network to obtain capital, productive technology, and management skills, and to gain access to the international market. Third, at the start of carrying out market-oriented economic reforms, the establishment of a small number of selected SEZs also served as a laboratory for China's overall economic reforms. The idea was to introduce the successful experience drawn from the actual practice of market-oriented economic reforms in a small number of SEZs into other areas and, meanwhile, to limit it so that it could be easily controlled if something went wrong. In addition, from the perspective of their geographical diffusion, the establishment of the SEZs could be viewed as a pilot project for the more extensive operation of the uneven development strategy that was implemented in 1988. Fourth, the creation of SEZs was aimed at providing a favourable investment environment for foreign investors, while trying out preferential FDI policies to be implemented later in the rest of the country. Finally, there was the reformers' strategic consideration of reducing possible political resistance from the conservatives against market-oriented economic reforms in order to carry out the overall economic reform scheme more smoothly and effectively.

Based on Chen, Chunlai (1997). *The Evolution and Main Features of China's Foreign Direct Investment Policies*. (Working Paper No. 97/15). Chinese Economics Research Centre, University of Adelaide.

per cent reduction of income tax in the following three years); exemption from income tax on the remitted share of profits; exemption from export duties and from import duties for equipment, instruments, and apparatus for producing export products; and the easing of entry and exit formalities.

4.10.6 Foreign Trade Management

In 1978, almost all trade was carried out through 13 Foreign Trade Companies (FTCs) responsible for implementing the central plan. In 1984, the FTC monopoly was abolished. The system was decentralised by allowing branches to become independent and competing operating entities and to operate as agents of the enterprises, which meant that they could charge a fee for their services, but could not absorb profits or losses on goods traded. In 1988, further reform led to a reduction in goods covered by the mandatory export plan by about 30 per cent, an increase in retention quotas and access to the foreign exchange. In 1991, the mandatory export plan as well as fiscal subsidies for exports was abolished leading to greater competition among the FTCs in purchasing products from enterprises and better prices for export suppliers. By 1994, there were more than 9,000 FTCs actively competing for exporters. With the unification of the exchange rate, there was also a change in the tax system regarding the treatment of exports under the VAT.

Zero rating for exports was introduced, which meant that exporters could claim a refund of the VAT paid on inputs. By 1996, when the renminbi became convertible on the current account, the FTCs and China's foreign trade were almost entirely market-driven.

4.10.7 China's Liberalisation: A Focus on Overall Growth, Not Enclaves

The preceding discussion makes it clear that the SEZs in China were not an experimental approach to increasing exports. Instead they were the vanguard of an alternative market-based growth strategy that took advantage of FDI and the cultural and geographical proximity of strong market economies like Hong Kong and Taiwan. The geographical spread of SEZ policies ensured that the provinces around the SEZ provided essentially similar investment environments. Indeed, much of the export boom came from them and not directly from the SEZs. As provinces such as Guangdong began to show signs of congestion, the growth process spread beyond it. This spread was facilitated by the regional approach to infrastructure development. These strategies, that is, (a) choosing a large established area that leveraged

existing infrastructure, (b) exploiting natural locational and cultural affinities, such as proximity to Taiwan and Hong Kong, and (c) unbundling infrastructure development from the development of the SEZ, ensured that investments were market-oriented, reduced the risk of stranded investments as a result of special locational privileges and ensured that the growth was more reflective of China's underlying comparative advantage. This market-orientation, coupled with China's high savings and investment rate, has made it the success it is today.

4.10.8 Indian SEZs

India also had similar models of EPZs and EOUs. These were located at various places including Cochin, Falta, Kandla, Chennai, NOIDA, Santa Cruz, Visakhapatnam and Surat. But these eight zones failed to achieve their export targets. Thus, a policy was introduced on April 1, 2000 to set up Special Economic Zones in the country with a view to providing an internationally competitive and hassle-free environment for exports. This was supplemented by the comprehensive SEZ Act of 2005. Units may be set up in an SEZ for manufacture of goods and rendering of services. All the import/export operations of the SEZ units will be on a self-certification basis. The units in the Zone have to be net foreign exchange earners but they shall not be subjected to any pre-determined value addition or minimum export performance requirements. Sales in the Domestic Tariff Area by SEZ units shall be subject to payment of full customs duty and import policy in force. Further, offshore banking units may be set up in the SEZs.

The policy provides for setting up of SEZs in the public, private, or joint sector, or by state governments. It was also envisaged that some of the existing Export Processing Zones would be converted into Special Economic Zones. Accordingly, the government has converted Export Processing Zones located at Kandla and Surat (Gujarat), Cochin (Kerala), Santa Cruz (Mumbai-Maharashtra), Falta (West Bengal), Madras (Tamil Nadu), Visakhapatnam (Andhra Pradesh) and Noida (Uttar Pradesh) into Special Economic Zones. In addition, three new Special Economic Zones approved for establishment at Indore (Madhya Pradesh), Manikanchan – Salt Lake (Kolkata) and Jaipur (Rajasthan) have commenced operations.

4.10.9 Characteristics of the Indian SEZ Model

The distinct characteristics of the Indian SEZ model are described below:

- International experiences show that the government has largely developed special economic zones and has invested the necessary funds to create zone infrastructure.
- As an extension, the government has also taken the principal responsibility for marketing these zones internationally. Unlike this, the primary thrust of the Indian SEZ model is to facilitate 'private sector-led' SEZs. This has opened up possibilities for developing SEZs in the private sector and joint sector.
- Keeping in view the learnings from other countries, the Indian SEZ model also envisages a minimum size of 1,000 hectares for all greenfield SEZs. As highlighted earlier, a minimum critical mass or size is necessary to create the desired economic multiplier. The combined utilised area under all EPZs and FTZs in India is 2,100 acres, i.e., less than 1,000 hectares, which is the minimum size stipulated for greenfield SEZs. The simultaneous conversion of existing EPZs and FTZs into SEZs provides an opportunity to test and fine-tune the SEZ policy before it is applied to greenfield SEZs.
- The experience of comparable countries shows that decisions such as location selection, number of SEZs to be promoted and the focus for investment attraction have largely been influenced by the national government. In the Indian SEZ model, states are being encouraged to take these choices, while the central government largely focuses on policy-making and facilitation. This has resulted in a number of proposals from states for developing SEZs. Since much of the funding for SEZs is envisaged through the private sector/ banks, the soundness of the business model, competitive differentiation and market forces would be key determinants of the bankability of these projects.



4.10.10 India vs China

India vs China

India, like China, is also offering a host of incentives like duty-free imports, tax holidays, freedom from customs procedures, etc. Units operating in these trade zones are given additional incentives and more flexibility in their operations, like flexible labour laws. Within the SEZ, no permission is required for inter-unit sales or transfer of goods. One of the comparisons between the SEZs in China and India is the size of the SEZ. In China, each SEZ is well over 1,000 hectares. Though SEZs in India are smaller, the minimum area requirements stipulated for various categories of SEZs has been increased after the implementation of the SEZ Act, 2005. Several multi-product SEZs can now be set up with 1,000 hectares of land as in the case of China. The following table presents the minimum area requirements. An example of an operational multi-product SEZ set up with an area of more than 1000 hectares is the Mundra Port and Special Economic Zone, Gujarat Adani Port Limited. The physical exports from this SEZ were Rs. 431.59 crore in 2007-08. It provided direct employment to 1,667 people, of which 26 were women. An investment of Rs. 4,313.07 crore has already been made in Mundra SEZ and the projected investment is around Rs. 29,059.92 crore with direct employment of 2,08,734 people.

Table 4.9

Area permits for different types of SEZs

Type	Area	Area for Special States/ UTs
Multi-product	1000 hectares	200 hectares
Multi-services	100 hectares	100 hectares
IT	100 hectares	50 hectares
Gems and jewellery	10 hectares and minimum built-up area of 1 lakh square metres	10 hectares and minimum built-up area of 1 lakh square metres
Bio-tech and Non-conventional energy (including solar energy equipment/cell but excluding SEZs for non-conventional energy production and manufacturing)	10 hectares and minimum built-up area of 40,000 square metres.	10 hectares and minimum built-up area of 40,000 square metres
FTWZ*	40 hectares and minimum built-up area of 1 lakh square metres	40 hectares and minimum built-up area of 1 lakh square metres

Source: Department of Commerce, Government of India, (Briefs on Special Economic Zones in India).

Notes: The special states/UTs are union territories including the erstwhile union territory of Goa and the special category states of Assam, Meghalaya, Nagaland, Arunachal Pradesh, Mizoram, Manipur, Tripura, Himachal Pradesh, Uttarakhand, Sikkim, and Jammu and Kashmir.

* FTWZ refers to Free Trade Warehousing Zones.

Issues relating to land acquisition have been an important aspect of Special Economic Zones in India. There is no specific provision for the acquisition of land for Special Economic Zones. Since land is a state subject, it is the primary responsibility of the state government to ensure that the land use proposed by the developer (be it a State Industrial Development Corporation or a private company) is earmarked for industrial use. The Board of Approvals of SEZs has followed the general principle that in the case of land acquisition for SEZs, first priority should be for acquisition of waste and barren land and, if necessary, single-crop agricultural land could be acquired for the SEZs. If perforce a portion of double-cropped agricultural land has to be acquired to meet the minimum area requirements, especially for multi-product SEZs, the same should not exceed 10 per cent of the total land required for the SEZ. The state governments have been advised in this regard and they certify accordingly. The Board of Approval only considers those proposals which have been duly approved by the state government. The total land area proposed in 144 in-principle approvals given so far is approximately 1,231,563 hectares. This includes 54 multi-product SEZs.

Another ingredient is the availability of power at competitive rates. Apart from cheap power, there are no power failures in China. Also, interest rates on bank loans is lower in China than in India. All these facilities make the Chinese SEZs a viable proposition for foreign investors. However, India has also begun to emulate the Chinese model and power units are being allowed to be set up in SEZs as per the power sector guidelines and single-window clearance facilities. Decentralisation of the decision-making authority was also a major reason for the SEZ success in China. Provincial and local authorities were made partners and stakeholders by delegating to them the power to approve of foreign investment. In India, the powers for foreign investment approval are vested with Development Commissioners, who are the representatives of the central government.

The flexible labour laws with the hire-and-fire policy in SEZs have been one of the biggest attractions for foreign investors in China. The new Labour Law consists of 107 articles, but none of these is more than one paragraph. All jobs are on a contract basis which stand terminated on the expiry of the term; the terms are flexible for a specific job. In contrast, in India, labour laws are very problematic for employers, with the Industrial Dispute act of 1947 not allowing companies that have 100 or more employees to retrench labour without prior permission from the concerned state government.

With the intention of emulating the Chinese model of promoting exports, India announced the Export and Import (EXIM) Policy in 2000-01 (with effect from April 1, 2000). Thereafter, the Special Economic Zone Policy was announced in 2000. SEZs in India functioned from November 1, 2000 to February 9, 2006 under the provisions of the Foreign Trade Policy, and fiscal incentives were made effective through the provisions of relevant statutes. In the meanwhile, the Special Economic Zones Act, 2005 was passed by Parliament in May 2005, which received Presidential assent on June 23, 2005. After extensive consultations, the SEZ Act, 2005, supported by SEZ Rules, came into effect on February 10, 2006, providing for drastic simplification of procedures and for single-window clearance on matters relating to central as well as state governments. It also provided a firm legislative and operative framework for the operation of SEZs in the country. The main objectives of the scheme are export promotion, generation of economic activity and investment stimulation. The other objectives included earning foreign exchange, attracting foreign investment, generating employment, attracting the latest technology into the country, backward and forward linkages by way of sourcing of raw material from and supply of finished goods to DTA, upgrading skills and creating a source of skilled manpower, development of backward areas, etc.

A few policy measures to enhance the performance of the SEZs include a vision in the design, establishment and operations of the SEZ; it is necessary to develop zones as industrial clusters of specific products. The backward linkages would also benefit the growth of accessories units. They, perhaps, could also encourage downstream industries; zones in the long run need to give way to industrial clusters of horizontally and vertically integrated industries, in general, and high-tech industries, in particular. This would not only help jump-start manufacturing processes, but would also improve export competitiveness with greater returns. At present, there is no autonomous authority responsible for the development of zones and for providing single-window clearances in India; the zone administration functions as a government department office. It is recommended that the SEZs should be managed by autonomous authorities, which should be constituted under specific Acts and should be assigned the responsibility of promoting the zones.

Undoubtedly, SEZs are a major instrument for attracting foreign investment for most developing countries like India and China. However, China started its reform process in 1978-79 and, therefore, has begun to reap the benefits of the SEZ policy in terms of increased employment and investment. The performance of India's SEZs after the implementation of the SEZ Act in 2005 has improved. Indian SEZs are growing significantly, their contribution to exports is growing, and an increasing number of units are coming forward to invest in SEZs. With a proper system, policy framework and incentives in place, Indian SEZs have begun to play a crucial role in promoting foreign investment in the country.



Annex 4.1: Comparison of Special Economic Zones with Export Processing Zones

- No minimum export performance (EP) or Net Foreign Exchange earning as percentage of exports (NFEP), as for EOU/EPZ units.
- Performance of SEZ units monitored by a committee headed by Development Commissioner and consisting of Customs.
- Duty to be recovered in case of failure to achieve positive NFEP under the Customs Act in proportion to shortfall, unlike in EOU/EPZ.
- No fixed ceiling on DTA sales by SEZ units. For EPZ, only 50 per cent of exports.
- Exemption from customs/excise duty for import/domestic procurement of goods for setting up units. This facility is not available to EPZ units.
- Duty-free material to be utilised over five years, unlike in EOU/EPZ where it is one year.
- Sub-contracting facility available to SEZ jewellery units; not available to EPZ units.
- All imports on self-certification, unlike in EOU/EPZ where attestation of Development Commissioner is required for import of capital goods.
- No routine examination by Customs of export and import cargo in SEZ.
- 100 per cent FDI investment through automatic route available to manufacturing SEZ units. In EOU/EPZ, FIPB approval is required.
- Retention of 100 per cent of export earning in EFFC account. For EOU/EPZ units it is 70 per cent.
- Exports proceeds to be realised and repatriated within 12 months for SEZ units, while for EPZ units it is 6 months.
- Simplified procedures for operations like record keeping, inter-unit transfer, sub-contracting, and disposal of obsolete material and waste and scrap.

Source: Raman, A. Thothathri and Parag Diwan (2002). Free Trade Zones to Special Economic Zones: The Great Indian Dream. New Delhi: Pentagon Press.

**Annex 4.2: Investment in State/Private SEZs Notified Prior to SEZ Act, 2005 (Rs. crore)**

Zone	Investment Proposed (Excl. FDI)		Investment Made (Excl. FDI)		FDI Proposed		FDI Investment Made		Total Investment Made
	By Developer	By Unit	By Developer	By Unit	By Developer	By Unit	By Developer	By Unit	
Surat SEZ	48.5	450.0	49.0	228.0	0.0	0.0	0.0	0.0	277.0
Manikanchan SEZ, W. Bengal	-	-	26.0	20.1	-	-	-	-	46.1
Jaipur SEZ	0.0	0.0	25.9	75.3	0.0	0.1	0.0	0.0	101.2
Indore SEZ	1000.0	2636.8	48.7	503.0	0.0	93.8	0.0	0.0	551.7
Jodhpur SEZ	19.9	50.0	18.2	9.2	-	-	0.0	0.0	27.4
Salt Lake Electronics City - Wipro, West Bengal	-	-	10.3	12.6	0.0	0.0	0.0	0.0	22.9
Mahindra City SEZ (IT) Tamil Nadu	135.9	1605.9	129.6	363.8	0.0	95.6	15.8	122.1	631.3
Mahindra City SEZ (Auto ancillary) Tamil Nadu	21.6	353.5	21.4	169.8	0.0	55.8	0.0	52.1	243.3
Mahindra City SEZ (Textile) Tamil Nadu	12.5	57.9	12.4	18.3	0.0	9.0	0.0	3.4	34.1
Nokia Tamil Nadu	2200.0	730.0	57.5	979.4	854.0	0.0	0.0	786.5	1823.3
Moradabad SEZ	0.0	0.0	100.0	22.0	0.0	0.0	0.0	0.0	122.0
Surat Apparel Park	63.0	0.0	51.6	27.8	0.0	0.0	0.0	0.0	79.3
Total	3501.4	5884.1	550.6	2429.3	854.0	254.3	15.8	964.0	3959.7

Source: www.sezindia.nic.in



Annex 4.3: Employment in State/Private SEZs Notified Prior to SEZ Act, 2005

Zone	No. of Units Approved	Indirect Employment		Direct Employment			
		Proposed	Current	Proposed	Current		
				Men	Women	Total	
Surat SEZ	162	8500	8200	10000	5580	3720	9300
Manikanchan SEZ, W. Bengal	24	2500		-	1715	14	1729
Jaipur SEZ	15	100	75	2500	2403	38	2441
Indore SEZ	57	0	763	10000	4762	76	4838
Jodhpur SEZ	114	5000	967	2500	265	0	265
Salt Lake Electronics City - Wipro, West Bengal	2	6000	-	-	-	-	3948
Mahindra City SEZ (IT) Tamil Nadu	11	20550	8793	17360	4018	2135	6153
Mahindra City SEZ Auto ancillary) Tamil Nadu	8	475	2566	530	428	23	451
Mahindra City SEZ (Textile) Tamil Nadu	10	0	633	0	225	619	844
Nokia Tamil Nadu	8	0	596	20000	5920	7703	13623
Moradabad SEZ	259	500	105	5000	60	0	60
Surat Apparel Park	44	0	0	25000	810	306	1116
Total	403	43125	21997	42890	19396	6625	44768

Source: www.sezindia.nic.in

Chapter 5: FDI: Linkages with the Economy

5.1 The Concept

One of the important gains expected from FDI inflows is that it would bring in new skills and technologies and would generate productive linkages with the economy. The concepts of backward and forward linkages were first described by Hirschman (1958). Backward linkages refer to the impact of increase in the output of a downstream industry on its demand for inputs from upstream industries. For example, increased production of passenger cars would boost demand for steel, rubber (tyres), auto components, etc. The impact of backward linkages differs across upstream industries since the downstream industry does not buy inputs equally from all industries. Forward linkages refer to increased production of an upstream industry on requirements of downstream industries. Thus, increased production of petroleum products would make its availability easy for downstream industries that use petroleum products as inputs. The impact of forward linkages is not uniform across downstream industries since their requirements of input from an upstream industry are not uniform. An industry may be strong in its backward linkage effects, forward linkage effects, both of these or none of these.

FDI inflows have various types of impact on a domestic economy. One of the most important effects relates to “vertical linkages”, i.e., the impact of FDI coming to a particular sector on inter-industry transactions. Vertical spill-overs can be analysed through computing backward and forward linkages of sectors where the FDI is coming in.

We concord four-digit DIPP sectors into 130 Input Output Transaction Matrix (IOTM) sectors to check the type of sectors into which a major share of FDI has been received.

5.2 Computation of Linkages

We used the Hirschman-Rasmussen Index method to compute backward and forward linkages from India's IOTM (2003-04). Backward linkages refer to the demand-pull concept and forward linkages to the supply-push concept developed by Rasmussen (1958) and Hirschman (1958).¹

We follow the computations of backward and forward linkages based on the standard input-output model of an economy:

$$AX + F = X$$

and

$$X = (I - A)^{-1} F \text{ or } X = BF$$

where X is the $n \times 1$ vector of total output requirement of the economy with n sectors of production; A is the $n \times n$ matrix of input coefficients; F is the $n \times 1$ vector of final demand; and B is the $n \times n$ matrix of $(I - A)^{-1}$. a_{ij} are $n \times n$ elements of input coefficients of A -matrix of IOTM and b_{ij} are $n \times n$ elements of $(I - A)^{-1}$ matrix.

1. Refer to CSIRO (2007) for details on computation of backward and forward linkages.



The backward linkage index, BL_j is computed as:

$$BL_j = \frac{1}{n} \sum_{i=1}^n b_{ij} / \frac{1}{n^2} \sum_{i=1}^n \sum_{j=1}^n b_{ij}$$

The backward linkage for sector j reflects the effects of one unit increase in final demand in this sector on overall economic activity.

The forward linkage effect, FL_i , is computed as:

$$FL_i = \frac{1}{n} \sum_{j=1}^n b_{ij} / \frac{1}{n^2} \sum_{i=1}^n \sum_{j=1}^n b_{ij}$$

The forward linkage for sector i reflects the effects of one unit increase in production of sector i on overall economic activity.

5.3 Sectoral Linkages with FDI Inflows

Linkage effects have been computed for all 130 IOTM sectors. Sectors have then been identified under four different categories, viz.:

- a) KY: key sectors with strong backward and forward linkages ($BL_j > 1$ and $FL_i > 1$);
- b) BW: strong backward linkages ($BL_j > 1$ and $FL_i < 1$);
- c) FW: strong forward linkages ($BL_j < 1$ and $FL_i > 1$); and
- d) NK: non-key sectors with weak backward and forward linkages ($BL_j < 1$ and $FL_i < 1$).

Sectors disaggregated under these four categories are presented in Tables 5.1 to 5.4.

IOTM sectors which have strong backward and forward linkages (KY) in India's economic structure include electricity (IOTM sector number 107), petroleum products (63), land transport (110), non-ferrous basic metals (80) and iron, steel and ferrous alloys (77) (Table 5.1). Some of the KY sectors have relatively high backward linkages, while others have relatively high forward linkages.

Sectors with high backward linkages (BW) include electronics equipment (94); electrical wires and cables (89); batteries (90); electrical industrial machinery (88); and art silk & synthetic fibre textiles (50) (Table 5.2).

Sectors with high forward linkages (FW) include trade (116); banking (118); crude petroleum (29); coal and lignite (27); and communications (115) (Table 5.3).

Finally, sectors with weak BW and FW linkages (NK) include agricultural products; some of the mineral products; tobacco products; wood and wood products; and some of the services (Table 5.4).

The 4-digit DIPP-classified sectors have then been arranged in descending order of FDI inflows. These sectors have been classified under four linkage categories based on their match with IOTM sectors. The top 15 aggregate DIPP 4-digit sectors account for about 95 per cent of the total FDI inflows during 2000-2007 (Table 5.5).

Four sectors among the top 15 DIPP sectors include key sectors (KS), viz., miscellaneous industries including



construction (4200); fuels, including power and oil refinery (0200); chemicals other than fertilisers (1900); and metallurgical industries (0100). Eight sectors have strong backward linkages (BW), viz., electrical equipment (0500); transportation industry (0700); drugs and pharmaceuticals (2200); cement and gypsum products (3500); food-processing industries (2700); hotel and tourism (4000); miscellaneous mechanical & engineering (1200); and textiles (2300). The remaining three aggregate DIPP sectors have strong forward linkages. These include service sectors (3900); telecommunications (0600); and consultancy services (3800).

It is important to note that the top 15 aggregate 4-digit DIPP, based on FDI inflows during 2000-2007, do not include any non-key (NK) sectors. This implies that about 95 per cent of the FDI inflows received by India are in sectors with high economic linkages and, hence, are expected to have benefited the growth process of the Indian economy.

Table 5.1

List of Key Sectors

S. No.	I\O Code	Commodity	Backward Linkages	Forward Linkages	FW + BW
1	107	Electricity	1.0757	4.27868	5.3544
2	63	Petroleum products	1.0669	4.01811	5.0850
3	110	Land transport including via pipeline	1.0584	4.02246	5.0809
4	80	Non-ferrous basic metals	1.1955	2.81608	4.0116
5	77	Iron, steel and ferro alloys	1.1276	2.47790	3.6055
6	73	Other chemicals	1.1676	1.97151	3.1391
7	106	Construction	1.0872	2.02633	3.1135
8	65	Inorganic heavy chemicals	1.1890	1.82349	3.0125
9	66	Organic heavy chemicals	1.1851	1.81012	2.9953
10	72	Synthetic fibres, resin	1.2036	1.65679	2.8604
11	109	Railway transport services	1.0449	1.64293	2.6878
12	67	Fertilisers	1.2214	1.43593	2.6573
13	62	Plastic products	1.2734	1.35882	2.6322
14	82	Miscellaneous metal products	1.1842	1.38594	2.5702
15	57	Paper, paper products & newsprint	1.1891	1.36512	2.5542
16	92	Communications equipment	1.4015	1.14055	2.5420
17	22	Animal services (agricultural)	1.3084	1.20487	2.5133
18	87	Other non-electrical machinery	1.2141	1.29403	2.5081
19	105	Miscellaneous manufacturing	1.2329	1.21336	2.4462
20	78	Iron and steel casting & forging	1.2075	1.11939	2.3269
21	2	Wheat	1.2160	1.00078	2.2168



Table 5.2
Backward-Oriented Sectors

S. No.	I\O Code	Commodity	Backward Linkages	Forward Linkages
1	94	Electronic equipment [incl.TV]	1.3961	0.88838
2	89	Electrical wires & cables	1.3421	0.64746
3	90	Batteries	1.3252	0.59527
4	88	Electrical industrial machinery	1.3047	0.83848
5	50	Art silk, synthetic fibre textiles	1.2939	0.85515
6	91	Electrical appliances	1.2740	0.58165
7	93	Other electrical machinery	1.2724	0.98776
8	95	Ships and boats	1.2710	0.78325
9	99	Bicycles, cycle-rickshaws	1.2660	0.54913
10	83	Tractors and agri. implements	1.2452	0.51521
11	42	Tea and coffee processing	1.2353	0.53034
12	84	Industrial machinery (F&T)	1.2339	0.64069
13	97	Motor vehicles	1.2327	0.82116
14	61	Rubber products	1.2285	0.78758
15	108	Water supply	1.2243	0.58284
16	43	Miscellaneous food products	1.2236	0.74026
17	47	Cotton textiles	1.2209	0.91362
18	53	Readymade garments	1.2202	0.54318
19	79	Iron and steel foundries	1.2191	0.79916
20	114	Storage and warehousing	1.2173	0.51912
21	48	Woollen textiles	1.2121	0.56769
22	69	Paints, varnishes and lacquers	1.2106	0.82136
23	98	Motor-cycles and scooters	1.2089	0.64463
24	40	Hydrogenated oil [vanaspati]	1.2051	0.49010
25	86	Machine tools	1.1948	0.79109
26	85	Industrial machinery (others)	1.1894	0.71521
27	54	Miscellaneous textile products	1.1880	0.62365
28	100	Other transport equipment	1.1789	0.48633
29	71	Soaps, cosmetics & glycerine	1.1758	0.55448
30	103	Gems & jewellery	1.1725	0.90675
31	49	Silk textiles	1.1679	0.49127
32	96	Rail equipment	1.1657	0.78855
33	44	Beverages	1.1639	0.55217
34	68	Pesticides	1.1530	0.94018
35	41	Edible oils (other than vanaspati)	1.1471	0.78952
36	64	Coal tar products	1.1461	0.62952
37	38	Sugar	1.1456	0.55686
38	58	Printing and publishing	1.1450	0.71514
39	39	Khandsari, boora	1.1447	0.54639
40	81	Hand tools, hardware	1.1377	0.78133
41	70	Drugs and medicines	1.1213	0.84553
42	1	Paddy	1.1081	0.87121
43	60	Leather and leather products	1.1064	0.74692
44	32	Bauxite	1.1046	0.58985
45	52	Carpet-weaving	1.1034	0.48054
46	75	Cement	1.0957	0.58879



S. No.	I\O Code	Commodity	Backward Linkages	Forward Linkages
47	74	Structural clay products	1.0883	0.62631
48	46	Khadi, cotton textiles (handloom)	1.0880	0.53823
49	102	Medical, precision & optical instr.	1.0858	0.53013
50	76	Other non-metallic mineral prods.	1.0762	0.77053
51	59	Leather footwear	1.0754	0.48558
52	3	Jowar	1.0711	0.50687
53	117	Hotels and restaurants	1.0641	0.86231
54	104	Aircraft and spacecraft	1.0379	0.49400
55	112	Air transport	1.0267	0.59300
56	51	Jute, hemp, mesta textiles	1.0084	0.57262
57	7	Pulses	1.0042	0.63271

Table 5.3

Forward-Oriented Sectors

S. No.	I\O Code	Commodity	Backward Linkages	Forward Linkages
1	116	Trade	0.6451	6.54486
2	118	Banking	0.6466	3.77902
3	29	Crude petroleum	0.7755	3.23079
4	27	Coal and lignite	0.7353	2.00557
5	115	Communications	0.7298	1.76472
6	20	Other crops	0.8865	1.75650
7	119	Insurance	0.7584	1.27252
8	123	Business services	0.9865	1.19360
9	8	Sugarcane	0.8023	1.18208
10	11	Other oilseeds	0.7716	1.07639
11	128	Other commercial, social & personal services	0.7060	1.00034



Table 5.4
Non-key Sectors

S. No.	I\O Code	Commodity	Backward Linkages	Forward Linkages
1	4	Bajra	0.8803	0.49887
2	5	Maize	0.7857	0.51690
3	6	Gram	0.7217	0.62472
4	9	Groundnut	0.7752	0.82295
5	10	Coconut	0.7234	0.54455
6	12	Jute	0.7216	0.63266
7	13	Cotton	0.9292	0.95530
8	14	Tea	0.6299	0.61603
9	15	Coffee	0.8688	0.49775
10	16	Rubber	0.7435	0.60423
11	17	Tobacco	0.6318	0.56176
12	18	Fruits	0.5215	0.61236
13	19	Vegetables	0.5368	0.54966
14	21	Milk and milk products	0.6383	0.58420
15	23	Poultry & eggs	0.6033	0.50829
16	24	Other livestock prods. & gobar gas	0.8483	0.99468
17	25	Forestry and logging	0.5715	0.89942
18	26	Fishing	0.6335	0.51019
19	28	Natural gas	0.6565	0.91736
20	30	Iron ore	0.7191	0.54875
21	31	Manganese ore	0.5977	0.48750
22	33	Copper ore	0.7100	0.60308
23	34	Other metallic minerals	0.7850	0.57870
24	35	Limestone	0.7155	0.53138
25	36	Mica	0.8395	0.47749
26	37	Other non-metallic minerals	0.5719	0.91127
27	45	Tobacco products	0.8840	0.52523
28	55	Furniture and fixtures (wooden)	0.9602	0.49767
29	56	Wood and wood products	0.8808	0.81533
30	101	Watches and clocks	0.9910	0.54260
31	111	Water transport	0.8684	0.58374
32	113	Supporting and aux. tpt. activities	0.9293	0.78807
33	120	Ownership of dwellings	0.5308	0.47749
34	121	Education and research	0.5714	0.48776
35	122	Medical and health	0.8416	0.50742
36	124	Computer & related activities	0.7267	0.77609
37	125	Legal services	0.6088	0.75021
38	126	Real estate activities	0.7035	0.56837
39	127	Renting of machinery & equipment	0.6141	0.61509
40	129	Other services	0.7939	0.88072
41	130	Public administration	0.4775	0.47749



Table 5.5
Sector-wise FDI in India (US\$ million)

Sector Code	Sector Name	Total	Percentage Share	Linkages Classification
3900	Services sector ¹	8218.95	21.56	FW
0500	Electricals Equipment (incl. S/W & Elec)	7565.17	19.85	BW
4200	Miscellaneous industries ²	5872.59	15.41	KS
0600	Telecommunications	3723.4	9.77	FW
0700	Transportation industry	2457.38	6.45	BW
0200	Fuels (Power & Oil Refinery)	1899.63	4.98	KS
1900	Chemicals (other than fertilisers)	1186.16	3.11	KS
2200	Drugs and Pharmaceuticals	997.91	2.62	BW
3500	Cement and Gypsum Products	944.86	2.48	BW
0100	Metallurgical industries ³	731.02	1.92	KS
2700	Food-Processing industries ⁴	609.55	1.60	BW
3800	Consultancy Services ⁵	577.35	1.51	FW
4000	Hotel & Tourism	541.98	1.42	BW
1200	Miscellaneous Mechanical & Engineering	351.65	0.92	BW
2300	Textiles (including Dyed, Printed)	345.79	0.91	BW
4100	Trading	328.82	0.86	FW
2600	Fermentation industries	264.02	0.69	BW
3000	Rubber Goods	169.28	0.44	BW
0900	Machine Tools	151.7	0.40	BW
0800	Industrial Machinery	144.41	0.38	BW
1000	Agricultural Machinery	136.08	0.36	BW
2400	Paper and Pulp (including Paper Products)	128.57	0.34	KS
1300	Commercial, Office & Household equipment	115.35	0.30	FW
3300	Glass	103.58	0.27	NK
3400	Ceramics	96.87	0.25	BW
2900	Soaps, Cosmetics and Toilet Preparations	95.44	0.25	BW
1400	Medical and Surgical Appliances	92.19	0.24	BW
1100	Earth-moving Machinery	67.93	0.18	BW
1800	Fertilisers	61.04	0.16	KS
2800	Vegetable Oils and Vanaspati	39.56	0.10	BW
3100	Leather, Leather Goods and Pickers	27.31	0.07	BW
2500	Sugar	26.51	0.07	BW
1600	Scientific Instruments	10.79	0.03	BW
2000	Photographic Raw Film and Paper	10	0.03	NK
1500	Industrial Instruments	9.74	0.03	BW
3200	Glue and Gelatine	6.16	0.02	NK
0300	Boilers and Steam-Generating Plants	3.83	0.01	BW
2100	Dye-Stuffs	2.84	0.01	BW
3600	Timber Products	0.57	0.00	NK
0400	Prime Movers (other than Electrical)	0.33	0.00	BW
3700	Defence Industries	0.05	0.00	BW
	Total	38116.36	100.00	

KS: Key Sector, FW: Forward-Oriented, BW: Backward-Oriented, NK: Non-Key Sector

1. Includes non-key sectors (Education and Other Services),

2. Includes non-key sectors (Horticulture, Tea, Coffee, Real Estate)

3. Includes non-key sectors (Mining Services)

4. Includes non-key sector (Marine Products)

5. Includes non-key sector (Other Services)

Chapter 6: Secondary Data-Based Analysis

6.1 Backdrop

The study is based on the Capitaline database.¹ It provides fundamental and market data on over 14,000 Indian listed and unlisted companies classified under more than 300 industries. It contains information on company profile, financial indicators, ownership patterns, finished products, exports, raw materials and other details. Apart from the firm-level information, the Capitaline database also provides the addresses of all the plants of the company along with the products manufactured.²

There is a debate on the cut-off percentage of foreign equity stake required for a firm to be classified as an FDI-enabled firm or as an FDI firm. We have considered all firms with foreign equity participation of 10 per cent and above to be “FDI firms”; these include both domestic firms, with more than 10 per cent foreign equity, as well as foreign/MNC firms.³ All other firms, with less than 10 per cent foreign equity, are referred to as “domestic firms”. The analysis, based on secondary data, has been undertaken to cover the issues of a) spatial spread and its reasons; b) sectoral clustering; c) depth of value-added; d) employment generating effects; e) labour and capital intensity; f) comparative performance of FDI firms and domestic firms; and g) export potential.

Based on the data compiled in the Population Census 2001, cities/towns have been grouped into three classes based on size. Class-1 cities are towns with a population of 10,00,000 (one million) and above, Class-2 cities are towns with a population between 5,00,000 and 10,00,000, and Class-3 cities are towns with a population of less than 5,00,000. For uniformity, we have used the term “city” and not “town” in our report. Thus the spatial distribution of manufacturing firms is captured through the distribution of plants and facilities of FDI and domestic firms across states and across cities of various classes within states. It is assumed that Class-1 and Class-2 cities are relatively more developed vis-à-vis Class-3 cities, which are likely to be suburban towns that are closer to rural areas of the country. The purpose of introducing city-size classes is to locate the movement and final plant location of FDI firms. The greater the amount of FDI that moves into Class-3 cities, the higher its linkage with the suburban/ rural economy of the country.⁴

In our analysis of the secondary data, we have adopted a dual methodology which is given as follows:

1. **Spatial spread:** The information of firms/plants, both FDI and domestic, has been used for the period March 1999 to September 2008, based on the latest reported data, in order to analyse the spatial spread of the firms plants over a period of time; and
2. **Current Scenario:** The data of FDI firms/plants for a more recent period have been used to gauge the current economic performance of these firms/plants. The period April 2006 – September 2008 has been used as the period of reference to cull the latest reported financial and operative data. This is done because Capitaline cannot report data for all firms at a single point of time, say March 2008, since it receives financial reports of the firms at different

1. <http://www.capitaline.com/new/plus.asp>

2. Prowess is an alternative database but does not provide information on plant location.

3. IMF (1996). Balance of Payments Textbook, page 108.

4. As a follow-up to our discussion with DIPP, the major focus of our analysis has been on manufacturing sectors. However, we have also provided descriptive features of FDI-enabled firms in service sectors in data tables of this chapter. While the penetration of foreign equity, fixed capital, employment and output of the FDI manufacturing plants is relatively deep in Class-3 cities (around 45 per cent for each category), the same is not true of the penetration of FDI facilities in service sectors with corresponding shares hovering around 10 per cent. Thus, the reach of the FDI manufacturing plants into Class-3 cities is much higher than that of FDI firms in services.



points of time and some firms may not have reported their latest figures. The cut-off dates, viz., April 2006 and March 2008 have been used to include three consecutive years, viz., 2005-06 to 2007-08. This information has been used to study agglomeration/clustering issues.

6.2 Spatial Spread of FDI Firms and Plants

This section is based on the database extracted from Capitaline for the period March 1999 – September 2008. The Capitaline database provides information on 14,292 firms: 4,854 manufacturing firms and 9,438 service firms. These include 501 FDI firms: 401 manufacturing and 100 services firms (Table 6.1).⁵ This study provides a detailed analysis of firms in the manufacturing sector, based on the NIC 2004 3-digit classification, as compared with services firms. We discuss details of the manufacturing sector in this section.

The information in this section has been used to analyse plant location issues during the period March 1999 to September 2008.

A firm has various types of offices including the head office, plants, service facilities, branches, development centres, and zonal offices. In the case of manufacturing firms, plants are the most important centres where the actual manufacturing takes place. However, it is not easy to identify similar office types for service firms, since the various office types might provide services in some way. Our analysis is based on “plants” in the case of manufacturing firms and “all types of office facilities” in the case of services. The term “plant” thus implies an operative unit of a manufacturing firm, while the term “facility” refers to an operative unit of a service-providing firm.

There were 4,854 manufacturing firms with 11,938 operative plants spread over 1,119 cities during 1999-2008. These include 401 FDI firms that had 1,273 plants spread over 294 cities. The remaining 4,453 firms are domestic and had 10,665 plants spread over 1,069 cities (Table 6.2).

The distribution of office types of 401 manufacturing FDI firms indicates that there are 2,732 types of offices (Table 6.3). These include 1,273 “plants”. The corresponding distribution for the domestic manufacturing firms indicates that there are 10,666 “plants” among 21,011 office types (Table 6.4).

6.2.1 Manufacturing Firms: Registered Offices

Before moving to the spatial spread of plants, we looked at the spread of registered offices of FDI as well as domestic manufacturing firms. While 400 FDI firms have registered offices spread over 21 states/Union Territories⁶ (Table 6.5), 4,449 domestic firms have registered offices spread over 27 states/Union Territories (Table 6.6). Distribution is highly skewed in both the cases. Maharashtra and Gujarat have a high concentration of registered offices of domestic as well as FDI firms; Maharashtra has about 27 per cent of registered offices of domestic manufacturing firms and 33 per cent in the case of FDI manufacturing firms, while Gujarat follows with 12 per cent registered offices in each of the two categories. In the case of FDI manufacturing firms, Maharashtra and Gujarat are followed by Tamil Nadu (10.5 per cent), Karnataka (8.5 per cent), Delhi (8.3 per cent), West Bengal (8.0 per cent), and Andhra Pradesh (5.8 per cent). In the case of domestic manufacturing firms, the five most concentrated states, after Maharashtra and Gujarat, are Tamil Nadu (10.7 per cent), Andhra Pradesh (9.1 per cent), West Bengal (8.2 per cent), Delhi (8.1 per cent) and Karnataka (4.3 per cent). These seven states account for 78 per cent of the registered domestic and 85 per cent of the registered FDI manufacturing firms.

5. Tables of this chapter are provided on pages 145-239.

6. We use the term “states” in this study for both states and Union Territories.

We have also looked at the city-wise concentration of FDI registered offices within each of the top seven states. The distribution is skewed, with capital cities being the most concentrated; the exception is Gujarat where Ahmedabad has a higher concentration than the capital, Gandhinagar, though the two cities are only 30 kilometres apart.

6.2.2 Manufacturing Firms' Plant Locations: Across Country

Plant location is an important variable in identifying the destination of investment by domestic and FDI firms. It can be seen that the state-wise concentration pattern of domestic and FDI plants is in line with the distribution of firms registered in these states.

About 69 per cent of 10,665 domestic manufacturing plants belonging to 4,449 firms are located in seven states, viz., Maharashtra, Gujarat, Tamil Nadu, Andhra Pradesh, Uttar Pradesh, Karnataka and West Bengal in declining order (Table 6.7). Maharashtra alone has about 19 per cent plants, while Maharashtra and Gujarat together account for about 31 per cent of the plants. While six of the seven states are in line with the distribution of registered manufacturing domestic firms, Uttar Pradesh displaces Delhi in terms of the share of domestic manufacturing plants. About 55 per cent of all domestic manufacturing plants are located in Class-3 cities and 13 per cent in Class-2 cities. This leaves only one-third of the total domestic manufacturing plants located in Class-1 cities. Thus Class-2 cities account for a relatively small proportion of domestic manufacturing plants.

There are 401 FDI manufacturing firms that have 1,273 plants. About 70 per cent of these plants are located in seven states, viz., Maharashtra, Gujarat, Tamil Nadu, Karnataka, West Bengal, Haryana and Andhra Pradesh (Table 6.8). Maharashtra alone has about 20 per cent of the plants, while Maharashtra and Gujarat together account for about 31 per cent of the plants. While the six of the seven states are in line with the distribution of registered manufacturing FDI firms, Haryana displaces Delhi in terms of the share of FDI manufacturing plants. About 54 per cent of all FDI manufacturing plants are located in Class-3 cities and 10 per cent in Class-2 cities, leaving 36 per cent of the remaining plants located in Class-1 cities. The share of FDI manufacturing plants located in Class-3 cities varies across states. Thus, Class-2 cities account for a relatively small proportion of FDI manufacturing plants.

Thus, there are striking similarities between domestic and FDI manufacturing plants across states and classes of cities, even though the coverage of the two types of firms in terms of states and cities is quite different. While 10,665 domestic manufacturing plants are distributed across 28 states and 1,069 cities, 1,273 FDI manufacturing plants are distributed across 22 states and 294 cities.

Though the share of Class-3 cities is 54 per cent in all the FDI manufacturing plants, there are wide variations across the seven major states that account for 70 per cent of all plants. While more than 83 per cent of the FDI manufacturing plants in Haryana are in Class-3 cities, the proportion is as low as 26 per cent in Maharashtra and 28 per cent in Karnataka. While Tamil Nadu has 47 per cent of its FDI manufacturing plants located in Class-3 cities, the proportion is 61 per cent for Gujarat and 63 per cent in Andhra Pradesh.

The 1,068 cities that have domestic manufacturing plants are distributed such that there are 27 Class-1 cities, 43 Class-2 cities and 998 Class-3 cities (Table 6.9). This implies that there are 128 domestic manufacturing plants per Class-1 city, 32 per Class-2 city and 6 per Class-3 city.

FDI manufacturing plants are located in 294 cities such that there are 23 Class-1 cities, 24 Class-2 cities and 247 Class-3 cities (Table 6.10). This implies that there are 20 FDI manufacturing plants per Class-1 city, 5 per Class-2 city and 3 per Class-3 city.



It can be observed that there is a decline in all three city classes when FDI manufacturing plants are compared with domestic manufacturing plants. In the case of Class-1 cities, the number drops from 27 having domestic plants to 23 having FDI plants, though many of these would be common. The corresponding decline is from 44 to 24 in the case of Class-2 cities. The decline is quite significant in the case of Class-3 cities; while 998 Class-3 cities have domestic manufacturing plants, only 247 have FDI manufacturing plants. However, many of these cities would be common between the two types of manufacturing plants.

6.2.3 Manufacturing Firms' Plants: Comparative Location across Country

As noted earlier, manufacturing plants are spread over 1,118 cities according to the data in the Capitaline database. However, the data for 50 cities is provided only for FDI manufacturing plants and not for domestic plants (Table 6.11); on the other hand, 824 cities have information only on domestic manufacturing plants. The cities for which information is available either for only FDI manufacturing firms or for only domestic manufacturing firms are referred to as "unmatched cities" in this study. There are 244 cities for which plant-level information is provided for both FDI and domestic firms; these are termed "matched cities" in this study. However, this does not imply that alternative categories of manufacturing plants, FDI and domestic, do not exist in unmatched cities though the information is not available in the Capitaline database. Thus, there may still be some FDI manufacturing plants in the 824 unmatched cities on which information is available only for domestic manufacturing firms and vice versa.

There are 1,273 FDI plants located in 294 cities. These include 51 manufacturing plants located in 50 unmatched cities and 1,222 plants located in 244 matched cities (Table 6.12). In the case of domestic manufacturing plants, 2,330 plants are located in 824 unmatched cities and 8,335 in 244 matched cities. Thus, 80 per cent of all 11,938 manufacturing plants are located in 244 matched cities (22 per cent of 1,118 cities).

As observed, FDI manufacturing plants are located in 294 cities though their co-existence with domestic manufacturing plants is documented in 244 matched cities. All the 50 unmatched cities are Class-3 cities. In the case of matched cities, more than 80 per cent are Class-3 and less than 10 per cent are Class-1 (Table 6.13). Such a pattern of Class-3 city-concentration is similar across the board in most of the major states. The share of Class-3 cities is 80 per cent or above in Andhra Pradesh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Tamil Nadu and West Bengal with the share touching 93 per cent in Haryana and 87 per cent in Gujarat. However, the share of Class-3 cities among the matched cities is relatively low, at 61 per cent, in Maharashtra.

The simultaneous existence of domestic and FDI manufacturing plants in matched cities is important from the point of view of agglomeration economies. The two types of manufacturing plants appear to have reinforced each other's presence in cities across various states.

The distribution of domestic manufacturing plants across states indicates that there are 8,335 plants across 244 matched cities with 3,754 plants (45 per cent) in Class-3 cities (Table 6.14). The share of domestic manufacturing plants in Class-3 cities varies across the major industrial states, from as high as 57 to 58 per cent in Andhra Pradesh and Gujarat to as low as 19 per cent in Maharashtra and 24 per cent in Karnataka.

The distribution of FDI manufacturing plants across states indicates that there are 1,222 plants across 244 matched cities with 640 plants (52 per cent) in Class-3 cities (Table 6.15). The share of FDI manufacturing plants in Class-3 cities varies across the major industrial states, from as high as about 83 per cent in Haryana, and 60 per cent in Andhra

Pradesh and Gujarat to as low as about 26 per cent in Maharashtra and Karnataka. Thus, there is a striking similarity between the distribution and reach of domestic and FDI plants in Class-3 cities. This provides a strong indication of economies of agglomeration across Class-3 cities in various states.

A further check on degree of association between the number of domestic and FDI plants in 244 matched cities has been conducted through finding the correlation coefficient between the two variables at the all-India as well as the state level. The correlation coefficient between city-wise distribution of domestic and foreign plants is 0.89, suggesting that there is a strong linkage between the co-existence of domestic and FDI manufacturing plants (Table 6.16). Even though state-wise correlation is somewhat weak among less important industrial states, it is relatively strong across the major industrial states, e.g., 0.99 for Karnataka, 0.97 for Andhra Pradesh, 0.96 for West Bengal, and 0.93 each for Gujarat and Maharashtra.

The details of names and characteristics of 50 unmatched cities that have 51 FDI manufacturing plants are provided in Annex-1 of this chapter (given after 55 tables of this chapter). Similar details on 244 matched cities are provided in Annex-2 of this chapter. Details of FDI manufacturing plants located across the country are provided in Annex-3 of this chapter.

6.2.4 Service Firms' Facilities

FDI-enabled service firms are spread over 369 cities across India, including 311 (84 per cent) Class-3 cities (Table 6.17). Andhra Pradesh has the highest number of cities (126) with FDI-enabled service facilities; these include 121 Class-3 cities. Karnataka has 76 cities with FDI-enabled service facilities, of which 73 cities are Class-3. Other states have significantly fewer cities in which FDI-enabled service facilities are located.

Of a total of 1,257 FDI-enabled service facilities, 35 per cent are located in Class-3 cities. The state-wise share of FDI-enabled service facilities located in Class-3 cities is 61 per cent in Andhra Pradesh; 43 per cent in Karnataka; 18 per cent in Tamil Nadu; and 3 per cent in Maharashtra (Table 6.18).

6.3 Sectoral Details of FDI in Manufacturing Sector

The data of FDI firms/plants for more recent periods have been used to gauge the current economic performance of these firms/plants. The period April 2006 – March 2008 has been used as the period of current reference to cull the latest reported financial and operative data. As mentioned earlier, Capitaline cannot report data for all firms at a single point of time, say March 2008, since it receives financial reports of the firms at different points of time and some firms may not have reported their latest figures. The cut-off dates, viz., April 2006 and March 2008 have been decided to include three consecutive years, viz., 2005-06 to 2007-08 to extract the latest available information on FDI manufacturing firms and plants. This information has been used to study FDI agglomeration/clustering issues as well as other performance indicators of firms and plants and NIC 3-digit sectors across states and cities. These indicators include market capitalisation, equity, net fixed capital, output, employment, value-added and output-capital ratio and FDI sectoral intensity.⁷ FDI-specific indicators have also been compared with the corresponding domestic indicators.

6.3.1 Spread across States: Firms and Plants

We were able to retrieve the latest information on 351 FDI firms with 1,171 plants spread over 275 cities, thus implying 3.3 plants per firm on average. The corresponding information for domestic plants is available for 3,107 firms that have 8,485 plants spread over 958 cities (Table 6.19).

7. Net fixed capital has been taken as the book value reported in the balance sheets of the firms in our database.



In order to check the geographical spread of the FDI firms vis-à-vis domestic firms, we categorised the firms based on the number of states in which they had plant locations (Tables 6.20 and 6.21). Such a spread has been computed for firms having plants in one or more states.

There are 190 (out of 351) FDI firms with plants in only one state with 317 (out of 1,171) plants. This implies that there are about 2 plants per FDI manufacturing firm and about 57 per cent of these plants are located in Class-3 cities. 72 FDI firms have 248 plants spread over two different states, with 60 per cent of the plants located in Class-3 cities. Fewer firms have plants spread over three or more states. Eleven FDI firms have plants spread over five different states, with a total of 96 plants, and the remaining 15 firms have an even wider spread (more than five states), with a total of 207 plants. The average number of plants per firm is greater in wider-spread firms than in less-spread firms. While firms with plants in only one state have 1.7 plants per firm, those with a spread across five states have 8.7 plants per firm, and for firms with plants spread across more than five states, the number shoots up to 13.8. However, it may be noted that the average number of plants per firm in one state remains nearly uniform over firms with plants spread over one to five states, although it increases for firms with plants spread over more than five states. About 53 per cent of the FDI manufacturing plants (622 out of 1,171) are located in Class-3 cities (Table 6.20).

The scenario is strikingly similar in the case of domestic manufacturing firms. There are 3,107 firms with 8,485 plants, thus implying 2.7 plants per firm on average (Table 6.21). About 54 per cent of the domestic manufacturing firms are located in Class-3 cities. The average number of plants per firm as well as the number of plants per firm per state across the state-wise spread of firms closely matches that of the FDI manufacturing firms. For example, the average number of plants per firm for firms with plants in only one state is 1.6 for domestic manufacturing firms and 1.7 for FDI manufacturing firms. The corresponding number of plants per firm for firms spread across five states is 8.9 for domestic manufacturing firms and 8.7 for FDI manufacturing firms. The average number of plants per firm per state is in the range of 1.7 and 1.8 in both cases, viz., domestic and FDI firms.

About 72 per cent of the FDI-enabled 1,171 plants (841 plants) are concentrated in seven states (Table 6.22). Maharashtra has the highest number of plants followed by Tamil Nadu, Gujarat, Andhra Pradesh and Karnataka. About 41 per cent of the 841 plants are concentrated in Class-3 cities. Within Karnataka, the share of FDI-enabled manufacturing plants in Class-3 cities is 49 per cent.

6.3.2 Sectoral Spread of Equity, Fixed Capital and Market Capitalisation

Capitaline database provides an NIC 3-digit code for each firm. It also provides information on foreign and domestic equity, market capitalisation and net fixed capital. This enables us to check the spread of these variables across NIC 3-digit sectors⁸ (Tables 6.23-6.31). All the 351 FDI firms and 3,107 domestic firms have been distributed across 101 3-digit NIC sectors. It may, however, be noted that some of the domestic firms also have foreign equity participation, albeit less than 10 per cent of the total equity.

The market capitalisation of all firms (FDI and domestic) is estimated at Rs. 32,309 billion, including Rs. 4,870 billion for the FDI firms. The all-India total equity capital in FDI and domestic sectors is Rs. 1,316 billion, with Rs. 1,203 billion in domestic firms and Rs. 113 billion in FDI firms (Table 6.23). The foreign equity component is Rs. 56.2 billion, with Rs. 49.4 billion in FDI firms and Rs. 6.8 billion in domestic firms.⁹

8. Equity capital is computed on the basis of the face value of the shares and not at market valuation.

9. Equity amount is based on the book value of assets and hence is Rs. 56 billion worth of foreign equity, which does not match FDI inflows. While mergers and acquisitions pay for shares at market prices greenfield FDI also pays the premium over and above the face value of the shares at the time of buying new issues. In order to find a proxy estimate for FDI inflows, we have computed market capitalisation of foreign equity shares. It turns out to be Rs. 2,65,106 crore.



We provide information on the top 25 NIC sectors based on the sectoral share of market capitalisation for the FDI firms. The information is also provided for net fixed capital and equity (foreign and domestic). In the case of FDI firms, the top 25 NIC sectors exhaust about 91 per cent of the total market capitalisation, 83 per cent of foreign equity and 84 per cent of net fixed capital. Market capitalisation of FDI firms accounts for 15 per cent of the total capitalisation (domestic plus FDI firms).

The share of foreign equity in total equity across all firms (FDI-enabled and domestic) is 4.3 per cent. FDI firms account for 88 per cent of total foreign equity in the country. Thus, 12 per cent of the foreign equity has moved into domestic firms, implying an average share of 0.6 per cent in total equity holding of domestic firms. Across the FDI-enabled manufacturing firms, the maximum foreign equity has gone into iron and steel (271), followed by other chemical products (242); non-metallic mineral products (269); basic chemicals (241); and general purpose machinery (291).

Small cities account for 46 per cent of market capitalisation, 44 per cent of foreign equity and 50 per cent of the net fixed capital of FDI firms (Table 6.24).¹⁰ However, the shares vary across sectors. The share of market capitalisation in small cities is significantly above the overall average of 46 per cent in sectors such as motor vehicles (341); growing crops, market gardening, and horticulture (011); non-metallic mineral products (269); basic iron and steel (271); transport equipment (359); and building of construction parts (452). The top 25 NIC sectors account for 92 per cent of the total market capitalisation in small cities. The corresponding shares are 74 per cent for foreign equity and 78 per cent for net fixed capital.

Market capitalisation of firms producing chemical products (other than basic chemicals) has high clustering in Maharashtra, Karnataka, West Bengal, Himachal Pradesh and Goa (Table 6.25). The market capitalisation of firms producing precious and non-ferrous metals has high clustering in Maharashtra, Dadra & Nagar Haveli, Tamil Nadu, Madhya Pradesh and Andhra Pradesh. The market capitalisation of firms producing electricity distribution and control apparatus has high concentration in Maharashtra, Karnataka, Gujarat, Haryana and West Bengal.

Maharashtra has relatively high clustering of market capitalisation of sectors such as chemical products, non-ferrous metals and medical appliances (Table 6.26). Karnataka has relatively high clustering of market capitalisation of sectors including motor parts, chemical products, and electricity distribution and control apparatus. Haryana has relatively high clustering of market capitalisation of sectors including transport equipment, motor vehicles, and electricity distribution and control apparatus. Gujarat has relatively high concentration of sectors including electricity generation and control apparatus, non-metallic mineral products, and chemical products. Tamil Nadu has relatively high concentration of non-ferrous metals, petroleum products, and dairy products.

The estimated market capitalisation of the foreign equity component in total equity in the manufacturing sector is Rs. 2,462 billion in the case of FDI-enabled firms and Rs. 189 billion in the case of the foreign equity component in the total equity of domestic firms (Table 6.27).

Foreign equity is worth Rs. 18 billion in FDI-enabled service firms (31 per cent of total equity in FDI-enabled service firms); only 8 per cent of Rs. 18 billion worth of FDI has moved into Class-3 cities. Market capitalisation of FDI-enabled service firms is at Rs. 2,956 billion; only 5 per cent originates in Class-3 cities (Table 6.28).

10. Values of equity, output, value-added, employment, net fixed capital and other related variables have been computed from firm-level information in Capitaline. City-level information is computed assuming equal distribution of these variables across all the plants of a firm. It also facilitates computation of distribution of values of these variables across cities of different sizes as well as across states.



6.3.3 Sectoral Spread of Output, Value-added and Employee Cost

Although we had information for 3,107 domestic firms in our database, the number dropped to 3,075 after we deleted firms that did not have complete data on required variables (Table 6.29). However, complete data are available for all the 351 FDI firms. The FDI firms constitute one-tenth of the total firms in our database. The share of number of FDI firms in 3-digit NIC sectors is relatively high in medical appliances and instruments (331); motor parts (343); dairy products (152); general purpose machinery (291); electrical equipment (319); tobacco products (160); and TV and radio receivers (323).

Information on sectoral output, value-added and employee cost is provided in Table 6.29. In the case of FDI firms, the share of the top 25 NIC sectors is 89 per cent in total output as well as in value-added, and 86 per cent in employee cost.

The total output of all firms (FDI and domestic) in our database amounts to Rs. 21,514 billion, with Rs. 2,796 billion originating from FDI firms and the remaining Rs. 18,718 billion being produced by domestic firms. Thus, 13 per cent of the total output is produced by FDI firms. The share of FDI firms is nearly the same, i.e., 13 per cent, in the case of total value-added as well as employee cost.

There are two notable observations. The share of value-added in all the FDI firms is 18 per cent of their output, which is close to the 18.4 per cent for domestic firms. This may be referred to as the depth of value-added. The share of the employee cost in value-added is 29.3 per cent for FDI firms and 28.7 per cent for domestic firms (Table 6.30). The share of employee cost to value-added may be referred to as the depth of returns to labour. However, the corresponding shares vary across the 3-digit NIC sectors. The share of value-added to output is relatively high in Andhra Pradesh, Gujarat and Karnataka (Table 6.31).

Sectors with relatively high proportion of value-added in output, within FDI-enabled firms, include software publishing, consultancy and supply (722); mining of iron ores (131); growing crops, market gardening, and horticulture (011); motion pictures, radio, television and other entertainment (921); and non-metallic mineral products (269) among others (Table 6.30).

Similar differences are observed in the case of the share of employee cost in value-added across sectors. While some sectors have ratios higher than the average (29.3 per cent), others have lower ratios. FDI firms with a relatively high proportion of employee cost in value-added include software and publishing (722); footwear (192); basic chemicals (241); textiles (171); and domestic appliances (293), among others.

It is important to check the share of small cities in total output, value-added and employee cost of the FDI firms. This provides information on the extent of the reach of FDI into small cities. The FDI firms have significant penetration in small cities; 49 per cent of total output, 48 per cent of value-added and 45 per cent of total wages (employee cost) originates from small cities (Table 6.32). The corresponding proportions vary across 3-digit NIC sectors. The share of small cities is significantly high in sectors like non-metallic mineral products (269); transport equipment (359); construction parts (452); mining of iron ores (131); electrical equipment (319); growing of crops, market gardening and horticulture (011); and textiles (171).

As already mentioned, the share of foreign equity in total equity (foreign plus domestic) is 4.3 per cent in our database. However, the corresponding share is 3.1 per cent in small cities, implying a relatively large presence of domestic equity in small cities (Table 6.33). There are wide variations across sectors. Some sectors have a relatively high share of foreign equity in total equity in small cities; these include dairy products (152); electrical equipment (319); footwear (192) and television and radio receivers (323), among others.

6.3.4 Employment Generation

The total number of people employed in FDI plants is about 15,64,920 (Table 6.34).¹¹ This amounts to a share of between 4 and 5 per cent of the total labour force in the formal sector.¹² More than 50 per cent of the total employment in the FDI manufacturing sectors originates in small cities. The top-25 NIC 3-digit sectors account for 80 per cent of the total FDI employment in large cities and 86 per cent of the total FDI employment in small cities. The share of employment in small cities varies across NIC sectors; it is relatively high in sectors where employee cost is higher than the overall average of 45 per cent originating in small cities.

Two sectors that provide relatively high shares of total employment in FDI plants include chemical products (242) and growing and processing crops, including tea and horticulture (011). While 3-digit NIC Sector 242 provides employment to about 16 per cent of the total employment in FDI firms, the corresponding value for NIC Sector 011 is about 14 per cent. While 49 per cent of the employment generated by chemical products originated in small cities, the corresponding proportion is 93 per cent in processing crops, including tea and horticulture (011).

Employment originating in FDI manufacturing firms varies widely across states (Table 6.35). About 20 per cent of the total employment is in Maharashtra. The corresponding share is 12.5 per cent in Karnataka, 8.8 per cent in West Bengal, 7.4 per cent in Haryana, 6.9 per cent in Assam, 6.3 per cent in Tamil Nadu, 6.2 per cent in Gujarat and 5.8 per cent in Andhra Pradesh. These eight states account for about three-fourth of the total manufacturing FDI sector employment. Other states account for lower employment shares.

While Maharashtra has only about 19 per cent of the total employment in FDI plants in small cities, the proportion is nearly 100 per cent in the case of Assam. The corresponding proportion is 21 per cent in Karnataka; 82 per cent in Haryana; 39 per cent in Tamil Nadu; 57 per cent in Gujarat; and 40 per cent in Andhra Pradesh. Thus, FDI plants in Assam, Gujarat and Haryana have relatively high proportions of employment in small cities.

6.3.5 Export Intensity

FDI firms account for 13 per cent of the total sales turnover and 12 per cent of export by all firms, both domestic and FDI (Table 6.36). FDI firms have a sales turnover of Rs. 2,994 billion out of the total sales turnover of Rs. 22,665 billion (FDI and domestic firms taken together). Exports of FDI firms are valued at Rs. 378 billion out of total exports of Rs. 3,069 billion. While some sectors have a relatively low share of the contribution of FDI firms in total sales turnover and exports, others have relatively high corresponding shares. FDI firms in 3-digit NIC sectors including refined petroleum products (232), basic chemicals (214) and textiles (171) contribute sectoral shares much lower than the overall averages in sales turnover and exports. However, FDI firms play an important role in sectoral sales turnover and exports in sectors such as chemical products (242); electricity distribution and control apparatus (312); medical appliances and instruments (331); motor parts (343); dairy products (152); transport equipment (359); mining of iron ores (131); and electrical equipment (319).

About 13 per cent of total sales of FDI firms are exported. This is referred to as “export intensity”. Some sectors have a relatively high share of exports in total sales, while others are on the low side. The corresponding share in some of the important sectors is 80 per cent in mining of iron ores (131), 50 per cent in basic precious and non-ferrous metals (272), 31 per cent in software publishing, consultancy and supply (722), 26 per cent in textiles (171) as well as in special purpose

11. This number is computed by adding sectoral employment. Sectoral employment is computed as the ratio of sectoral employee cost to sectoral wage rate; sectoral wage rate is taken from the Annual Survey of Industries (ASI), Government of India. This may be an approximation but we could not arrive at a better estimate.

12. Based on 40 per cent workers' participation rate and 8 per cent share of the organised sector.



machinery (292), 24 per cent in wearing apparel (181), 20 per cent in basic iron and steel (271), and 18 per cent in electrical equipment (319). Export intensity is relatively low in sectors such as electricity distribution and control apparatus (312), motor vehicles (341), non-metallic mineral products (269), medical appliances (331), dairy products (152), transport equipment (359), refined petroleum products (232), footwear (192), tobacco products (160), domestic appliance (293) and radio and TV receivers (323).

Net foreign exchange (forex) earnings of FDI as well as domestic firms are negative.¹³ The net forex deficit amounts to 2,794 billion, with FDI firms accounting for Rs. 311 billion (11 per cent) of this deficit. Some sectors have a surplus on net forex earnings; these include chemical products (242), building and construction parts (452), mining of iron ores (131), textiles (171) and software publishing, consultancy and supply (722). Manufacture of refined petroleum products (232) is the largest forex deficit-incurring sector. Other such sectors include basic precious and non-ferrous metals (272), iron and steel (271) and basic chemicals (241).

6.3.6 Labour Wage Intensity

An important issue in assessing the impact of FDI firms is their ability to generate employment and provide returns to labour in these firms. Employee cost can be taken as a proxy for payment to workers. We define “labour wage intensity” as the employee cost incurred per unit of net fixed capital.

The ratio of employee cost to net fixed capital turns out to be 19 paise per rupee for FDI firms (Table 6.37); the corresponding ratio is 15 paise for domestic firms. Hence, the labour wage intensity in FDI firms is about 25 per cent higher than in domestic firms. Certain sectors have relatively high labour wage intensity for FDI firms. The software development and publishing sector (722) provides the highest returns to its employees in terms of per unit of their net fixed capital, followed by footwear (192), medical appliances (331) and electricity distribution and equipment (312), among others. The corresponding values for domestic firms are relatively low in all these sectors.

6.3.7 Output to Capital Ratio

Output to capital ratio is an indicator of production per unit of capital. Some sectors produce more output per unit of capital, while others produce less. In our database, the FDI firms produce Rs. 3.55 worth of output per rupee of net fixed capital, compared with Rs. 2.92 for domestic firms (Table 6.37). The output to capital ratio for the FDI firms is relatively high for sectors such as medical appliances and instruments (331), electricity distribution and control apparatus (312), refined petroleum products (232), mining of iron ores (131) and transport equipment (359), among others. The corresponding values for domestic firms are relatively low in all these sectors.

6.3.8 Plant-Level Average Labour and Capital Intensity

Class-3 cities have relatively higher scale, market capitalisation, value-added, wages paid and output per plant vis-à-vis medium and large cities. Information on the skill composition of workers employed in manufacturing plants is not available (Tables 6.38 to 6.43). Net fixed capital per plant is Rs. 81 crore in Class-3 cities and Rs. 57 crore in others. Market capitalisation per plant is Rs. 466 crore in Class-3 cities and Rs. 381 crore in others. Value-added per plant is Rs. 50 crore in Class-3 cities and Rs. 38 crore in others. Employee cost per plant is Rs. 14 crore in Class-3 cities and Rs. 12 crore in others. Output per plant is Rs. 286 crore in Class-3 cities and Rs. 206 crore in others. Employment per plant is 2,058 in Class-3 cities and 1,243 in other cities.

13. Net forex earning is defined as the difference between gross earnings in forex minus gross expenses in forex. Gross forex earnings include exports; interest, dividend and other earnings. Gross forex expenses include imports of intermediate as well as capital goods; royalty and technical fees paid; foreign travel; interest, and dividend and other expenses.

6.3.9 FDI in Service Sectors

Market capitalisation of the FDI-enabled service firms is less than two-fifth the combined market capitalisation of manufacturing and service firms. However, it has insignificant reach in Class-3 cities compared with the impressive presence of FDI-enabled manufacturing firms in Class-3 cities. Only one-tenth of output and value-added of the FDI-enabled service sectors originates in Class-3 cities (Tables 6.44 to 6.45).

Market capitalisation of the FDI-enabled service firms is Rs. 2,956 billion compared with Rs. 4,870 billion of the FDI-enabled manufacturing sectors. Sectors with high market capitalisation include telecommunications; software publishing and consultancy; transport services; and construction activities.

FDI in service sectors has an insignificant presence in Class-3 cities. The share of market capitalisation in Class-3 cities accounts for about 5 per cent of the total market capitalisation of the FDI-enabled service sectors. The share of foreign equity in Class-3 cities accounts for about 8 per cent of the total foreign equity of the FDI-enabled service sectors. The share of net fixed capital in Class-3 cities accounts for about 14 per cent of the total net fixed capital in the FDI-enabled service sectors. Only 10.4 per cent of the output of FDI-enabled service facilities originates in Class-3 cities and only 10 per cent of value-added FDI-enabled service facilities originate in Class-3 cities.

6.4 State-wise Details of FDI in Manufacturing Sector

Details of the spread of FDI firms and plants have been discussed in Section 6.2. The focus of Section 6.3 is on sectoral details of FDI in manufacturing sectors. This section provides details of the spread of FDI across various states in India, and highlights the breakdown into large and small cities. The variables under consideration include net fixed capital, total equity (domestic and foreign), total output and market capitalisation (Table 6.46).

As discussed in Table 6.23, the all-India total equity capital in FDI firms is valued as Rs. 113 billion in FDI firms, which includes foreign equity worth Rs. 49.4 billion, i.e., 44 per cent of the total equity in FDI firms. The market capitalisation of all the FDI firms is valued at Rs. 4,870 billion. The corresponding value of the net fixed capital and output in FDI firms is Rs. 788 billion and 2795 billion, respectively. Small cities account for 46 per cent of market capitalisation, 44 per cent of foreign equity, 49 per cent of output and 50 per cent of the net fixed capital of FDI firms.

Maharashtra accounts for the maximum shares of market capitalisation, total equity, FDI equity and net fixed capital in FDI firms. About one-fourth of the market capitalisation of the FDI firms in India originates in Maharashtra. The same holds true of total equity, foreign equity and net fixed capital. Maharashtra has become the top state in attracting FDI into India (Table 6.46). The major indicators, viz., FDI equity, total equity, net fixed capital, output and market capitalisation, for other states are less important than in Maharashtra.

In the case of total equity, other states with significant shares are Gujarat (13 per cent), Andhra Pradesh (10 per cent) and Tamil Nadu (9.5 per cent). Other states have lower shares of total equity. The share of small cities in state-level equity is 42 per cent in Gujarat, 31 per cent in Andhra Pradesh and 32 per cent in Tamil Nadu.

The share of foreign equity in total foreign equity is 15 per cent in Gujarat, 11 per cent in Andhra Pradesh and 8 per cent each in Karnataka and Tamil Nadu. The share of small cities in state-level foreign equity is 38 per cent in Gujarat, 28 per cent in Andhra Pradesh and 25 per cent each in Karnataka and Tamil Nadu. These are followed by the other states.



Market capitalisation is significant in Karnataka (11 per cent), Haryana (9 per cent), Gujarat (6.4 per cent) and Tamil Nadu (5.5 per cent). The share of small cities in state-level market capitalisation is 14.4 per cent in Karnataka, 86.4 per cent in Haryana, 45 per cent in Gujarat and 44 per cent in Tamil Nadu.

The share of net fixed capital in total net fixed capital is 11 per cent each in Gujarat and Tamil Nadu, 10 per cent in Andhra Pradesh and 8 per cent in Haryana. Other states have lower shares. The share of small cities in state-level net fixed capital is 30 per cent in Gujarat, 45 per cent in Tamil Nadu, 25 per cent in Andhra Pradesh and 94 per cent in Haryana.

In the case of total output, significant contributions are made by the states, namely, Tamil Nadu (16 per cent), Haryana (11 per cent), Karnataka and Gujarat (each 8 per cent), along with the share of small cities in state-level output of 46, 90, 28 and 44 per cent, respectively.

6.5 Agglomeration and Locational Choice

In this section we focus on agglomeration and locational choice of industrial plants in India. While such analysis is available in the literature with reference to the overall industrial location, a corresponding analysis of FDI-enabled industrial plants is scarce. While many industries tend to be agglomerated in a few states/regions others have wider dispersal. We have discussed the issue of industrial agglomeration of FDI-enabled plants in India against the backdrop of overall industrial agglomeration. We have also provided analytical information on the locational choice of FDI-enabled industrial plants in the country.

The measure of agglomeration used in our analysis is similar to the one used by Ellison and Glaeser (1997) and Kathuria (2009). The determinants of locational choice of industrial plants have also been worked out using econometric estimation techniques. While agglomeration estimates have been based on state-level data, the determinants of locational choice are analysed at the state level as well as at the city level. Apart from this, we have discussed variations across geographical regions like north, east, west and south.

6.5.1 Agglomeration

One important concern in India's industrial policy is the dispersal of industrial plants across various states of the country. There are two types of agglomeration forces, viz., natural advantage and spill-overs. Natural advantage refers to factors of production that provide enabling conditions for producing certain goods, e.g., tea, wine, photographic films, etc. Locational spillovers refer to physical as well as intellectual spillovers, e.g., the brass industry in Moradabad, sports goods industry in Jalandhar, hosiery in Ludhiana and software in Hyderabad and Bangalore.

We use the Ellison-Glaeser (E-G) index to calculate the degree of industrial (NIC 3-digit) agglomeration/dispersal across various states/Union Territories of India.¹⁴ The index is computed using employment and output information for all plants, both domestic and FDI. This index controls for industry characteristics regardless of the causes of concentration. The E-G index can be estimated either by using concentration of output of industrial plants or using concentration of employment data. While the E-G index derived from the employment data, E-G-L, attributes industrial agglomeration solely to labour market pooling and information of spill-overs through labour, the same cannot be said of the index derived using the output data (E-G-O). In this study, the agglomeration index has been computed using the value of output attributes agglomeration to labour market as well as capital/technology spill-overs or a combination. However, geographical concentration by itself does not imply the existence of spill-overs or natural advantage indicators.

14. For details of the E-G index, refer to Ellison and Glaeser (1997). The index varies between 0 and 1. An E-G index above 0.05 for an industry connotes high agglomeration, between 0.02 and 0.05 is moderate agglomeration, and between 0 and 0.02 a dispersed industry. E-G values less than 0 for a sector indicate excessive dispersion.



Based on the availability of data, we computed the E-G-L and E-G-O for 3-digit NIC sectors of production. The E-G-L has been computed for 93 sectors and the E-G-O for 92 sectors of production. Based on the E-G-L values, there are 41 highly agglomerated, 18 moderately agglomerated and 34 non-agglomerated, i.e., dispersed, sectors. The corresponding numbers for E-G-O are 37, 22 and 33, respectively (Table 6.47).

We depict the E-G-L of the top 25 (out of 93) sectors that provide the highest employment in FDI-enabled industrial sectors in Table 6.48. These sectors account for 87 per cent of the FDI-enabled employment in our database. Other important sectoral characteristics, including those for FDI-enabled components, have also been reported.

It can be observed that 10 out of the 25 top FDI employment sectors have relatively high agglomeration, 9 are relatively dispersed and 6 sectors are moderately agglomerated. Some of the highly agglomerated sectors with high employment in FDI-enabled production units include growing of crops (011), motor parts (343), general purpose machinery (291), medical appliances (331) and transport equipment (359), among others. Examples of dispersed sectors include chemical products (242), dairy products (152), tobacco products (160), basic iron and steel (271) and motor vehicles (341), among others.

About 39 per cent of the total FDI employment is generated in the 10 highly agglomerated E-G-L sectors and 36 per cent in the dispersed sectors. FDI plants account for 22 per cent of all the plants (domestic and FDI) in the highly agglomerated E-G-L sectors, with the corresponding value being 18 per cent in the dispersed sectors.

The preferred state-level destinations of the top 25 (out of 93) FDI employment-providing sectors is shown in Table 6.49. It may be observed that the highly agglomerated sectors have relatively high employment in their respective top preferred states, with the reverse holding true for the least agglomerated (dispersed) sectors.

The E-G-O of the top 25 (out of 92) sectors that produce the highest output in FDI-enabled plants is reported in Table 6.50. These sectors account for 91 per cent of the FDI-enabled output in our database. Other important sectoral characteristics, including those for FDI-enabled components, have also been reported.

It is observed that 6 out of the top 25 FDI output sectors have relatively high agglomeration, 11 are relatively dispersed, and 8 sectors are moderately agglomerated. Some of the highly agglomerated sectors with high output in FDI-enabled production units include motor parts (343), general purpose machinery (291), transport equipment (359), and medical appliances (331), among others. Examples of dispersed sectors include chemical products (242), basic iron and steel (271), motor vehicles (341), dairy products (152) and basic chemicals (241), among others.

About 17 per cent of the total FDI output is generated in the six highly agglomerated E-G-O sectors and 61 per cent in the dispersed sectors. FDI plants account for 19 per cent of all the plants (domestic and FDI) in highly agglomerated E-G-O sectors, with the corresponding value being 13 per cent in dispersed sectors.

The state-level distribution in five major states for the top 25 FDI output-generating industrial sectors is depicted in Table 6.51. It can be observed that the highly agglomerated sectors have a relatively high output in their respective top preferred states, with the reverse holding true for the least agglomerated (dispersed) sectors.

6.5.2 Determinants of Locational Choice of FDI-enabled Plants

As already mentioned, while agglomeration estimates have been based on state-level data, the determinants of locational choice have been analysed at the state level as well as the city level. Apart from this, one can also consider variations across geographical regions like north, east, west and south, as well as firm-level characteristics.



While firms are generally headquartered in relatively large cities, the plants are located in large as well as small (Class-3) cities.

While investors in industrial plants may not follow a highly structured theory-based model with regard to the choice of a particular location, there would be some rule-of-thumb considerations for these decisions. Multiple factors are likely to play a simultaneous role in when a firm makes a decision on where to locate a plant. The decision would be based primarily on the nature of the plant. For example, an integrated iron and steel plant would prefer to locate close to regions producing primary inputs (iron ore and coal), whereas a cement plant would be close to limestone quarries. State-level factors may include the number of SEZs, energy deficit, per capita income, and the number of workers' unions. City-level factors may include congestion in a city, presence of a port/ airport/ SEZ, distance from the nearest major city, and the share of FDI plants in total plants, among others. The share of FDI plants in the total number of plants in a city may be taken as a proxy for FDI plant density/ FDI agglomeration.

The analysis is based on 1,240 plants located in 286 cities (21 Class-1, 20 Class-2 and 245 Class-3 cities) spread over 26 states and Union Territories (Tables 6.52 and 6.53). These 1,240 plants account for 12 per cent of the total plants (FDI plus domestic) located in the corresponding 286 cities and 26 states / Union Territories. Of the 1,240 FDI plants, 434 plants are located in Class-1 cities, 85 in Class-2 cities and 721 in Class-3 cities. Thus, Class-3 cities account for 58 per cent of the total number of FDI plants. With regard to regional distribution, there are 217 FDI plants in the north, 184 in the east, 481 in the west and 358 in the south (Table 6.54). In the northern region, about 79 per cent of the 217 FDI plants are located in Class-3 cities; the corresponding numbers are 71 per cent in the east, 51 per cent in the west and 49 per cent in the south.

In the model estimation, we have divided city sizes as “large” for Class-1 and Class-2 cities taken together, and “small” for Class-3 cities. We have used a discrete choice binary logit econometric model to estimate locational decisions of FDI-enabled plants in India.¹⁵ The discrete choice model facilitates our analysis to reveal the city-level preferences of FDI-enabled firms which might otherwise be lost in aggregate methodologies (Cheng, 2007). In the estimated regression equation, the dependent variable is set up as zero if a particular plant is located in a large city (Classes 1 and 2) and 1 if it is located in a small (Class-3) city.

We worked with various alternative model specifications based on independent variables with firm-, city-, state-, and region-specific characteristics. These characteristics relate to dummy, discrete, and continuous variables. In our final estimate, we incorporate the firm-level characteristic as export intensity (continuous). The city-level characteristics include the share of FDI plants in total plants (continuous), airport location in a city (dummy variable) and the distance from the nearest Class-1 city (distance-wise dummies). The state-level variables include the number of SEZs (discrete), power deficit to availability ratio (continuous), number of trade unions (discrete) and per capita income (continuous). Other independent variables refer to the four regions (dummies) as well as regional interaction dummy variables vis-à-vis distance dummies.

It was found that the alternative specifications make some of the independent variables consistent in terms of sign and significance, while other variables provide fragile results with respect to sign/ significance. Variables, such as the share of FDI plants in a city and electricity deficit to availability ratio in a state, are robust across various model specifications. One variable that showed less robust results is per capita income. However, we included this in the final specification of the model as a proxy for level of development of a state. Two specifications, one showing the base estimate and other depicting the final accepted specification, are shown in Table 6.55.

15. Technical details of this model are provided in Long and Freeze (2003).

The base specification includes six variables, namely, number of operational SEZs in a state, share of FDI plants in total plants in a city, airport location in a city, state-wise electricity deficit to availability ratio, firm-wise export intensity and state-wise number of labour unions. The regression results show that the share of FDI plants in a city exerts a positive and significant effect on the location of FDI plants in Class-3 cities. This is consistent throughout our other regression specification estimates. The probability that a firm establishes a plant in a Class-3 city is higher if the firm is relatively export-intensive. However, other factors have a negative influence on the probability of a plant being set up in a Class-3 city; these factors include the location of an airport in a city, state-level electricity deficit to availability ratio and the number of labour unions in a state. There is some indication in our preliminary regressions that location-specific infrastructure facilities like the existence of a major port and operational SEZs in a particular Class-3 city exert a negative influence on FDI plant location in that city. This may happen due to likely congestion and relatively high land prices in such Class-3 cities. However, the state-level number of operational SEZs has a positive influence on FDI plant location in Class-3 cities. This variable is a proxy for state-level infrastructure and government incentives to attract FDI plants. The number of labour unions at the state level, which is a proxy for labour market rigidity, shows that it reduces the probability of FDI plants coming to Class-3 cities in that state.

In the final specifications, we have included per capita income at the state level, regional dummies, distance dummies and the interaction between region and distance dummies, along with our base-specific variables. The sign and significance of the base run variables remain intact in our final estimated regression result. The impact of per capita income exerts a mildly positive influence on FDI plant location in Class-3 cities.

Regions do not influence FDI plants to locate in Class-3 cities. In general, FDI firms prefer to locate in Class-3 cities, which are relatively far from the nearest Class-1 city. However, in the southern region, the probability of an FDI firm locating itself 100 to 500 km from the nearest Class-1 city is lower than that in the northern region. In the case of the eastern region, the probability of an FDI firm locating itself beyond 100 km from the nearest Class-1 city is higher than that in the northern region. The western region does not indicate any significant difference in terms of FDI plant location in Class-3 cities based on distance from the nearest Class-1 city vis-à-vis the location pattern in the northern region.

Chapter 7: Primary Survey: Analysis and Results

7.1 Backdrop

Even though most of the objectives of the study were fulfilled using secondary data in Chapter 6, a primary survey of FDI-enabled enterprises was undertaken to gather relevant information across India. Separate survey questionnaires were prepared for manufacturing and service firms,¹ in order to capture all the relevant information pertaining to these sectors, and discussed with knowledgeable persons. Then, a survey was conducted to collect information from FDI-enabled enterprises.

To select samples for the primary survey, a list of FDI enterprises was compiled from company-level records provided by the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India. These records contain information on FDI inflows, investing country, name of the company, NIC sector and item code. They are called company-specific records as these are entered as many times as a company receives foreign investment during a particular year. Company records were available for the period January 2000 to June 2007. They were supplied in html format, which were converted into Excel files for easy processing and tabulation. After conversion, individual records were edited for the name of the company and sectors. This exercise facilitated grouping of companies by year, routes and sector. After cleaning and editing, a total of 20,420 processed records were obtained. These are spread across 92 sectors as classified under the Industries (Development and Regulation) Act (IDR Act), 1951.

However, for sampling purposes the individual records of a company were merged to form unique companies. Records with an FDI inflow above \$10,000 (0.01 million) were considered to prepare a list of unique companies. With this cut-off, the number of records came down to 14,850. It was found that records with investment below \$0.01 million had entries with zero amount of FDI; these records were grouped separately and samples of unique companies were obtained from them. This would help assess the reasons for the low level of investment.

The list of unique companies was prepared such that if a particular company had received foreign investment more than once in a specific sector during January 2000 to June 2007 that particular company was made unique by that sector and its cumulative FDI was calculated accordingly. However, if the company had received foreign investment in different sectors, it was considered as a different company. Through this process, the records were merged into 9,056 unique companies that accounted for cumulative foreign direct investment of \$38.12 billion.

The list of unique companies was used to select samples for the primary survey. A sample of about 20 per cent was selected and a two-stage sampling technique was followed to select samples. First, a weighted stratified sampling technique was applied. Under this method, unique companies were divided into groups or strata, and samples were selected separately from each stratum. Here, sectors act as strata. Samples were selected from each stratum based on weights, where the weight was the average of the share of number of companies and share of FDI in each sector. This procedure is simple and takes into account both the number of companies and amount of FDI in each sector, but it resulted in over-sampling of companies in a few sectors, because these sectors comprised a small number of companies but accounted for relatively high amounts of FDI, that is, the FDI per company was high. To overcome this problem, the over-sampled companies were redistributed to other sectors such that it did not exceed the total number of

1. Copies of the questionnaires are provided at the end of the report.



companies in that sector. By this method, the entire sample of 2,000 companies was allocated and then redistributed across sectors. This sample accounted for 39 per cent of total cumulative FDI.

After the allocation of samples to the sectors, the next stage of sampling involved exact identification of companies through the simple random selection method. This was achieved by the use of SPSS software through which the allocated companies in each stratum were randomly selected without replacement.² This formed the total sample of companies to which questionnaires were to be sent.

Efforts were made to compile company addresses since the DIPP records contained only the company names and not their addresses. Different sources, such as the Capitaline and Prowess databases and various websites, were used to locate these addresses.

After compiling the addresses of both manufacturing and services firms, we posted the questionnaires to companies across India. About 1,500 questionnaires were despatched along with covering letters from DIPP and NCAER. After three months of waiting and a follow-up, we received very few responses, so the survey was conducted through personal interviews.

7.2 Difficulties in Conducting the Survey

The first problem was collecting the addresses of the manufacturing and service firms, and several sources were used to locate them. Most of the information compiled from the Ministry of Corporate Affairs website and the internet was outdated as many companies had either shut down or relocated. We mainly relied on the information in the Capitaline database.

Other difficulties were as follows: lack of responses from company representatives, including the top management; most respondents merely handed over annual reports of the company and were not willing to discuss the questionnaire; and those who did discuss the questionnaires could not answer many of the questions due to lack of information. Thus, the response rate to the questionnaires was low.

We received more than 400 responses but selected only 284 due to data consistency. These included 129 manufacturing firms and 155 service firms.

7.3 Analysis

All the completed questionnaires were entered in an Excel database and SPSS software was used to tabulate the aggregated results. All individual company data remain confidential.

Of the 284 FDI-enabled firms, there are 129 manufacturing firms (25 are common with the secondary data base) and 155 service companies (9 are common with the secondary data base) (Table 7.1a). These companies are spread across four zones – East, North, South and West – and also large and small cities, where large cities comprise Class-1 and Class-2 cities combined, and small cities are Class-3 cities. The large cities are towns with a population of 5,00,000 and above, and Class-3 cities are towns with a population of less than 5,00,000. This bifurcation of large cities and small cities was made partially to address the question of where FDI goes within a particular zone. More specifically, the interest was in knowing whether FDI is concentrated in large cities, i.e., metros, or small cities/towns/rural areas. Of the 284 firms which could be surveyed, there is concentration of firms in the North and South zones followed by the West zone; there are few FDI-enabled firms in the East zone. The maximum number of surveyed manufacturing firms is in

2. The number of companies randomly selected from each stratum was different depending on their weightage.

the North and South zones, whereas the maximum number of service firms is in the South zone. The distribution of sample firms zone-wise and sector-wise shows that nearly 83.5 per cent of all firms are in large cities, whereas only 16.5 per cent of the firms are in small cities (Table 7.1b). The zone-wise and sector-wise distribution of FDI-enabled firms is also presented in Figure 7.1. However, this is a biased sample, because the surveyors could not reach firms in our sample and had to choose from other firms too.

Figure 7.1 **FDI firms by Zone and Sector**

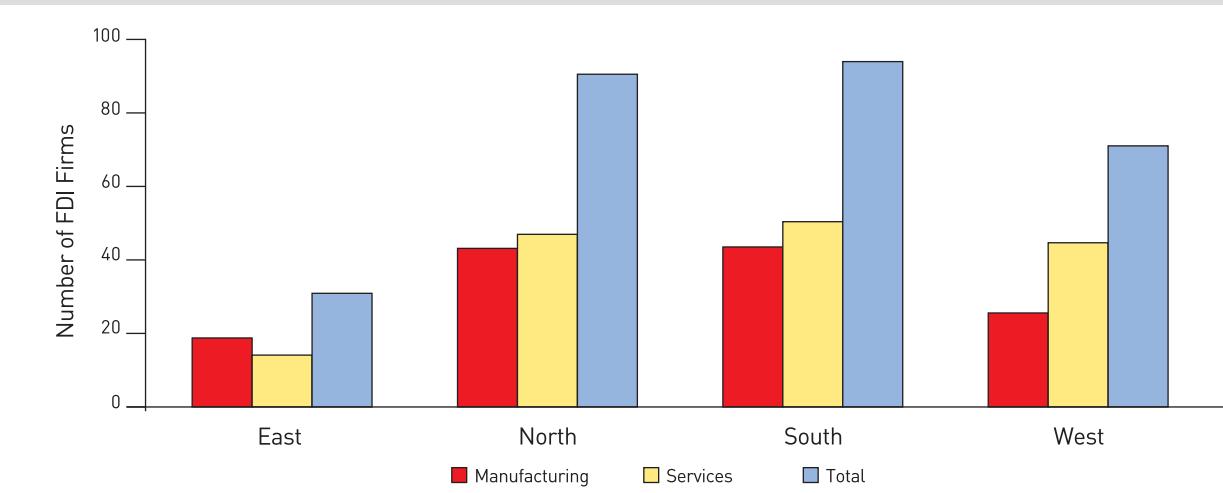


Table 7.2a shows the sector-wise and zone-wise distribution of foreign equity holdings of FDI-enabled firms in large and small cities. There are 138 firms with foreign equity holding of more than 50 per cent, 127 firms with foreign equity holding of 10-50 per cent, and only 19 firms with foreign equity holding of less than 10 per cent. Therefore, the total number of FDI-enabled firms, i.e., with foreign equity of more than 10 per cent, is 265. However, for our analysis we consider all firms to be FDI-enabled. There is a larger number of service firms (86) with foreign equity holding of more than 50 per cent vis-à-vis manufacturing, whereas there are only 52 firms with foreign equity holding of more than 50 per cent. Among the zones, the West zone has the maximum number of firms with foreign equity holding of more than 50 per cent, and all these firms are in large cities. Figure 7.2 shows the zone-wise distribution of the equity holdings of firms.

The distribution of foreign equity capital holding also shows that nearly 8.2 per cent of all the firms in large cities have an equity holding of more than 50 per cent, but 18.1 per cent of the firms have an equity holding of more than 50 per cent in small cities. In the West zone, large cities have the maximum number of firms with a foreign equity holding of more than 50 per cent. Table 7.2b also reveals that service firms in large cities have an equity holding of more than 50 per cent and this pertains more to the West zone. In contrast, the maximum number of firms with an equity holding of less than 10 per cent is in the South zone (57.9 per cent).

Table 7.3a shows the zone-wise listing status of FDI-enabled firms, both services and manufacturing, in large and small cities. Of the sample of 284 firms, 125 firms are listed and 159 are unlisted firms. Of the 125 listed firms, 65 are manufacturing firms and 60 are service firms. Further, 79 companies of this set of 125 are listed on both the NSE and BSE stock exchanges, whereas 31 companies are listed only on the BSE and 15 only on the NSE.

In terms of distribution, Table 7.3b shows that nearly 46.2 per cent of the firms in large cities are listed and the remaining 53.8 per cent are unlisted. On the other hand, listed firms in small towns recorded 33.3 per cent and the

unlisted firms recorded 66.7 per cent. Between the NSE and the BSE, more companies in both services and manufacturing are listed on the BSE than the NSE.

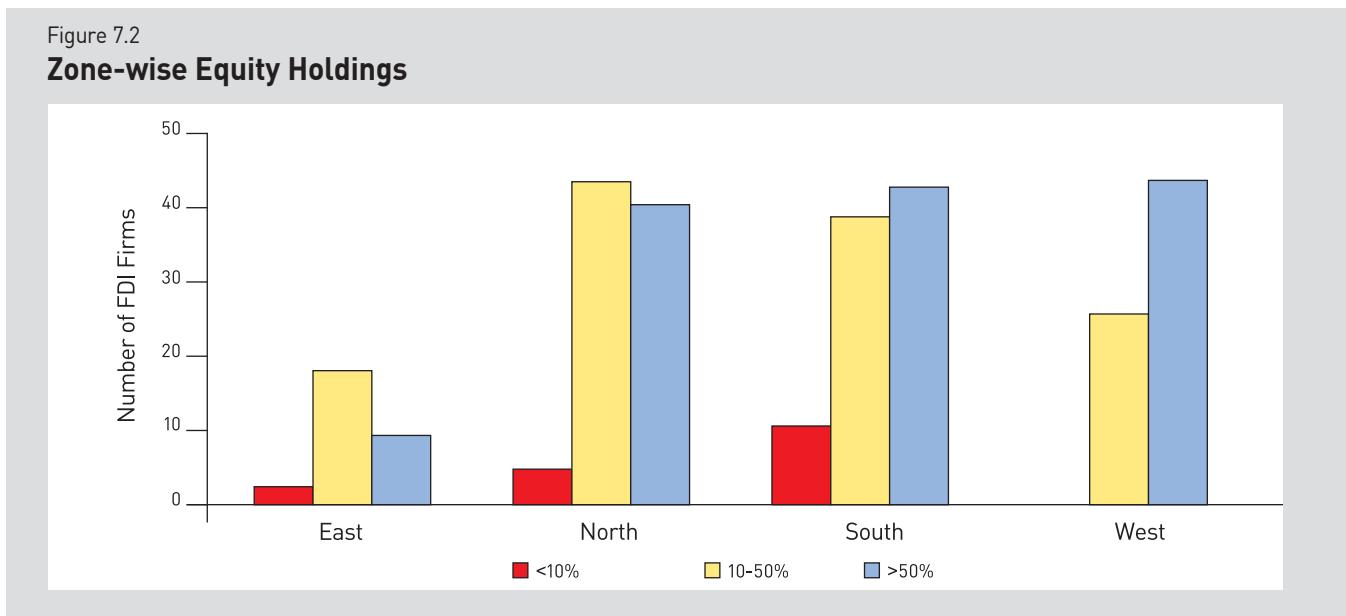


Table 7.4 shows the zone-wise and sector-wise distribution of FDI-enabled service firms. Of the 155 surveyed service firms, 139 service firms were in large towns, whereas only 16 firms were in small towns. The maximum number of service firms are in the South zone in large cities (47), followed by Maharashtra (45) in large cities. The maximum number of service firms are in other services (93), followed by non-financial services, which has about 32 service firms.

In Table 7.5, an attempt has been made to see the resource category of manufacturing firms in the sample. The three resource categories include labour-intensive industries, capital-intensive industries and technology-intensive industries. The respondents were asked to select the resource category which most suited their firm (i.e., Rank 1), followed by other resource categories, namely, as Rank 2 and 3, respectively. Of the sample size of 1293 firms, 38 firms ranked capital-intensive as their first choice, followed by 31 firms which accorded Rank 1 to the labour-intensive category and 60 firms that ranked themselves as technology-intensive. Also, 38 firms have given Rank 1 to capital-intensive, followed by 26 firms which have given Rank 2 to technology-intensive and 12 firms which have given Rank 3 to labour-intensive industry. The majority of the firms which have given Rank 1 to capital-intensive industries have given Rank 2 to technology-intensive and Rank 3 to labour-intensive. The survey also revealed that most of the surveyed manufacturing firms are located in large cities, with the maximum number of firms being capital-intensive.

Table 7.6a shows the number of employees in manufacturing firms and service firms in a sample of 254 firms. The total number of employees in 254 firms is 1,70,610, with 1,37,183 males and 33,387 females. Of the total number of employees, 87,812 are employed in manufacturing firms and 82,798 in service firms. But in large cities, taking into account all zones, 79,213 people are employed in service firms, vis-à-vis 74,857 in manufacturing firms. Overall, nearly 51.5 per cent of the employees in 254 firms are employed in manufacturing firms vis-à-vis 48.5 per cent in service firms (see Table 7.6b). It may be observed that the percentage of females employed in service firms is high in large cities (13.1 per cent) vis-à-vis the high percentage of females employed in manufacturing in small cities (23.0 per cent). Thus, large cities provide more employment to women in service firms, whereas a large percentage of women are employed in manufacturing in small cities.

3. Data available on resource category of firms from only 129 questionnaires.



Table 7.6b shows the zone-wise number of employees per firm for the surveyed 254 FDI-enabled firms. The number of employees per firm is 672. However, the number of employees per firm in manufacturing is 791 compared to 579 in services. The number of employees per firm is higher in large cities in both manufacturing and services vis-à-vis small cities.

Table 7.7a shows the mode of transport from the FDI firm to the closest urban/metro centre. Of a sample of 121 manufacturing firms for which data was available from the questionnaires, nearly 97 firms (71 in large cities and 26 in small cities) mentioned road transport as the major means of transport to the nearest urban centre and 23 firms (22 in large cities, 1 in small city) said rail was the most important mode of transport, followed by only one firm which said that the mode of transport most commonly used and available is air transport. The findings are similar for service firms; nearly 106 service firms (92 in large cities and 14 in small cities) out of the sample of 136 said that road is the most important mode of transport, followed by 29 firms (only large cities) for whom rail was the most important mode of transport, and only one service firm mentioned the air route as a means of transport.

Table 7.7b describes the quality of transport from the firm to the nearest urban centre/metro. Of the 111 firms for which data is available, 59 firms mentioned that the quality of transport is good from the firm to the nearest urban centre, 36 firms opined that the quality of transport is average and 16 firms rated the quality of transport as excellent. Of a sample of 123 service firms, 37 service firms mentioned the quality of transport from the firm to the nearest urban centre to be excellent, 69 firms termed the quality to be good and only 17 said the quality of transport was average. Across the sample, a large number of service and manufacturing firms mentioned the quality of transport to the nearest urban centre from the firm to be good.

Table 7.7c shows the infrastructure facilities available within a radius of 10 kilometres from the firm. It appears that the presence of FDI-enabled firms is concurrent with the existence of schools, colleges and hospitals within a radius of 10 km. This scenario is similar across zones, except for the East zone where data for small cities is not available.

Table 7.8a describes the number of firms that have led to improved infrastructure facilities in the region. Of a sample of 124 manufacturing firms across zones and large and small cities, 98 firms opined that setting up the FDI-enabled firms had led to improvement in infrastructure. 91 firms observed that the presence of FDI-enabled units has led to improved road infrastructure, followed by 72 firms which said that setting up FDI-enabled firms has resulted in improved electricity and 61 firms said that FDI-enabled firms have also led to the setting up of a hospital in the area and that facilities like education, drinking water, recreation and other services also improved in the region. The same holds true if an FDI-enabled service firm is set up. Nearly 52 service firms said that the setting up of an FDI-enabled service firm has led to improvements in road infrastructure, 39 facilities stated that there is an improvement in electricity supply and 37 firms said that there is access to hospitals. Though zone-wise the story is the same, it differs between large and small cities; 14.7 per cent of the manufacturing firms in large cities said that the setting up of the FDI-enabled firms has not led to improvements in infrastructure facilities, but 85.3 per cent said that there is an improvement in infrastructure facility due to the setting up of an FDI-enabled firm. Similarly, 42.9 per cent of the FDI-enabled firms in manufacturing in small cities said that the FDI firm has not led to improvement in infrastructure facilities, whereas 57.1 per cent said that there is an improvement in infrastructure facilities due to the setting up of an FDI-enabled firm; and 46.7 per cent of the service firms in small towns said that the setting up of the service firm has not improved infrastructure in the area, while only 53.3 per cent of the service firms in small towns said that the FDI-enabled service firm has led to improvements in infrastructure. In the case of large cities, 61.5 per cent said that the setting up of FDI service firms has not led to improved infrastructure facilities, but 38.5 per cent said that the setting of FDI service firms led to improved infrastructure facilities (Table 7.8 b).



7.4 Major Findings

- Of the sample of 284 surveyed firms, there is a concentration of firms in the North and South zones followed by the West zone, with few firms in the East zone. The maximum number of manufacturing firms is located in the North and South zones, whereas the maximum number of service firms is in the South zone, with the majority of firms being in the large cities. Of the 284 firms, 129 are manufacturing firms and 155 are service firms. The zone-wise and sector-wise distribution of sample firms shows that nearly 83.5 per cent of the firms are in large cities, whereas only 16.5 per cent of the firms are in small cities.
- There are 138 firms with foreign equity holding of more than 50 per cent, 127 firms with foreign equity holding of 10-50 per cent and 19 firms with foreign equity holding of less than 10 per cent. However, there is a larger number of service firms (86) with foreign equity holding of more than 50 per cent vis-à-vis manufacturing where only 52 firms have foreign equity holding of more than 50 per cent. Among the zones, the West zone has the maximum number of firms with foreign equity holding of more than 50 per cent and all of them are in large cities.
- Nearly 46.2 per cent of the firms in large cities are listed and the remaining 53.8 per cent firms are unlisted. On the other hand, in small towns listed firms accounted for 33.3 per cent, whereas unlisted firms accounted for 66.7 per cent. Between the NSE and the BSE, more companies in both services and manufacturing are listed on the BSE than the NSE.
- Of the sample of 155 service firms, 139 service firms are located in large towns, whereas only 19 service firms are located in small towns. The maximum number of service firms are in the South zone in large cities (47) followed by Maharashtra (45) in large cities. The maximum number of service firms relate to other services (93), followed by non-financial services, which have about 32 service firms. In manufacturing, out of 129 firms, 98 are located in large cities and the remaining 31 firms are located in small cities. As per zone-wise classification, the South zone has 36 FDI-enabled firms located in large cities followed by the West, North and East zones. Similarly, among FDI-enabled firms in small cities, the North zone has a higher number of firms followed by the South zone and data for the remaining zones was not reported.
- The majority of the firms report that road transport is the most important means of transport to the closest urban centre or metro. Across zones, a large number of service firms and manufacturing firms mentioned that the quality of transport to the nearest urban centre from the plant/facility was good.
- Nearly 60 per cent of the service firms belong to Other services, and most of the service firms are located in large cities, compared to small cities in all zones
- Most manufacturing firms are located in large cities with the maximum number of firms being capital-intensive.
- Overall, nearly 51.5 per cent of the employees in 254 firms are employed in manufacturing firms vis-à-vis 48.5 per cent in service firms. The percentage of females employed in service firms is greater in large cities (13.1 per cent), whereas the percentage of females employed is greater in manufacturing firms in small cities (23.0 per cent). Thus, large cities provide more employment to women in service firms, whereas a large percentage of women are gainfully employed in manufacturing in small cities.
- The number of employees per firm is greater in large cities in both manufacturing and services vis-à-vis small cities.
- The presence of FDI-enabled firms is concurrent with the existence of schools, colleges and hospitals within a radius of 10 km. This scenario is similar across zones except for the East zone, where data for small cities is not available.
- Both manufacturing and service firms mention that the setting up of an FDI firm has led to improved infrastructure in the area; however, this is truer for large towns than small towns. The majority of the small towns mentioned that the setting up of an FDI firm has not led to improvements in infrastructure in the area. ●



Table 7.1a

Distribution of Surveyed Firms by Zone and Sector

Zones	Manufacturing	Services	Total
East			
Large Cities	18	13	31
Small Cities	-	-	-
Total	18	13	31
North			
Large Cities	19	34	53
Small Cities	24	13	37
Total	43	47	90
South			
Large Cities	36	47	83
Small Cities	7	3	10
Total	43	50	93
West			
Large Cities	25	45	70
Small Cities	-	-	-
Total	25	45	70
All zones			
Large Cities	98	139	237
Small Cities	31	16	47
Total	129	155	284

Note: Number of observations = 284.

Table 7.1b

Distribution of Surveyed Firms by Zone and Sector (%)

Zones	Manufacturing	Services	Total
East			
Large Cities	14.0	8.4	10.9
Small Cities	-	-	-
Total	14.0	8.4	10.9
North			
Large Cities	14.7	21.9	18.7
Small Cities	18.6	8.4	13.0
Total	33.3	30.3	31.7
South			
Large Cities	27.9	30.3	29.2
Small Cities	5.4	1.9	3.5
Total	33.3	32.3	32.7
West			
Large Cities	19.4	29.0	24.6
Small Cities	-	-	-
Total	19.4	29.0	24.6
All zones			
Large Cities	76.0	89.7	83.5
Small Cities	24.0	10.3	16.5
Total	100.0	100.0	100.0



Table 7.2a
Zone-wise Foreign Equity Capital Holding

Zone	Equity Holding								
	<10 %			10-50%			>50%		
	Manufac-	Services	Total	Manufac-	Services	Total	Manufac-	Services	Total
turing									
East									
Large Cities	2	1	3	11	7	18	5	5	10
Small Cities	-	-	-	-	-	-	-	-	-
Total	2	1	3	11	7	18	5	5	10
North									
Large Cities	1	3	4	14	14	28	4	17	21
Small Cities	-	1	1	11	5	16	13	7	20
Total	1	4	5	25	19	44	17	24	41
South									
Large Cities	5	4	9	20	16	36	11	27	38
Small Cities	2		2	1	2	3	4	1	5
Total	7	4	11	21	18	39	15	28	43
West									
Large Cities	-	-	-	10	16	26	15	29	44
Small Cities	-	-	-	-	-	-	-	-	-
Total	-	-	-	10	16	26	15	29	44
Overall									
Large Cities	8	8	16	55	53	108	35	78	113
Small Cities	2	1	3	12	7	19	17	8	25
Total	10	9	19	67	60	127	52	86	138

Note: Number of observations = 284.



Table 7.2b

Zone-wise Distribution of Foreign Equity Capital Holding (%)

Zone	Equity Holding								
	<10 %			10-50%			>50%		
	Manufacturing	Services	Total	Manufacturing	Services	Total	Manufacturing	Services	Total
East									
Large Cities	20.0	11.1	15.8	16.4	11.7	14.2	9.6	5.8	7.2
Small Cities	-	-	-	-	-	-	-	-	-
Total	20.0	11.1	15.8	16.4	11.7	14.2	9.6	5.8	7.2
North									
Large Cities	10.0	33.3	21.1	20.9	23.3	22.0	7.7	19.8	15.2
Small Cities	-	11.1	5.3	16.4	8.3	12.6	25.0	8.1	14.5
Total	10.0	44.4	26.3	37.3	31.7	34.6	32.7	27.9	29.7
South									
Large Cities	50.0	44.4	47.4	29.9	26.7	28.3	21.2	31.4	27.5
Small Cities	20.0	-	10.5	1.5	3.3	2.4	7.7	1.2	3.6
Total	70.0	44.4	57.9	31.3	30.0	30.7	28.8	32.6	31.2
West									
Large Cities	-	-	-	14.9	26.7	20.5	28.8	33.7	31.9
Small Cities	-	-	-	-	-	-	-	-	-
Total	-	-	-	14.9	26.7	20.5	28.8	33.7	31.9
Overall									
Large Cities	80.0	88.9	84.2	82.1	88.3	85.0	67.3	90.7	81.9
Small Cities	20.0	11.1	15.8	17.9	11.7	15.0	32.7	9.3	18.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



Table 7.3a
Listing Status of FDI-enabled Firms by Zone

Zone	Class	Manufacturing		Services		Overall		BSE Total	NSE Both	BSE Both	NSE Both	BSE Overall	Total
		Yes*	No**	Total	Yes*	No**	Total						
East	<i>Large Cities</i>	13	5	18	4	9	13	17	14	31	1	11	-
	<i>Small Cities</i>	-	-	-	-	-	-	-	-	-	-	-	-
	<i>Total</i>	13	5	18	4	9	13	17	14	31	1	11	-
North	<i>Large Cities</i>	13	6	19	16	17	33	29	23	52	3	1	9
	<i>Small Cities</i>	5	20	25	5	8	13	10	28	38	1	1	3
	<i>Total</i>	17	26	43	22	25	47	39	51	90	4	2	12
South	<i>Large Cities</i>	25	11	36	29	18	47	54	29	83	11	1	13
	<i>Small Cities</i>	4	3	7	2	1	3	6	4	10	1	-	3
	<i>Total</i>	29	14	43	31	19	50	60	33	93	12	1	16
West	<i>Large Cities</i>	6	19	25	3	42	45	9	61	70	2	1	3
	<i>Small Cities</i>	-	-	-	-	-	-	-	-	-	-	-	-
	<i>Total</i>	6	19	25	3	42	45	9	61	70	2	1	3
All zones	<i>Large Cities</i>	57	41	98	52	86	138	109	127	236	17	4	36
	<i>Small Cities</i>	9	23	32	7	9	16	16	32	48	2	1	6
	<i>Total</i>	65	64	129	60	95	155	125	159	284	19	5	42

Note: Number of observations = 284

* Listed Companies

** Unlisted Companies


 Table 7.3.b
Zone-wise Distribution of Listing Status of FDI-enabled Firms (%)

Zone	Class	Yes*	Manufacturing		Services		Overall		Total	BSE	NSE	If Listed, whether it is			Total					
			No**	Total	Yes*	No**	Total	Yes*				No**	Total	Both	BSE	NSE	Both			
East	Large Cities	41.9	16.1	58.1	12.9	29	41.9	54.8	45.2	100	5.9	5.9	64.7	-	5.9	17.6	5.9	11.8	82.4	100
	Small Cities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
North	Total	41.9	16.1	58.1	12.9	29	41.9	54.8	45.2	100	5.9	5.9	64.7	-	5.9	17.6	5.9	11.8	82.4	100
	Large Cities	25	11.5	36.5	30.8	32.7	63.5	55.8	44.2	100	10.3	3.4	31	3.4	20.7	31	13.8	24.1	62.1	100
South	Small Cities	13.2	52.6	65.8	13.2	21.1	34.2	26.3	73.7	100	10	30	-	10	40	10	20	70	100	
	Total	18.9	28.9	47.8	24.4	27.8	52.2	43.3	56.7	100	10.3	5.1	30.8	2.6	17.9	33.3	12.8	23.1	64.1	100
West	Large Cities	30.1	13.3	43.4	34.9	21.7	56.6	65.1	34.9	100	20.4	1.9	24.1	18.5	3.7	31.5	38.9	5.6	55.6	100
	Small Cities	40	30	70	20	10	30	60	40	100	16.7	0	50	16.7	-	16.7	33.3	-	66.7	100
All zones	Total	31.2	15.1	46.2	33.3	20.4	53.8	64.5	35.5	100	20	1.7	26.7	18.3	3.3	30	38.3	5	56.7	100
	Large Cities	8.6	27.1	35.7	4.3	60	64.3	12.9	87.1	100	22.2	11.1	33.3	-	-	33.3	22.2	11.1	66.7	100
All zones	Small Cities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Total	8.6	27.1	35.7	4.3	60	64.3	12.9	87.1	100	22.2	11.1	33.3	-	-	33.3	22.2	11.1	66.7	100
All zones	Large Cities	24.2	17.4	41.5	22	36.4	58.5	46.2	53.8	100	15.6	3.7	33	10.1	8.3	29.4	25.7	11.9	62.4	100
	Small Cities	18.8	47.9	66.7	14.6	18.8	33.3	33.3	66.7	100	12.5	6.3	37.5	6.3	31.3	18.8	12.5	68.8	100	
All zones	Total	22.9	22.5	45.4	21.1	33.5	54.6	44	56	100	15.2	4	33.6	9.6	8	29.6	24.8	12	63.2	100

Note: Number of observations = 284

* Listed Companies

** Unlisted Companies

**Table 7.4
Distribution of FDI-enabled Service Firms by Zone and Sector**

Category	East			North			South			West			Overall		Total
	Large cities	Small cities													
Financial	3	-	4	2	6	1	14	6	-	-	27	3	30	30	30
Non-financial	2	-	5	4	14	1	6	6	-	-	27	5	32	32	32
Other Services	8	-	25	7	27	1	25	-	-	-	85	8	93	93	93
Total	13	-	34	13	47	3	45	3	-	-	139	16	155	155	155

Note: Financial includes Banking and Insurance; Non-Financial includes Hospital, Outsourcing, Research and Development, Education.
Number of observations = 155

**Table 7.5
Zone-wise Resource Category of Surveyed Manufacturing FDI-enabled Firms**

Intensive Industries	Zone	Large	Small	Total	Intensive Industries	Zone	Large	Small	Total	Intensive Industries	Zone	Large	Small	Total	
					Capital	Labour	Technology	East	North	South	West	Technology	East	North	South
Capital	East	4	0	4	Labour	North	4	1	5	Technology	East	6	0	6	6
North	5	6	11	18	South	1	19	9	2	11	West	7	0	7	10
South	18	1	19	31	West	0	5	West	7	0	Technology	3	3	3	17
West	4	0	5	7	Total	31	7	28	3	31	Total	39	21	60	27
Total	20	6	26	38	Capital	East	6	6	Capital	East	East	3	0	3	13
Technology East	North	4	5	9	North	1	13	South	2	2	North	8	12	20	20
South	12	1	13	16	South	5	5	West	3	3	South	6	2	8	8
West	4	5	5	14	West	3	3	Technology	16	16	West	11	0	12	15
Total	20	6	26	42	Total	2	2	Labour	2	2	Labour	3	0	3	7
Labour	East	4	4	8	North	2	1	South	2	3	North	2	5	7	7
North	1	1	2	4	South	4	2	West	4	6	South	3	2	5	5
South	6	6	6	18	West	4	4	Technology	16	16	West	3	0	3	3
West	0	0	0	0	Total	11	1	12	3	15	Total	11	7	18	18

Note: Number of observations = 129.



Table 7.6a
Number of Employees in Surveyed FDI-enabled Firms by Zone

Zone/Sector	Large Cities			Small Cities			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
East									
Manufacturing	4302	363	4665	-	-	-	4302	363	4665
Services	1599	895	2494	-	-	-	1599	895	2494
Total	5901	1258	7159	-	-	-	5901	1258	7159
North									
Manufacturing	20149	2419	22568	9720	1433	11153	29869	3852	33721
Services	9191	1544	10735	2360	565	2925	11551	2109	13660
Total	29340	3963	33303	12080	1998	14078	41420	5961	47381
South									
Manufacturing	27133	6962	34095	1176	626	1802	28309	7588	35897
Services	33335	11663	45040	480	180	660	33815	11843	45700
Total	60468	18625	79135	1656	806	2462	62124	19431	81597
West									
Manufacturing	11757	1772	13529	-	-	-	11757	1772	13529
Services	15981	4965	20944	-	-	-	15981	4965	20944
Total	27738	6737	34473	-	-	-	27738	6737	34473
Overall zones									
Manufacturing	63341	11516	74857	10896	2059	12955	74237	13575	87812
Services	60106	19067	79213	2840	745	3585	62946	19812	82798
Total	123447	30583	154070	13736	2804	16540	137183	33387	170610

Note: Number of observations = 254.



**Table 7.6b
Number of Employees in Surveyed FDI-enabled Firms by Zone**

Zone/Sector	Large Cities			Small Cities			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
East									
Manufacturing	239	20	259	-	-	-	239	20	259
Services	123	69	192	-	-	-	123	69	192
Total	190	41	231	-	-	-	190	41	231
North									
Manufacturing	1343	161	1505	442	65	507	807	104	911
Services	296	50	346	236	57	293	282	51	333
Total	638	86	724	378	62	440	531	76	607
South									
Manufacturing	1005	258	1263	235	125	360	885	237	1122
Services	794	278	1072	160	60	220	751	263	1016
Total	876	270	1147	207	101	308	807	252	1060
West									
Manufacturing	490	74	564	-	-	-	490	74	564
Services	363	113	476	-	-	-	363	113	476
Total	408	99	507	-	-	-	408	99	507
Overall zones									
Manufacturing	754	137	891	404	76	480	669	122	791
Services	462	147	609	218	57	276	440	139	579
Total	577	143	720	343	70	414	540	131	672

Note: Number of observations = 254.



**Table 7.7a
Mode of Transport from FDI-enabled Firms to Nearest Metro/Urban Centre [in numbers]**

Zone	Cities	East			North			South			West			Overall Total Cities
		Large Cities	Small Cities	Total Cities										
<i>Manufacturing</i>														
Road	8	-	8	10	20	30	31	6	37	22	-	22	71	26
Rail	6	-	6	2	-	2	5	1	6	9	-	9	22	1
Air	-	-	-	1	1	-	-	-	-	-	-	-	-	1
<i>Services</i>														
Road	-	-	-	14	11	25	40	3	43	38	-	38	92	14
Rail	-	-	-	1	-	1	1	-	1	27	-	27	29	-
Air	-	-	-	1	-	1	-	-	-	-	-	-	1	-

Note: Number of observations = 257

**Table 7.7b
Quality of Transport from FDI Firm to Nearest Metro/Urban Centre**

Zone	Cities	East			North			South			West			Overall Total Cities
		Large Cities	Small Cities	Total Cities										
<i>Manufacturing</i>														
Excellent	4	-	4	4	1	5	4	1	5	2	-	2	14	2
Good	14	-	14	5	8	13	18	3	21	11	-	11	48	11
Average	-	-	-	4	10	14	11	2	13	9	-	9	24	12
<i>Services</i>														36
Excellent	-	-	-	11	5	16	15	3	18	3	-	3	29	8
Good	10	-	10	5	2	7	23	-	23	29	-	29	67	2
Average	-	-	-	2	2	7	-	7	8	-	8	15	2	17

Note: Number of observations = 236



Table 7.7c
Infrastructure Facilities available within 10 km

Zone	East			North			South			West			Overall Total Cities
	Cities	Large Cities	Small Cities	Total Cities	Large Cities	Small Cities	Total Cities	Large Cities	Small Cities	Total Cities	Large Cities	Small Cities	
<i>Manufacturing</i>													
High School	17	-	17	13	16	29	35	7	42	22	-	22	23
Senior Secondary School	17	-	17	12	15	27	31	6	37	17	-	17	21
Degree College	17	-	17	10	12	22	29	7	36	18	-	18	19
Technical/ Vocational Training Centre	14	-	14	6	11	17	28	5	33	12	-	12	16
In-patient care Hospital	17	-	17	11	16	27	31	5	36	18	-	18	21
Two-Wheeler	16	-	16	8	14	22	31	4	35	10	-	10	18
Four-Wheeler	17	-	17	9	13	22	22	5	27	11	-	11	18
Cinema House	17	-	17	12	16	28	31	5	36	15	-	15	21
Fire Station	17	-	17	9	17	26	29	6	35	6	-	6	11
<i>Services</i>													
High School	13	-	13	16	7	23	44	3	47	42	-	42	115
Senior Secondary School	13	-	13	17	6	23	43	3	46	26	-	26	99
Degree College	13	-	13	18	6	24	44	3	47	41	-	41	116
Technical/ Vocational Training Centre	13	-	13	9	3	12	37	3	40	22	-	22	81
In-patient care Hospital	13	-	13	14	9	23	45	3	48	37	-	37	109
Two-Wheeler	12	-	12	13	4	17	43	3	46	24	-	24	92
Four-Wheeler	13	-	13	13	5	18	42	3	45	35	-	35	103
Cinema House	13	-	13	17	6	23	44	3	47	39	-	39	113
Fire Station	13	-	13	11	2	13	41	3	44	28	-	28	93

Note: Number of observations = 284



Table 7.8a
Number of FDI-enabled Firms Facilitating Improvement in Infrastructure

Zone	East			North			South			West			Overall		
	Improvements/Large Cities	Small Cities	Total	Large Cities	Small Cities	Total									
Manufacturing															
Yes	18	-	18	11	10	21	30	6	36	22	-	23	81	16	98
No	-	-	5	11	16	6	1	7	3	-	3	14	12	26	
Total	18	0	18	16	21	37	36	7	43	25	0	26	95	28	124
If yes, Number of manufacturing firms that led to improved infrastructure															
Road	18	-	18	11	8	19	28	6	34	19	-	20	76	14	91
Electric	14	-	14	7	8	15	23	6	29	13	-	14	57	14	72
Hospital	16	-	16	4	11	15	17	4	21	9	-	9	46	15	61
Education	16	-	16	5	9	14	16	3	19	9	-	10	46	12	59
Drinking water	13	-	13	6	9	15	20	6	26	6	-	6	45	15	60
Recreation	14	-	14	2	11	13	12	3	15	5	-	5	33	14	47
Others	-	-	-	2	-	2	2	-	2	-	-	-	4	-	4
Services															
Yes	12	-	12	4	5	9	31	3	34	5	-	5	52	8	60
No	1	-	1	27	7	34	16	-	16	39	-	39	83	7	90
Total	13	0	13	31	12	43	47	3	50	44	0	44	135	15	150
If yes, Number of service facilities that led to improved infrastructure															
Road	12	-	12	4	5	9	24	3	27	4	-	4	44	8	52
Electric	7	-	7	1	3	4	24	3	27	1	-	1	33	6	39
Hospital	10	-	10	0	3	3	21	3	24	-	-	-	31	6	37
Education	8	-	8	0	3	3	16	3	19	-	-	-	24	6	30
Drinking water	11	-	11	2	2	4	22	3	25	-	-	-	35	5	40
Recreation	11	-	11	0	2	2	19	3	22	2	-	2	32	5	37
Others	-	-	-	1	1	3	-	3	1	-	1	4	1	5	

Note: Number of observations = 274



**Table 7.8b
Distribution of FDI-enabled Firms Facilitating Improved Infrastructure**

Zone	East			North			South			West			Overall		
	Improvements/Large Cities	Small Cities	Total	Large Cities	Small Cities	Total									
Manufacturing															
Yes	100	-	100	68.8	47.6	56.8	83.3	85.7	83.7	88	-	88.5	85.3	57.1	79
No	-	-	-	31.3	52.4	43.2	16.7	14.3	16.3	12	-	11.5	14.7	42.9	21
Total	100	-	100	100	100	100	100	100	100	100	-	100	100	100	100
If yes, Number of manufacturing firms that led to improved infrastructure															
Road	19.8	-	19.8	12.1	8.8	20.9	30.8	6.6	37.4	20.9	-	22	83.5	15.4	100
Electric	19.4	-	19.4	9.7	11.1	20.8	31.9	8.3	40.3	18.1	-	19.4	79.2	19.4	100
Hospital	26.2	-	26.2	6.6	18	24.6	27.9	6.6	34.4	14.8	-	14.8	75.4	24.6	100
Education	27.1	-	27.1	8.5	15.3	23.7	27.1	5.1	32.2	15.3	-	16.9	78	20.3	100
Drinking water	21.7	-	21.7	10	15	25	33.3	10	43.3	10	-	10	75	25	100
Recreation	29.8	-	29.8	4.3	23.4	27.7	25.5	6.4	31.9	10.6	-	10.6	70.2	29.8	100
Others	-	-	-	50	-	50	50	-	50	-	-	-	100	-	100
Services															
Yes	92.3	-	92.3	12.9	41.7	20.9	66	100	68	11.4	-	11.4	38.5	53.3	40
No	7.7	-	7.7	87.1	58.3	79.1	34	-	32	88.6	-	88.6	61.5	46.7	60
Total	100	-	100	100	100	100	100	100	100	100	-	100	100	100	100
If yes, Number of service firms that led to improved infrastructure															
Road	23.1	-	23.1	7.7	9.6	17.3	46.2	5.8	51.9	7.7	-	7.7	84.6	15.4	100
Electric	17.9	-	17.9	2.6	7.7	10.3	61.5	7.7	69.2	2.6	-	2.6	84.6	15.4	100
Hospital	27	-	27	0	8.1	8.1	56.8	8.1	64.9	-	-	-	83.8	16.2	100
Education	26.7	-	26.7	0	10	10	53.3	10	63.3	-	-	-	80	20	100
Drinking water	27.5	-	27.5	5	5	10	55	7.5	62.5	-	-	-	87.5	12.5	100
Recreation	29.7	-	29.7	0	5.4	5.4	51.4	8.1	59.5	5.4	-	5.4	86.5	13.5	100
Others	-	-	-	-	20	20	60	-	60	20	-	20	80	20	100

Note: Number of observations = 274

Chapter 8: FDI Data Reporting and Classification

8.1 Backdrop

The diverse nature and geographical spread of multinational enterprises within the economic territory of India has generated interest among policy makers and researchers in using FDI statistics for various purposes. This necessitates compiling FDI statistics according to a standard industrial classification that enables users to compare data across industry groups. Further, the regular analysis of investment trends, and identifying partner countries and industries should be part of macroeconomic policy planning. The timely availability of data helps in monitoring economic developments. In this context, the present chapter looks at the reporting and classification of FDI data in India.

8.2 Current System of FDI Classification in India

The Department of Industrial Policy and Promotion (DIPP) compiles FDI data. The data is collected and reported by the Reserve Bank of India (RBI) as unit records of various FDI inflow transactions. These unit records provide information about the name of the Indian company, name of the foreign investor, amount of foreign direct investment, route of inflow and the receiving sector. DIPP processes these unit records into a usable form and presents them in different ways. In general, FDI inflows are presented by route (RBI Automatic, FIPB and acquisition of shares), by country of origin and by sector.

DIPP follows the modified sectoral classification furnished in the Industries (Development and Regulation) Act, 1951 to present the FDI data by sector. The sectors of production/economic activity are classified into 43 main categories and 92 sub-categories (which include some of the main categories that do not have further sub-divisions). However, this classification constrains the effective use of FDI statistics in understanding the investment patterns by various industry groups, because the DIPP classification differs from the widely followed standard, namely, the National Industrial Classification (NIC), the latest one being NIC-2008. Some of the NIC categories are not included in DIPP 92 4-digit categories. It is, thus, desirable that FDI statistics should be presented according to a standard classification, which covers all fields of economic activity.

To compile FDI statistics, the Government of India follows the methodology proposed by the Technical Monitoring Group (TMG) on Foreign Direct Investment. TMG (2003) submitted its First Action Taken Report in October 2002, which laid down the procedures for compiling FDI statistics that are comparable with international best practices.

TMG identified 14 components to be included under three broader categories of FDI statistics: equity capital, reinvested earnings and other capital. Equity capital comprises equity in unincorporated entities; non-cash acquisition against technology transfer, plant and machinery, goodwill, business development and similar considerations, control premium and non-competition fee. Reinvested earnings include reinvested earnings of incorporated and unincorporated entities as well as reinvested earnings of indirectly held direct investment enterprises. Other capital comprises short-term and long-term borrowings, trade credit, suppliers' credit, financial leasing, financial derivatives, debt securities, and land and buildings.

The structure and functioning of multinational enterprises have changed with the increasing internationalisation of operations. This may impact the allocation of FDI in a particular economy or where FDI transactions taking place with



a partner country may switch to another country. Thus, the current methodology to compile FDI statistics in India needs to be revised to better reflect foreign direct investment positions (stocks) and transactions (flows).

8.3 OECD Methodology

In April 2008, the Organisation of Economic Cooperation and Development (OECD) brought out the fourth edition of the Benchmark Definition of Foreign Direct Investment. This incorporates recent changes in terms of the activities of multinational enterprises and types of investments these enterprises are undertaking across countries.

According to OECD (2008), “foreign direct investment reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor” (p.15). The purpose of establishing a long-term relationship by a direct investor with the direct investment enterprise is to exercise a significant influence on the management of the direct investment enterprise. The “lasting interest” is acquired when the direct investor owns at least 10 per cent of the voting power in the direct investment enterprise. Though opinions are divided on the cut-off percentage of voting power to be held by the direct investor to have an effective voice in the management of the direct investment enterprise, the OECD recommends the 10 per cent threshold to ensure statistical consistency across countries. The OECD’s Benchmark Definition embraces the concepts and definitions of the International Monetary Fund’s Balance of Payments and International Investment Positions Manual (BPM) as well as the System of National Accounts of the Commission of the European Communities, the International Monetary Fund, OECD, the United Nations and the World Bank.

8.4 Concept of Economic Territory and Residence

Foreign direct investment includes transactions/positions between a resident and a non-resident institutional unit. It excludes all transactions/positions between units that are residents of the same country. Thus, the concept of residence is important in determining cross-border investments between residents of two or more economic territories. Each institutional unit¹ is considered as a resident of one and only one economic territory.² According to the System of National Accounts, there are two types of institutional units, viz., households, and legal and social entities. Households can be direct investors but not direct investment enterprises. Legal and social entities include governments, corporations and non-profit institutions; they also include quasi-corporations, which are unincorporated enterprises belonging to households or government units, and they may behave in much the same ways as corporations. While only business enterprises can be both direct investors and direct investment enterprises, government and non-profit organisations can be direct investors but not direct investment enterprises. Though some units like households may have links with more than one economy, for statistical consistency they are attached to a single economic territory.

The Benchmark Definition does not classify foreign direct statistics by institutional sectors, i.e., enterprise (legal and social entities) types including corporations, quasi-corporations, branch, estates, other trusts and partnerships and special corporate structures.³ However, it is important to understand these institutional structures in determining whether a particular transaction or position should be included in foreign direct investment statistics. The classification of resident or non-resident institutional sectors is based on the principal product or products produced or distributed or service rendered by various enterprise types.

Five institutional sectors are classified by the Benchmark Definition and are the same sectors that are reported by the System of National Accounts. These are the non-financial corporation sector, financial corporation sector, government

-
1. Institutional unit is an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities.
 2. In the Benchmark Definition, "economic territory" has the dimension of physical location as well as legal jurisdiction and is under the economic control of a single government. The Benchmark also considers economic territory as country. However, it does not adhere to any legal (nationality) or statistical (economy) definition.
 3. For definitions of these terms, see OECD (2008), Chapter 3.



sector, non-profit institutions serving households sector, and the household sector. Enterprises can fall under any of these five sectors, and could be direct investors since any resident unit may own or control a non-resident unit that qualifies as a direct investment enterprise. However, enterprises covered under the non-financial corporation sector or the financial corporation sector can only be foreign direct investment enterprises, because households and governments cannot be owned or controlled by non-resident units. Further, non-profit institutions serving household sector may be established or owned by non-residents, but financial transactions are not driven by investment considerations and thus they are not generally regarded as direct investment enterprises.

8.5 Foreign Direct Investor-Foreign Direct Investment Enterprise Relationship

As discussed elsewhere, to include financial transactions or position as foreign direct investment, the two institutional units should be resident in different economies and they should be in a direct investment relationship. A foreign direct investor is an institutional unit resident in one economy that has acquired either directly or indirectly at least 10 per cent of the voting power of an enterprise or equivalent in an unincorporated enterprise that is resident in another economy. A direct investor can be an individual; a group of related individuals; an incorporated or unincorporated enterprise; a public or private enterprise; a group of related enterprises or a group of unrelated enterprises; a government body; an estate, trust or other societal organisation; or any combination of the above. In the case of two enterprises each owning 10 per cent or more of each other's voting power, each enterprise is an investor in the other.

A foreign direct investment enterprise is an enterprise resident, whether incorporated or the equivalent for an unincorporated, in one economy and in which an investor resident in another economy owns either directly or indirectly at least 10 per cent of voting power. The threshold ownership of 10 per cent voting power proves the existence of a direct investment relationship between the direct investor and the direct investment enterprise. It is important to identify the direct investment relationship in order to find the exact number of FDI-enabled enterprises to be included in the FDI statistics of a particular economy.

Further, it is important to consider the ownership stake of a direct investor in the ownership chain and the investor's relationship with an enterprise other than that of the original enterprise in which 10 per cent voting power is held. Consider that there are Enterprises A, B and C in different economies. Suppose Enterprise A owns 70 per cent of the voting power in Enterprise B and is considered as a direct investor in B. Enterprise B, in turn, has 60 per cent of the voting power in Enterprise C and is considered as a direct investor in C. It is clear that A has control over B and, through its control over B, it has indirect control over C. Thus, financial transactions between A and C should be relevant to FDI, even though A has no equity holding in C.

Similarly, a direct investor may have control over more than one direct investment enterprise. For instance, given the threshold voting power, Enterprise A can have control over B and C. While compiling FDI statistics, it is important to take into account the financial transactions between B and C, even though there is no equity participation between them. Enterprise B may raise capital and lend to C at concessional rates because they are both controlled by A. That is, enterprise A, B and C are in a foreign direct investment relationship and B and C are considered as "fellow enterprises" of one another. Based on the percentage of equity participation in the foreign direct investment relationship, a direct investment enterprise can be called a subsidiary or an associate.⁴

8.6 FDI Data Reporting

To record the direct investment between residents and non-residents, the Benchmark Definition recommends the use of two methods to account for the FDI data. They are the asset/liability principle and directional principle. Under the

4. For more details, see OECD (2008), Chapter 3.



asset/liability principle, while the FDI assets (both transactions and positions) of the compiling economy are allocated to the economies of residence of the non-resident debtors, the FDI liabilities are allocated to the economies of the non-resident creditors. All financial claims on and obligations to non-residents by residents can be reported by normal balance sheet data, showing gross assets and liabilities for positions and net transactions for each category.

The directional principle helps the compiling economy to determine whether the investment was inward (inward foreign direct investment) or outward (outward foreign direct investment). While the former originated abroad, the latter originated within the compiling economy. The directional principle should also cover the transactions and positions between fellow enterprises as described in the previous section. The determination of FDI by the compiling economy of the direction of investment (inward or outward) transactions and positions between a resident fellow enterprise and a non-resident fellow enterprise is made by reference to the broad residency of the ultimate controlling parent of the fellow enterprise. If the ultimate controlling parent is a resident of the compiling economy, the direct investment between the two fellow enterprises are categorised as outward foreign direct investment. However, if the ultimate controlling parent is not a resident of the compiling economy, the transactions and positions between the fellow enterprises are categorised as inward foreign direct investment.

The Benchmark Definition lays down a methodology to compile FDI data by type of FDI based on the purpose of investment. The types of FDI include mergers and acquisitions (M&A), greenfield investment, extension of capital (additional new investment) and financial restructuring. While M&A refers to the purchase or sale of existing equity, greenfield investments refer to an altogether new investment. Extension of capital relates to additional new investments as an expansion of an established business; it is both conceptually and in terms of economic impact similar to greenfield investments. Financial restructuring refers to investment for debt repayment or loss reduction.

8.7 Components of FDI

Under the asset/liability principle, the main components of FDI would include equity and debt instruments. Equity includes common and preferred shares (excluding non-participating preference shares), reserves, capital contributions and reinvestment of earnings. In fact, foreign direct investment includes all cross-border transactions and positions in equity between FDI-related enterprises. Further, dividends, distributed branch earnings, reinvested earnings and undistributed branch earnings are components of FDI income on equity. Specifically, equity comprises equity in branches; all shares in subsidiaries and associates (except non-participating preferred shares) and other contributions of an equity nature. The reinvestment of earnings includes the claims of direct investors, which is in proportion to equity held, on the retained earnings of direct investment enterprises.

The debt instruments included in FDI cover marketable securities such as bonds, debentures, commercial paper, promissory notes, non-participating preference shares and tradable non-equity securities as well as loans, deposits, trade credit and other accounts payable/receivable. There is also a category called “reverse investment”, which reflects the reverse of the standard FDI flows as the direct investor uses its influence to have its direct investment enterprises provide equity or debt financing for its own operations. This occurs when the director investor owns less than 10 per cent voting power to establish a separate direct investment relationship on its own with the direct investment enterprise.

Further, the direct investment assets and liabilities for equity and debt can be classified by the nature of the relationship between the resident and non-resident FDI enterprises. The direct investment assets can be ascribed to three categories, namely, (i) investment by a resident direct investor in its non-resident direct investment enterprises, (ii) reverse investment by a resident direct investment enterprise in its non-resident direct investors and (iii) investment by a resident fellow enterprise in non-resident fellow enterprises. Similarly, direct investment liabilities can be ascribed to



three categories, namely, (i) investment of a non-resident direct investor in resident direct investment enterprises, (ii) reverse investment of non-resident direct investment enterprises in resident direct investors and (iii) investment of non-resident fellow enterprises in resident fellow enterprises. These categories under the asset/liability principle can be further subdivided into sub-classes according to the residence of the ultimate controlling parent, that is, the direct investor at the top of the control chain. These classes can also be grouped by industrial activity and the residence of the FDI partners. Further, FDI accounts are presented in three blocks, viz., FDI positions,⁵ FDI transactions and FDI income. Information on these blocks can be obtained from the balance sheet entries of direct investors, direct investment enterprises and fellow enterprises.

However, under the directional principle the presentation of FDI statistics requires rearrangement of some of these building blocks. In case the direct investment enterprise holds less than 10 per cent of the voting power in its direct investors, any inverse investment (either equity or debt) from the direct investment enterprise to its direct investor is to be accounted for under outward or inward appropriately, as opposed to the asset/liability equivalent. Further, recording of transactions and positions between fellow enterprises under the directional principle is to be made appropriate by bringing modifications where necessary to their asset/ liability equivalents to provide the directional information.⁶ The presentation of data under the directional principle is the preferred one, especially for industry and country classification of FDI data.

8.8 Industry Classification of FDI Statistics

For better economic planning and decision making, investment enterprises should be grouped by type of economic or industrial activity. It should be made available both for inward and outward foreign direct investment by both the industry of direct investment enterprise and the industry of direct investor. In case the data cannot be compiled for both types, the Benchmark Definition recommends that the data should be compiled at least according to the activity of the direct investment enterprises, and this should be compiled for both inward and outward direct investment. The inward investment should reflect the industry of the resident direct investment enterprise and outward investment should show the industry of the non-resident direct investment enterprise.

Even though many direct investors and direct investment enterprises are involved in a wide range of economic activities, they must be classified into a single industry. In fact, the industry classification should be based on the principal economic activity, which can be determined based on the contribution of an activity to the value-added of the enterprise. Further, the presentation of the data should be based on the reporting enterprise. That is, if the reporting entity is a direct investment enterprise and, at the same time, a direct investor, its industry classification should be based on activities it conducts and should exclude activities conducted by its own FDI enterprises. In the case of subsidiaries, associates and branches of an enterprise, the industry of the enterprise should be the principal activity of that enterprise only. For international comparison and statistical consistency, the OECD Benchmark Definition recommends the use of the International Standard Industry Classification (ISIC) for compiling FDI statistics.⁷

8.9 Distribution of FDI by DIPP Classification

This section presents the distribution of FDI compiled from company records received from DIPP, which we used to prepare unique companies for drawing of samples. As mentioned, the distribution of FDI includes only FDI received by different companies in a particular year and does not include stock swaps, advance inflows, NRI schemes and other miscellaneous receipts. Table 8.1 shows the FDI inflows from 2000 to 2007. In terms of US dollars, FDI inflow increased from US\$2 billion in 2000 to US\$11 billion in 2006. Despite the slowdown in investment during 2003, it has

5. FDI position shows the level of investment at a given point of time. It is also referred to as FDI stocks.

6. For details, see OECD (2008), Chapter 4.

7. For details, see OECD (2008), Chapter 7.



picked up and surged from \$4 billion in 2005 to \$11 billion in 2006. In terms of SDR volume, a similar trend in FDI inflows can be observed.

Table 8.2 shows the distribution of FDI by DIPP sectors. It may be observed from the table that during January 2000 – June 2007, the service sector accounted for the highest amount of FDI inflows (21.6 per cent), followed by electrical equipment (19.8 per cent) and miscellaneous industries (15.4 per cent). Within the service sector, financial and other services attracted about 10.3 per cent and 5.5 per cent, respectively, while banking services attracted about 2 per cent of FDI. Within the electrical equipment sector, the computer software industry attracted the highest share at 15.8 per cent, followed by electrical equipment with 2.4 per cent. Miscellaneous industries comprise major activities like construction, real estate, diamonds, ornaments and gold, agriculture (hybrid seeds and plantation), floriculture, tea/coffee and printing of books. Among these groups, construction and real estate received about 4.9 per cent and 2.9 per cent, respectively. Further, telecommunications received about 9.8 per cent of cumulative FDI.

The FDI inflows by country of origin are presented in Table 8.3. FDI inflows from various investing countries, by and large, showed an increasing trend. Among the countries, Mauritius emerged as the top country through which 44.9 per cent of the total FDI reached India. The bilateral agreements, including the Double Taxation Avoidance Act between India and Mauritius, favoured companies located in Mauritius that invested in India. The US and the UK accounted for about 9.7 per cent and 8.6 per cent of total FDI inflows, respectively. Japan, one of the highest contributors of official development assistance in India, accounted for about 4.6 per cent of total FDI.

The country-wise FDI inflows in DIPP 4-digit sub-sectors of the aggregate 92 sectors provides more detailed sectoral information about FDI inflows (Table 8.4). Among the top investing countries, the maximum FDI from Mauritius and the United States appears in the sub-categories of computer software industry and financial services. Inflows from the UK are concentrated in the sub-category “other services”. The Netherlands has invested in the computer software industry, “other miscellaneous industries” and “other services”. Investments from Japan are concentrated in the sub-categories of electrical equipment and the automobile industry, including passenger cars. Singapore has invested in financial services, “other miscellaneous industries” and “other services”. Inflows from Germany are concentrated in “other miscellaneous industries”, chemicals and insurance.

8.10 Concordance between DIPP and National Industrial Classification (NIC), 2008

As discussed elsewhere, the sectoral classification of FDI should reflect all economic activities taking place in the economic territory of India. India's NIC 2008 is based on the International Standard Industrial Classification (ISIC) Revision 4, which is widely used by countries to compile FDI statistics. Details of the DIPP classification are provided in Table 8.5. Here, we have attempted to construct a concordance table between DIPP 92 4-digit sectors and the NIC-2008 classification at 2 and 3 digits; NIC-2008 has 99 sectors at the 2-digit level and 238 sectors at the 3-digit level. The concordance schemes are provided in Table 8.6 and Table 8.7, respectively. We have created an additional 93rd DIPP sector (4300) that contains all the NIC sectors which could not be covered under any of the 92 DIPP 4-digit sectors. Thus, our mapping concordance is comprehensive and includes all the 2-digit and 3-digit NIC-2008 sectors.

8.11 Recommendation

To conclude, DIPP follows the modified sectoral classification furnished in the Industries Development and Regulation Act, 1951 to present FDI data by sector. However, this classification is inadequate as it is based on a high level of aggregation of economic activities. The widely followed standard classification is the National Industrial Classification. Therefore, NCAER recommends that DIPP base its FDI statistics classification on NIC-2008.



Table 8.1

Trends in FDI Inflows to India

Year	FDI (US\$ million)	FDI (SDR million)
2000	2347.0	1778.2
2001	3520.2	2762.6
2002	3358.7	2615.6
2003	2078.4	1481.7
2004	3212.6	2171.1
2005	4353.7	2963.7
2006	11117.2	7525.9
2007*	8128.6	5389.0
Total	38116.4	26687.8

Source: DIPP, Ministry of Commerce and Industry.

Note: *Up to June 2007.



Table 8.2
FDI inflows by Sector and Year (US\$ million)

Sector	Sector Name	2000	2001	2002	2003	2004	2005	2006	2007*	Total	% Share
Code											
100	METALLURGICAL INDUSTRIES	15.3	33.4	43.6	31.6	186.6	142.3	175.7	102.5	731	1.9
101	FERROUS	6.2	20.4	0.5	0	0.8	3.1	29.4	0	60.4	0.2
102	NON-FERROUS	0	0	11	7.1	3.2	84	56.4	4.9	166.7	0.4
103	SPECIAL ALLOYS	4.5	5.9	18	1	164.6	47.7	73.8	58.9	374.4	1
104	MINING SERVICES	0.8	3.4	10.7	23.4	10.7	6.3	3.3	19.3	77.9	0.2
199	MISC.(OTHER ITEM(S))-METALLURGY	3.8	3.8	3.4	0	7.2	1.3	12.9	19.4	51.8	0.1
200	FUELS (POWER & OIL REFINERY)	112.6	387.4	647.5	161.3	155.6	62.6	259.6	113.1	1899.6	5
201	POWER	110.7	183.3	635.3	39.1	54.4	34.3	197.9	47.8	1302.8	3.4
202	OIL REFINERY	1.9	203.7	5.3	0.6	4.6	8.4	59.9	56.3	381.9	1
299	OTHERS (FUELS)	0	0.5	6.8	121.6	55.2	19.9	1.9	8	213.9	0.6
300	BOILERS AND STEAM-GENERATING PLANTS	0	0	0	0	0	0.5	3.3	0	3.8	0
400	PRIME MOVERS OTHER THAN ELECTRICAL	0	0	0	0	0.1	0	0	0	0.3	0
500	ELECTRICAL EQUIPMENT (INCL S/M & ELEC)	279.2	455.9	664.6	295	861.9	1023.2	2035.8	1949.4	7565.2	19.8
501	ELECTRICAL EQUIPMENT	76.8	43.8	56.6	66.5	107.2	24.3	81.5	467.1	923.8	2.4
502	COMPUTER SOFTWARE INDUSTRY	193.4	394.3	348.8	117.5	671	923.1	1915.4	1462	6025.6	15.8
503	ELECTRONICS	8.1	11.9	247.2	110.5	80.5	64	27.9	19.9	569.9	1.5
504	COMPUTER HARDWARE	0.6	4.5	0.7	0.3	1.6	11.9	9.5	0.4	29.5	0.1
599	OTHERS (S/W)	0.4	1.3	11.3	0.2	1.5	0	1.5	0	16.4	0
600	TELECOMMUNICATIONS	159.4	949.9	189.4	172	139.1	215.7	971.7	926.2	3723.4	9.8
601	TELECOMMUNICATIONS	78.5	516.6	65.2	76.9	125.8	156	896	56.4	1971.3	5.2
602	RADIO PAGING	0	2.5	0	0	0	0	0	0	2.5	0
603	CELLULAR MOBILE/BASIC TELEPHONE SERVICE	1.3	424.3	86.6	48.8	0.1	0	34.5	802.8	1398.4	3.7
604	TELECOMMUNICATIONS (I&B)	79.7	6	28	21.8	8.6	57.4	41	67	309.5	0.8
699	OTHERS (TELECOMMUNICATIONS)	0	0.5	9.7	24.6	4.6	2.2	0.1	0	41.7	0.1
700	TRANSPORTATION INDUSTRY	283.3	308.1	442.5	328.9	175.2	218.6	402.3	298.3	2457.4	6.4
701	AUTOMOBILE INDUSTRY	145.2	222.4	46.6	95.8	115.5	34.4	10.6	1.1	671.6	1.8
702	AIR/SEA TRANSPORT	3.6	18.3	30.5	24.6	23.8	54.5	70.4	56.6	282.3	0.7
703	PASSENGER CARS	100.7	1	291.5	11.9	0.5	9.7	163.1	27	605.4	1.6
704	AUTO ANCILLARIES/PARTS	33.9	30.5	63.3	67.1	16	29.3	38.9	42.3	321.3	0.8
705	PORTS	0	15.4	0.1	117.9	13.6	0.5	0	0	147.4	0.4
706	RAILWAY-RELATED COMPONENTS	0	0	0	0	0	17.8	24.5	3.7	45.9	0.1



Sector Code	Sector Name	2000	2001	2002	2003	2004	2005	2006	2007*	Total	% Share
707	AIR FREIGHT	0	0	0	0	0	12	49.2	103.3	164.5	0.4
799	OTHERS (TRANSPORT)	0	20.4	10.5	11.7	5.9	60.5	45.6	64.5	219	0.6
800	INDUSTRIAL MACHINERY	4.9	27.3	16.3	10.4	9.4	33.8	25.9	16.6	144.4	0.4
900	MACHINE TOOLS	2.4	4.8	13.7	8.4	57.7	23	34.6	7.2	151.7	0.4
1000	AGRICULTURAL MACHINERY	3.6	0	14.5	0	0	61.6	56.3	0	136.1	0.4
1100	EARTH-MOVING MACHINERY	2.1	0.1	13.8	0	0.1	50.9	1	0	67.9	0.2
1200	MISCELLANEOUS MECHANICAL & ENGINEERING	25.5	77.4	27.8	41.5	15.6	50.4	51	62.4	351.7	0.9
1300	COMMERCIAL, OFFICE & HOUSEHOLD EQUIPMENT	12.8	3.4	2.5	10.8	2.4	35.6	6.2	41.7	115.4	0.3
1400	MEDICAL AND SURGICAL APPLIANCES	2.3	42.8	24.5	2.1	4.9	1.7	2	11.9	92.2	0.2
1500	INDUSTRIAL INSTRUMENTS	0	6.1	0.9	1.3	1.1	0	0.4	0	9.7	0
1600	SCIENTIFIC INSTRUMENTS	5.5	4.9	0.2	0	0	0.1	0.1	0	10.8	0
1800	FERTILISERS	0.1	0	16.4	21.6	13.5	4.2	5	0.3	61	0.2
1900	CHEMICALS (OTHER THAN FERTILISERS)	125.2	65.6	120.8	61.9	188.7	147.9	400	76.1	1186.2	3.1
1901	CHEMICALS	125.1	65	116.2	61.6	188.1	127.2	362.2	51.4	1096.8	2.9
1902	PAINTS & VARNISHES	0.1	0.6	4.1	0.4	0.6	20.5	5	3.9	35	0.1
1903	INDUSTRIAL GASES	0	0	0.5	0	0	0.1	32.9	20.8	54.3	0.1
2000	PHOTOGRAPHIC RAW FILM AND PAPER	0	0	0.4	0.5	0.3	6	2.7	0.1	10	0
2100	DYE-STUFFS	1.1	0	0.2	0.4	1.2	0	0	0	2.8	0
2200	DRUGS AND PHARMACEUTICALS	48.4	90.7	52.3	60.7	341.4	116.3	216.1	72	977.9	2.6
2300	TEXTILES (INCL. DYED, PRINTED)	1.9	4.5	45.9	18.2	38.8	79	117.5	40.1	345.8	0.9
2400	PAPER AND PULP INCL. PAPER PRODUCTS	60.5	11.1	11.4	7.3	3.8	27.4	5	2.1	128.6	0.3
2500	SUGAR	0	0	4	0.1	2.9	3	15.7	0.8	26.5	0.1
2600	FERMENTATION INDUSTRIES	16	11	7.8	2	7.4	171.6	4.3	43.9	264	0.7
2700	FOOD-PROCESSING INDUSTRIES	51.7	63.5	197.3	66.9	80.7	40.7	54	54.9	609.5	1.6
2701	FOOD PRODUCTS	51.6	63.5	195	56.4	54.5	14	45.5	53.5	534	1.4
2702	MARINE PRODUCTS	0	0	1.2	1.7	1.3	0.7	0.4	0	5.3	0
2799	MISCELLANEOUS (FOOD PROD.)	0.1	0	1.1	8.8	24.9	26	8.1	1.3	70.2	0.2
2800	VEGETABLE OILS AND VANASPATI	0	0	0	1.2	5.9	13.7	4.4	14.3	39.6	0.1
2900	SOAPs, COSMETICS AND TOILET PREPARATIONS	0	0	0	0	0.9	87.3	1.6	5.7	95.4	0.3
3000	RUBBER GOODS	3.8	0.7	46.3	18.1	43.8	34.2	18.4	4.1	169.3	0.4
3100	LEATHER AND LEATHER PRODUCTS	3.1	7.1	0.1	7	0.4	1	7.8	0.8	27.3	0.1
3200	GLUE AND GELATINE	0	0	6.2	0	0	0	0	0	6.2	0
3300	GLASS	33.9	8.3	44.8	5.5	8.4	0.8	1.5	0.5	103.6	0.3



Sector	Sector Name	2000	2001	2002	2003	2004	2005	2006	2007*	Total	% Share
Code											
3400	CERAMICS	1.9	2.9	0.3	1.4	26.3	6.2	44.5	13.5	96.9	0.3
3500	CEMENT AND GYPSUM PRODUCTS	73.9	138.3	23	9.6	0.2	452.1	209.7	38.3	944.9	2.5
3600	TIMBER PRODUCTS	0	0	0	0.1	0	0.4	0	0	0.6	0
3700	DEFENCE INDUSTRIES	0	0	0	0	0	0.1	0	0	0.1	0
3800	CONSULTANCY SERVICES	4.8	64.9	20.9	53.8	258	37	121.2	16.6	577.4	1.5
3801	DESIGN & ENG. SERVICES	0	15.1	0.8	21.5	1.1	12.1	9.3	0	59.9	0.2
3802	MANAGEMENT SERVICES	4.8	46.9	19.6	24.8	132.9	22.3	88.5	13	352.8	0.9
3803	MARKETING	0	0.1	0.1	7.3	119.6	0.3	5.9	1	134.4	0.4
3804	CONSTRUCTION	0	0	0.2	0	0	0.1	10.8	0	11.1	0
3899	OTHERS (CONSULTANCY SERVICE)	0	2.9	0.2	0.2	4.4	2.3	6.7	1.2	17.8	0
3900	SERVICE SECTOR	43.3	182.3	320.5	293.3	249	716.1	3938.4	2476.2	8219	21.6
3901	FINANCIAL	24.9	76.5	160.6	178.1	71.8	344.3	1912.1	1173.6	3941.8	10.3
3902	NON-FINANCIAL SERVICES	0.2	8.2	0.4	0.1	22.1	0.4	46.5	354.4	432.2	1.1
3903	BANKING SERVICES	11.8	.	91.2	10.1	84.3	82.9	131.7	350.7	762.8	2
3904	INSURANCE	6.4	90.8	374	34.8	36.2	69.8	74.5	154.2	504.1	1.3
3905	HOSPITAL & DIAGNOSTIC CENTRES	0	5.9	274	17	15	51	31.5	50.4	198.2	0.5
3906	OUTSOURCING	0	0	0	0	3.2	11.4	31.9	72.4	118.9	0.3
3907	RESEARCH & DEVELOPMENT	0	0	0	0	0	2	22	36.9	59.4	120.3
3908	EDUCATION	0	0	0	0	0.5	5.9	46.1	1.2	53.7	0.1
3999	OTHER SERVICES	0	0.9	3.5	53.2	14	128.5	1627	260	2087	5.5
4000	HOTEL & TOURISM	12.2	10.5	46.6	56.3	33.1	63.7	179.8	139.9	542	1.4
4001	HOTELS & RESTAURANTS	10.9	4.2	38.1	45.7	17.9	61.4	173.8	111.3	463.2	1.2
4002	TOURISM	1.3	5	2.8	1.8	14.2	0.7	5.3	25.5	56.6	0.1
4099	OTHERS (HOTEL & TOURISM)	0	1.2	5.7	8.8	1	1.6	0.7	3.1	22.1	0.1
4100	TRADING	28.8	49	38	18	15	28.4	84.7	66.9	328.8	0.9
4101	TRADING (FOR EXPORTS)	4.8	5.7	23.2	4.4	0.9	0	0.8	0.2	39.9	0.1
4102	TRADING (ACTIVITIES)	24	29.5	74	13.6	14.1	28.4	83.8	66.7	267.5	0.7
4103	E-COMMERCE	0.1	13.8	7.4	0	0	0	0.1	0	21.5	0.1
4200	MISCELLANEOUS INDUSTRIES	927.6	508.3	254	311.1	283.4	396.9	1659.3	1532	5872.6	15.4
4201	HORTICULTURE	0	0	0	0	0.4	0.5	0	0.5	1.4	0
4202	AGRICULTURE (HYBRID SEEDS & PLANTATION)	0.1	28.6	6.6	8.1	2	8.2	1.3	58.6	113.5	0.3
4203	FLORICULTURE	0	0	0	0	0	0.3	0	0	0.3	0
4204	DIAMOND	0	0.1	0.7	1.3	4.2	11.5	8.3	4.1	30.3	0.1
4205	ORNAMENT & GOLD	0.1	18.9	0.7	0.8	2.7	4.2	50.1	3.2	80.7	0.2
4206	CONSTRUCTION ACTIVITIES	23.1	21.5	40.3	46.1	139.5	115.8	812.1	678.4	1876.9	4.9
4207	TEA/COFFEE	0.1	20.2	0.1	0.3	0	1.4	6.2	0	28.3	0.1
4209	PRINTING OF BOOKS ETC.	0	0	6.3	0.1	12.3	9.5	48.8	7.1	84.1	0.2
4210	COIR	0	0	0	0	0.4	0.1	0.6	0	1.1	0
4211	REAL ESTATE	0	26.8	0	0	0	19.5	466.2	610.6	1123.1	2.9
4299	OTHERS (MISC INDUSTRIES)	904.2	392.3	199.4	254.4	121.8	225.9	265.6	170.8	2534.3	6.6
	Total	2347	3520.2	3358.7	2078.4	3212.6	4353.7	1117.2	8128.6	3816.4	100

Source: NCAER compilation based on DIPI, Ministry of Commerce and Industry.
Note: * Up to June 2007.



Table 8.3

Trends in FDI Inflows by Country of Origin (US\$ million)

Country	2000	2001	2002	2003	2004	2005	2006	2007*	Total	% share
Mauritius	829.9	1667.4	1517.5	562.1	1003.5	2115.2	4883.4	4541.5	17120.5	44.9
U.S.A.	418.4	367.5	282.6	413.6	647.4	471.7	731.5	508.6	3841.3	10.1
U.K.	65.5	285.4	353.9	187.5	143.1	219.2	1749.6	270.4	3274.5	8.6
Netherlands	127.2	229.2	155.7	252.6	495.2	119.3	494.9	301.9	2175.9	5.7
Japan	229.3	221.4	412.6	94.4	116	168.2	116.1	404.2	1762.1	4.6
Singapore	116.6	35.7	47.1	36.5	62.1	321.4	620.5	426.4	1666.3	4.4
Germany	86.4	133	138.1	78.8	158.1	83.3	312.6	265.8	1256	3.3
France	79.4	132.2	110.4	35.7	115	29.3	85.4	55.9	643.4	1.7
Switzerland	43.5	39.6	52.4	93.2	68.2	83	69.3	115	564.2	1.5
Bermuda	2.8	32.4	3.4	0.2	3.1	0.1	413.5	0.1	455.6	1.2
Others	348.2	376.3	284.8	324.1	401.2	743	1640.8	1238.8	5356.8	14.2
Total	2347.2	3520.1	3358.5	2078.7	3212.9	4353.7	11117.6	8128.6	38116.6	100

Source: NCAER compilation based on DIPP, Ministry of Commerce and Industry.

Note: * Up to June 2007.



**Table 8.4
FDI distribution by Country and Sector (Jan 2000 - June 2007) (\$ million)**

Country/ DIPP Code	502	3901	4299	3999	601	4206	603	201	4211	1901	2200	3500	501	3903	701	703	503	2701	3904	4001
Mauritius	3643.7	2046.7	850.7	141.5	1650.1	832	1310.4	1019.4	738.1	232.8	487.5	659.9	113.2	385.7	71.6	24	83.6	242.6	34.6	247.4
U.S.A.	791.3	444.9	339	25.6	86.2	188.1	2	52.2	16.9	38.3	151.6	7.3	107.9	211.5	95.5	55.5	52.9	50.8	53.4	19.7
U.K.	113.6	192.6	139.9	1505.6	4.9	15.8	55	64.3	1.9	21	60.7	0	4.7	24.9	2.3	2.6	184.4	1.2	111.9	35.3
Netherlands	517.3	77.9	199.8	148.3	30	0.7	0	56.4	150	215.8	45	136	6.4	12.1	5.1	20.6	38.9	26.5	42.4	0.6
Japan	23.3	32	147.7	11.8	52.9	22.6	0	1.9	0	10.8	0	0	380.1	0	326.1	296.1	39.9	11.4	13.8	0.8
Singapore	62.5	588.3	164	155.6	18	164.7	0	10.8	19.6	14.1	50	2.5	18.8	21.9	2.6	4.3	19.4	7	0	37.8
Germany	16	72.7	125.7	9.9	0.5	48.1	0	25	0	257.3	19.4	0	32.4	0	23.8	1.5	4.1	40.1	127.2	0.7
France	24.1	45.7	177.1	2.3	3.9	0	0.5	8.5	0	105.3	10.8	98.4	8.2	0.4	0.3	16.5	1.9	0.5	3.7	1.9
Switzerland	15.8	15.7	78.8	30.5	2.9	1.9	2.9	1.9	0	66.8	12	0	3.9	75.1	0.5	0	1.9	71.5	0.2	15
Bermuda	1.6	0	1	0.1	3.8	400.4	0	0	0.2	0	0	5.3	0	0	0	0	0	0	13.1	0
Others	815.9	425	310.1	55.8	118.3	202.6	27.7	62.4	196.6	133.8	160	40.9	243	31.1	144	184.2	143.1	82.7	103.9	104.3
Total	6025.1	3941.5	2533.8	2087	1971.5	1876.9	1398.5	1302.8	1123.1	1096.2	997	945	923.9	762.7	671.8	605.3	570.1	534.3	504.2	463.5

Source: NCAER compilation based on DIPP, Ministry of Commerce and Industry.



Table 8.5

DIPP Classification of FDI by Economic Activity

SECTOR-WISE CODE	
0100 METALLURGICAL INDUSTRIES	
0101	FERROUS
0102	NON-FERROUS
0103	SPECIAL ALLOYS
0104	MINING SERVICE
0199	MISC. (OTHER ITEMS)-METALLURGY
0200 FUELS (POWER & OIL REFINERY)	
0201	POWER
0202	OIL REFINERY
0203	POWER (OTHER)
0204	OIL REFINERY (OTHER)
0299	OTHERS (FUELS)
0300	BOILERS AND STEAM-GENERATING PLANTS
0400	PRIME MOVERS OTHER THAN ELECTRICAL
0500 ELECTRICAL EQUIPMENT (INCL S/W & ELEC)	
0501	ELECTRICAL EQUIPMENT
0502	COMPUTER SOFTWARE INDUSTRY
0503	ELECTRONICS
0504	COMPUTER HARDWARE
0599	OTHERS (S/W)
0600 TELECOMMUNICATIONS	
0601	TELECOMMUNICATIONS
0602	RADIO PAGING
0603	CELLULAR MOBILE/BASIC TELEPHONE SERVICE
0604	TELECOMMUNICATIONS (I&B)
0699	OTHERS (TELECOMMUNICATIONS)
0700 TRANSPORTATION INDUSTRY	
0701	AUTOMOBILE INDUSTRY
0702	AIR/SEA TRANSPORT
0703	PASSENGER CARS
0704	AUTO ANCILLARIES/PARTS
0705	PORTS
0706	RAILWAY-RELATED COMPONENTS
0707	AIR FREIGHT
0799	OTHERS (TRANSPORT)
0800 INDUSTRIAL MACHINERY	
0900	MACHINE TOOLS
1000	AGRICULTURAL MACHINERY
1100	EARTH-MOVING MACHINERY
1200	MISCELLANEOUS MECHANICAL & ENGINEERING

**SECTOR-WISE CODE**

1300 COMMERCIAL, OFFICE & HOUSEHOLD EQUIPMENT

1400 MEDICAL AND SURGICAL APPLIANCES

1500 INDUSTRIAL INSTRUMENTS

1600 SCIENTIFIC INSTRUMENTS

1700 MATHEMATICAL, SURVEYING AND DRAWING

1800 FERTILISERS

1900 CHEMICALS (OTHER THAN FERTILISERS)

1901 CHEMICALS

1902 PAINTS & VARNISHES

1903 INDUSTRIAL GASES

2000 PHOTOGRAPHIC RAW FILM AND PAPER

2100 DYE-STUFFS

2200 DRUGS AND PHARMACEUTICALS

2300 TEXTILES (INCL. DYED, PRINTED)

2400 PAPER AND PULP (INCLUDING PAPER PRODUCTS)

2500 SUGAR

2600 FERMENTATION INDUSTRIES

2700 FOOD-PROCESSING INDUSTRIES

2701 FOOD PRODUCTS

2702 MARINE PRODUCTS

2799 MISCELLANEOUS (FOOD PROD)

2800 VEGETABLE OILS AND VANASPATI

2900 SOAPS, COSMETICS AND TOILET PREPARATIONS

3000 RUBBER GOODS

3100 LEATHER AND LEATHER PRODUCTS

3200 GLUE AND GELATINE

3300 GLASS

3400 CERAMICS

3500 CEMENT AND GYPSUM PRODUCTS

3600 TIMBER PRODUCTS

**SECTOR-WISE CODE**

3700 DEFENCE INDUSTRIES

3800 CONSULTANCY SERVICES

3801 DESIGN & ENG. SERVICES
3802 MANAGEMENT SERVICES
3803 MARKETING
3804 CONSTRUCTION
3899 OTHERS (CONSULTANCY SERVICES)

3900 SERVICE SECTOR

3901 FINANCIAL
3902 NON-FINANCIAL SERVICES
3903 BANKING SERVICES
3904 INSURANCE
3905 HOSPITAL & DIAGNOSTIC CENTRES
3906 OUTSOURCING
3907 RESEARCH & DEVELOPMENT
3908 EDUCATION
3999 OTHER SERVICES

4000 HOTEL & TOURISM

4001 HOTEL & RESTAURANTS
4002 TOURISM
4099 OTHERS (HOTEL & TOURISM)

4100 TRADING

4101 TRADING (FOR EXPORTS)
4102 TRADING (ACTIVITIES)
4103 E-COMMERCE
4104 RETAIL TRADING

4200 MISCELLANEOUS INDUSTRIES

4201 HORTICULTURE
4202 AGRICULTURE (HYBRID SEEDS & PLANTATION)
4203 FLORICULTURE
4204 DIAMOND
4205 ORNAMENT & GOLD
4206 CONSTRUCTION ACTIVITIES
4207 TEA/COFFEE
4208 CIGARETTES
4209 PRINTING OF BOOKS, ETC.
4210 COIR
4211 REAL ESTATE
4299 OTHERS (MISC INDUSTRIES)



Table 8.6

Concordance Between DIPP Classification and NIC 2-Digit (2008)

S. No.	DIPP Code	DIPP Activity	NIC 2-Digit (2008)	NIC 2-Digit Activity (2008)
1 100 METALLURGICAL INDUSTRIES				
1.1	101	FERROUS	24	Manufacture of basic metals
1.2	102	NON-FERROUS	24	Manufacture of basic metals
1.3	103	SPECIAL ALLOYS	24	Manufacture of basic metals
1.4	104	MINING SERVICE	06,09, 05, 07,08	Extraction of crude petroleum and natural gas (06) ; Mining support service activities (09);Mining of coal and lignite (05);Mining of metal ores (07);Other mining and quarrying (08)
1.5	199	MISC. [OTHER ITEMS]-METALLURGY	25	Manufacture of fabricated metal products, except machinery and equipment
2 200 FUELS (POWER & OIL REFINERY)				
2.1	201	POWER	35	Electricity, gas, steam and air-conditioning supply
2.2	202	OIL REFINERY	19	Manufacture of coke and refined petroleum products
2.3	299	OTHERS (FUELS)	35	Electricity, gas, steam and air-conditioning supply
3	300	BOILERS AND STEAM-GENERATING PLANTS	25	Manufacture of fabricated metal products, except machinery and equipment
4	400	PRIME MOVERS OTHER THAN ELECTRICAL	28	Manufacture of machinery and equipment n.e.c.
5 500 ELECTRICAL EQUIPMENT (INCL S/W & ELEC)				
5.1	501	ELECTRICAL EQUIPMENT	27	Manufacture of electrical equipment
5.2	502	COMPUTER SOFTWARE INDUSTRY	62	Computer programming, consultancy and related activities
5.3	503	ELECTRONICS	26	Manufacture of computer, electronic and optical products
5.4	504	COMPUTER HARDWARE	28	Manufacture of machinery and equipment n.e.c.
5.5	599	OTHERS (S/W)	62	Computer programming, consultancy and related activities
6 600 TELECOMMUNICATIONS				
6.1	601	TELECOMMUNICATIONS	61	Telecommunications
6.2	602	RADIO PAGING	61	Telecommunications
6.3	603	CELLULAR MOBILE/BASIC TELEPHONE SERVICE	61	Telecommunications
6.4	604	TELECOMMUNICATIONS (I&B)	60	Broadcasting and programming activities
6.5	699	OTHERS (TELECOMMUNICATIONS)	61	Telecommunications
7 700 TRANSPORTATION INDUSTRY				
7.1	701	AUTOMOBILE INDUSTRY	29	Manufacture of motor vehicles, trailers and semi-trailers
7.2	702	AIR/SEA TRANSPORT	50,51	Water transport (50); Air transport (51)
7.3	703	PASSENGER CARS	29	Manufacture of motor vehicles, trailers and semi-trailers
7.4	704	AUTO ANCILLARIES/PARTS	29	Manufacture of motor vehicles, trailers and semi-trailers
7.5	705	PORTS	50	Water transport
7.6	706	RAILWAY-RELATED COMPONENTS	30	Manufacture of other transport equipment
7.7	707	AIR FREIGHT	51	Air transport
7.8	799	OTHERS (TRANSPORT)	30,49	Manufacture of other transport equipment (30); Land transport and transport via pipelines 49)
8	800	INDUSTRIAL MACHINERY	28	Manufacture of machinery and equipment n.e.c.
9	900	MACHINE TOOLS	28	Manufacture of machinery and equipment n.e.c.
10	1000	AGRICULTURAL MACHINERY	28	Manufacture of machinery and equipment n.e.c.
11	1100	EARTH-MOVING MACHINERY	28	Manufacture of machinery and equipment n.e.c.
12	1200	MISCELLANEOUS MECHANICAL & ENGINEERING	28	Manufacture of machinery and equipment n.e.c.
13	1300	COMMERCIAL, OFFICE & HOUSEHOLD EQUIPMENT	31	Manufacture of furniture



S. No.	DIPP Code	DIPP Activity	NIC 2-Digit (2008)	NIC 2-Digit Activity (2008)
14	1400	MEDICAL AND SURGICAL APPLIANCES	32	Other manufacturing
15	1500	INDUSTRIAL INSTRUMENTS	32	Other manufacturing
16	1600	SCIENTIFIC INSTRUMENTS	32	Other manufacturing
18	1800	FERTILISERS	20	Manufacture of chemicals and chemical products
19	1900	CHEMICALS (OTHER THAN FERTILISERS)		
19.1	1901	CHEMICALS	20	Manufacture of chemicals and chemical products
19.2	1902	PAINTS & VARNISHES	20	Manufacture of chemicals and chemical products
19.3	1903	INDUSTRIAL GASES	20	Manufacture of chemicals and chemical products
20	2000	PHOTOGRAPHIC RAW FILM AND PAPER	20	Manufacture of chemicals and chemical products
21	2100	DYE-STUFFS	20	Manufacture of chemicals and chemical products
22	2200	DRUGS AND PHARMACEUTICALS	21	Manufacture of pharmaceuticals, medicinal chemical and botanical products
23	2300	"TEXTILES (INCL. DYED, PRINTED)"	13	Manufacture of textiles
24	2400	PAPER AND PULP INCLUDING PAPER PRODUCTS	17	Manufacture of paper and paper products
25	2500	SUGAR	10	Manufacture of food products
26	2600	FERMENTATION INDUSTRIES	11	Manufacture of beverages
27	2700	FOOD-PROCESSING INDUSTRIES		
27.1	2701	FOOD PRODUCTS	10	Manufacture of food products
27.2	2702	MARINE PRODUCTS	10	Manufacture of food products
27.3	2799	MISCELLANEOUS (FOOD PROD)	10	Manufacture of food products
28	2800	VEGETABLE OILS AND VANASPATI	10	Manufacture of food products
29	2900	SOAPs, COSMETICS AND TOILET PREPARATIONS	20	Manufacture of chemicals and chemical products
30	3000	RUBBER GOODS	22	Manufacture of rubber and plastics products
31	3100	LEATHER and LEATHER PRODUCTS	15	Manufacture of leather and related products
32	3200	GLUE AND GELATINE	20	Manufacture of chemicals and chemical products
33	3300	GLASS	23	Manufacture of other non-metallic mineral products
34	3400	CERAMICS	23	Manufacture of other non-metallic mineral products
35	3500	CEMENT AND GYPSUM PRODUCTS	23	Manufacture of other non-metallic mineral products
36	3600	TIMBER PRODUCTS	16	Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
37	3700	DEFENCE INDUSTRIES	28	Manufacture of machinery and equipment n.e.c.
38	3800	CONSULTANCY SERVICES		
38.1	3801	DESIGN & ENG. SERVICES	62	Computer programming, consultancy and related activities
38.2	3802	MANAGEMENT SERVICES	62	Computer programming, consultancy and related activities
38.3	3803	MARKETING	46,47, 45	Wholesale trade, except of motor vehicles and motorcycles (46); Retail trade, except of motor vehicles and motorcycles (47); Wholesale and retail trade and repair of motor vehicles and motorcycles (45)
38.4	3804	CONSTRUCTION	41,42,43	Construction of buildings (41); Civil engineering (42); Specialised construction activities (43)
38.5	3899	OTHERS (CONSULTANCY SERVICES)	62,70,82	Computer programming, consultancy and related activities (62); Activities of head offices; management consultancy activities (70); Office administrative, office support and other business support activities (82)
39	3900	SERVICE SECTOR		
39.1	3901	FINANCIAL	64	Financial service activities, except insurance and pension funding
39.2	3902	NON-FINANCIAL SERVICES	65	Insurance, reinsurance and pension funding, except compulsory social security
39.3	3903	BANKING SERVICES	64	Financial service activities, except insurance and pension funding



S. No.	DIPP Code	DIPP Activity	NIC 2-Digit (2008)	NIC 2-Digit Activity (2008)
39.4	3904	INSURANCE	65	Insurance, reinsurance and pension funding, except compulsory social security
39.5	3905	HOSPITAL & DIAGNOSTIC CENTRES	86	Human health activities
39.6	3906	OUTSOURCING	62	Computer programming, consultancy and related activities
39.7	3907	RESEARCH & DEVELOPMENT	72,74	Scientific research and development (72); Other professional, scientific and technical activities (74)
39.8	3908	EDUCATION	85	Education
39.9	3999	OTHER SERVICES	94,33,39,53, 56,63,66,69,80,81, 88,,90,91,95,96	Repair and installation of machinery and equipment (33); Activities of membership organisations (94); Remediation activities and other waste management services (39); Postal and courier activities (53); Food and beverage service activities (56); Information service activities (63); Other financial activities (66); Legal and accounting activities (69); Security and investigation activities (80); Services to buildings and landscape activities (81); Social work activities without accommodation (88); Creative, arts and entertainment activities (90); Libraries, archives, museums and other cultural activities (91); Repair of computers and personal and household goods (95); Other personal service activities (96)
40	4000	HOTEL & TOURISM		
40.1	4001	HOTEL & RESTAURANTS	55	Accommodation
40.2	4002	TOURISM	79	Travel agency, tour operator and other reservation service activities
40.3	4099	OTHERS (HOTEL & TOURISM)	55	Accommodation
41	4100	TRADING		
41.1	4101	TRADING (FOR EXPORTS)	46,47	Wholesale trade, except of motor vehicles and motorcycles (46); Retail trade, except of motor vehicles and motorcycles (47)
41.2	4102	TRADING (ACTIVITIES)	46,47	Wholesale trade, except of motor vehicles and motorcycles (46); Retail trade, except of motor vehicles and motorcycles (47)
41.3	4103	E-COMMERCE	46,47	Wholesale trade, except of motor vehicles and motorcycles (46); Retail trade, except of motor vehicles and motorcycles (47)
42	4200	MISCELLANEOUS INDUSTRIES		
42.1	4201	HORTICULTURE	1	Crop and animal production, hunting and related service activities
42.2	4202	AGRICULTURE (HYBRID SEEDS & PLANTATION)	01,02,03	Crop and animal production, hunting and related service activities (01); Forestry and logging (02); Fishing and aquaculture (03)
42.3	4203	FLORICULTURE	1	Crop and animal production, hunting and related service activities
42.4	4204	DIAMOND	32	Other manufacturing
42.5	4205	ORNAMENT & GOLD	32	Other manufacturing
42.6	4206	CONSTRUCTION ACTIVITIES	41,71	Construction of buildings (41); Architecture and engineering activities; technical testing and analysis (71)
42.7	4207	TEA/COFFEE	10	Manufacture of food products
42.8	4209	PRINTING OF BOOKS, ETC.	18	Printing and reproduction of recorded media
42.9	4210	COIR	13	Manufacture of textiles
42.1	4211	REAL ESTATE	68,77,87	Real estate activities (68); Rental and leasing activities (77); Residential care activities (87)



S. No.	DIPP Code	DIPP Activity	NIC 2-Digit (2008)	NIC 2-Digit Activity (2008)
42.11	4299	OTHERS (MISC INDUSTRIES)	32,12,14,58,98	Other manufacturing (32); Manufacture of tobacco products (12); Manufacture of wearing apparel (14); Publishing activities (58); Undifferentiated goods- and services-producing activities of private households for own use (98)
43	4300	OTHERS NOT COVERED ABOVE	36,37,38,52,59, 73,75,78,84,92, 93,97,99	Water collection, treatment and supply (36); Sewerage (37); Waste collection, treatment and disposal activities; materials recovery (38); Warehousing and support activities for transportation (52); Motion picture, video and television programme production, sound recording (59); Advertising and Market Research (73); Veterinary activities (75); Employment activities (78); Public administration and defence, compulsory social security (84); Gambling and Betting activities (92); Sports activities and amusement and recreation activities (93); Activities of households as employers of domestic personnel (97); Activities of extraterritorial organisations and bodies (99)



Table 8.7
Concordance between DIIPP Classification and NIC 3-digit (2008)

S. No.	DIIPP Code	DIIPP Activity	NIC 3-Digit (2008)	NIC 3-Digit Activity (2008)
1	0100	METALLURGICAL INDUSTRIES		
1.1	0101	FERROUS	241	Manufacture of basic iron and steel
1.2	0102	NON-FERROUS	242,243	Manufacture of basic precious and other non-ferrous metals[242]; Casting of metals[243]
1.3	0103	SPECIAL ALLOYS	242	Manufacture of basic precious and other non-ferrous metals
1.4	0104	MINING SERVICE	091,051,052,061, 062,071,072,081, 089,099	Support activities for petroleum and natural gas mining; Mining of lignite (051); Mining of oil (052); Extraction of crude petroleum (061); Extraction of natural gas (062); Mining of iron ores (071); Mining of non-ferrous metal ores (072); Quarrying of stone, sand and clay (081); Mining and quarrying n.e.c.(089); Support activities for petroleum and natural gas mining (091); Support activities for other mining and quarrying (099)
1.5	0199	MISC.(OTHER ITEMS)-METALLURGY	259,252	Manufacture of other fabricated metal products; metalworking service activities (259); Manufacture of weapons and ammunition (252);
2	0200	FUELS (POWER & OIL REFINERY)	351	Electric power generation, transmission and distribution
2.1	0201	POWER	192,191	Manufacture of coke oven products (191); Manufacture of refined petroleum products
2.2	0202	OIL REFINERY	352,353	Manufacture of gas; distribution of gaseous fuels through mains (352); Steam and air conditioning supply (353)
2.3	0299	OTHERS(FUELS)		
3	0300	BOILERS AND STEAM-GENERATING PLANTS	251	Manufacture of structural metal products, tanks, reservoirs and steam generators (251)
4	0400	PRIME MOVERS OTHER THAN ELECTRICAL	281	Manufacture of general purpose machinery
5	0500	ELECTRICAL EQUIPMENT (INCL S/W & ELEC)		
5.1	0501	ELECTRICAL EQUIPMENT	271, 272, 273, 274, 275, 279	Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus (271); Manufacture of batteries and accumulators (272); Manufacture of wiring and wiring devices (273); Manufacture of electric lighting equipment (274); Manufacture of domestic appliances (275); Manufacture of other electrical equipment (279)
5.2	0502	COMPUTER SOFTWARE INDUSTRY	620	Computer programming, consultancy and related activities
5.3	0503	ELECTRONICS	261, 262, 263, 264, 265, 266, 267, 268	Manufacture of electronic components (261); Manufacture of computers and peripheral equipment (262); Manufacture of communications equipment (263); Manufacture of consumer electronics (264); Manufacture of measuring, testing, navigating and control equipment; watches and clocks (265); Manufacture of irradiation, electromedical and electrotherapeutic equipment (266); Manufacture of optical instruments and equipment (267); Manufacture of magnetic and optical media (268)
5.4	0504	COMPUTER HARDWARE	281	Manufacture of general purpose machinery
5.5	0599	OTHERS (S/W)	620	Computer programming, consultancy and related activities



S. No.	DIPP Code	DIPP Activity	NIC 3-Digit (2008)	NIC 3-Digit Activity (2008)
6	600	TELECOMMUNICATIONS	611, 612, 613	Wired telecommunications activities (611); Wireless telecommunications activities (612); Satellite telecommunications activities (613)
6.1	601	TELECOMMUNICATIONS		
6.2	602	RADIO PAGING	612	Wireless telecommunications activities
6.3	603	CELLULAR MOBILE/BASIC TELEPHONE SERVICES	612	Wireless telecommunications activities
6.4	604	TELECOMMUNICATIONS [&B]	601, 602	Radio broadcasting (601); Television programming and broadcasting activities (602)
6.5	699	OTHERS [TELECOMMUNICATIONS]	619	Other telecommunications activities
7	700	TRANSPORTATION INDUSTRY		
7.1	701	AUTOMOBILE INDUSTRY	291, 292, 293	Manufacture of motor vehicles (291); Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers (292); Manufacture of parts and accessories for motor vehicles (293)
7.2	702	AIR/SEA TRANSPORT	511, 501	Passenger air transport (511); Sea and coastal water transport (501)
7.3	703	PASSENGER CARS	291	Manufacture of motor vehicles
7.4	704	AUTO ANCILLARIES/PARTS	293	Manufacture of parts and accessories for motor vehicles
7.5	705	PORTS	502	Inland water transport
7.6	706	RAILWAY-RELATED COMPONENTS	302	Manufacture of railway locomotives and rolling stock
7.7	707	AIR FREIGHT	512	Freight air transport
7.8	799	OTHERS [TRANSPORT]	309, 491, 492, 493	Manufacture of transport equipment n.e.c. (309); Transport via railways (491); Other land transport (492); Transport via pipeline (493)
8	800	INDUSTRIAL MACHINERY	282	Manufacture of special-purpose machinery
9	900	MACHINE TOOLS	282	Manufacture of special-purpose machinery
10	1000	AGRICULTURAL MACHINERY	282	Manufacture of special-purpose machinery
11	1100	EARTH-MOVING MACHINERY	282	Manufacture of special-purpose machinery
12	1200	MISCELLANEOUS MECHANICAL & ENGINEERING	711	Architectural and engineering activities and related technical consultancy
13	1300	COMMERCIAL, OFFICE & HOUSEHOLD EQUIPMENT	310	Manufacture of furniture
14	1400	MEDICAL AND SURGICAL APPLIANCES	325	Manufacture of medical and dental instruments and supplies
15	1500	INDUSTRIAL INSTRUMENTS	325	Manufacture of medical and dental instruments and supplies
16	1600	SCIENTIFIC INSTRUMENTS	325	Manufacture of medical and dental instruments and supplies
18	1800	FERTILISERS	201	Manufacture of basic chemicals, fertiliser and nitrogen compounds, plastics and synthetic rubber in primary forms
19	1900	CHEMICALS [OTHER THAN FERTILISERS]	201	Manufacture of basic chemicals, fertiliser and nitrogen compounds, plastics and synthetic rubber in primary forms
19.1	1901	CHEMICALS		



S. No.	DIPP Code	DIPP Activity	NIC 3-Digit Activity (2008)	NIC 3-Digit Activity (2008)
19.2	1902	PAINTS & VARNISHES	202	Manufacture of other chemical products
19.3	1903	INDUSTRIAL GASES	201	Manufacture of basic chemicals, fertiliser and nitrogen compounds, plastics and synthetic rubber in primary forms
20	2000	PHOTOGRAPHIC RAW FILM AND PAPER	202	Manufacture of other chemical products
21	2100	DYE-STUFFS	202	Manufacture of other chemical products
22	2200	DRUGS AND PHARMACEUTICALS	210	Manufacture of pharmaceuticals, medicinal chemical and botanical products
23	2300	TEXTILES (INCL. DYED, PRINTED)	131	Spinning, weaving and finishing of textiles
24	2400	PAPER AND PULP INCLUDING PAPER PRODUCTS	170	Manufacture of paper and paper products
25	2500	SUGAR	107	Manufacture of other food products
26	2600	FERMENTATION INDUSTRIES	110	Manufacture of beverages
27	2700	FOOD-PROCESSING INDUSTRIES		Processing and preserving of meat [101]; Processing and preserving of fruit and vegetables [103];
27.1	2701	FOOD PRODUCTS	101, 103, 105, 106	Manufacture of grain mill products, starches and starch products [106]
27.2	2702	MARINE PRODUCTS	102	Processing and preserving of fish, crustaceans and molluscs
27.3	2799	MISCELLANEOUS (FOOD PROD)	107, 108, 104	Manufacture of other food products [107]; Manufacture of prepared animal feeds [108]; Manufacture of vegetable and animal oils and fats [104]
28	2800	VEGETABLE OILS AND VANASPATI	104	Manufacture of vegetable and animal oils and fats
29	2900	SOAPs, COSMETICS AND TOILET PREPARATIONS	202	Manufacture of other chemical products
30	3000	RUBBER GOODS	221, 222	Manufacture of rubber products [221]; Manufacture of plastics products [222]
31	3100	LEATHER AND LEATHER PRODUCTS	151, 152	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur [151]; Manufacture of footwear [152]
32	3200	GLUE AND GELATINE	202	Manufacture of other chemical products
33	3300	GLASS	231	Manufacture of glass and glass products
34	3400	CERAMICS	239	Manufacture of non-metallic mineral products n.e.c.
35	3500	CEMENT AND GYPSUM PRODUCTS	239	Manufacture of non-metallic mineral products n.e.c.
36	3600	TIMBER PRODUCTS	161, 162	Sawmilling and planning of wood [161]; Manufacture of products of wood, cork, straw and plaiting materials [162]
37	3700	DEFENCE INDUSTRIES	281	Manufacture of general purpose machinery
38	3800	CONSULTANCY SERVICES		
38.1	3801	DESIGN & ENG. SERVICES	620	Computer programming, consultancy and related activities
38.2	3802	MANAGEMENT SERVICES	620	Computer programming, consultancy and related activities



S. No.	DIPP Code	DIPP Activity	NIC 3-Digit Activity (2008)
38.3	3803	MARKETING	461, 471, 451, 452, 453, 454, 462, 463, 464, 465, 466, 472, 473, 474, 475, 476, 477, 478 Retail sale in non-specialised stores [47]; Sale of motor vehicles [451]; Maintenance and repair of motor vehicles [452]; Sale of motor vehicle parts and accessories [453]; Sale, maintenance and repair of motorcycles and related parts and accessories [454]; Retail sale of food, beverages and tobacco in specialised stores [472]; Retail sale of automotive fuel in specialised stores [473]; Retail sale of information and communications equipment in specialised stores [474]; Retail sale of other household equipment in specialised stores [475]; Retail sale of cultural and recreation goods in specialised stores [476]; Retail sale of other goods in specialised stores [477]; Retail sale via stalls and markets [478]; Wholesale on a fee or contract basis [461]; Wholesale of agricultural raw materials and live animals [462]; Wholesale of food, beverages and tobacco [463]; Wholesale of household goods [464]; Wholesale of machinery, equipment and supplies [465]; Other specialised wholesale [466]
38.4	3804	CONSTRUCTION	410, 421, 422, 429, 431, 432, 433, 439 Construction of buildings [410]; Construction of roads and railways [421]; Construction of utility projects [422]; Construction of other civil engineering projects [429]; Demolition and site preparation [431]; Electrical, plumbing and other construction installation activities [432]; Building completion and finishing [433]; Other specialised construction activities [439]
38.5	3899	OTHERS (CONSULTANCY SERVICE)	620, 701, 702, 821, 822, 823, 829 Computer programming, consultancy and related activities [620]; Activities of head offices [701]; Management consultancy activities [702]; Office administrative and support activities [821]; Activities of call centres [822]; Organisation of conventions and trade shows [823]; Business support service activities n.e.c. [829]
39	3900	SERVICE SECTOR	
39.1	3901	FINANCIAL	641, 642, 643 Monetary intermediation [641]; Other financial service activities, except insurance and pension funding activities [649]; Activities of holding companies [642]; Trusts, funds and other financial vehicles [643]
39.2	3902	NON-FINANCIAL SERVICES	652, 653 Reinsurance [652]; Pension funding [653]
39.3	3903	BANKING SERVICES	641 Monetary intermediation
39.4	3904	INSURANCE	651 Insurance
39.5	3905	HOSPITAL & DIAGNOSTIC CENTRES	861, 862, 869 Hospital activities [861], Medical and dental practice activities [862]; Other human health activities [869]
39.6	3906	OUTSOURCING	620 Computer programming, consultancy and related activities
39.7	3907	RESEARCH & DEVELOPMENT	721, 722, 741, 742, 749 Research and experimental development on natural sciences and engineering [721]; Research and photographic activities [742]; Other professional, scientific and technical activities n.e.c. [749]
39.8	3908	EDUCATION	851, 852, 853, 854, 855 Primary education [851]; Secondary education [852]; Higher education [853]; Other education [854]; Educational support services [855]



S. No.	DIPP Code	DIPP Activity	NIC 3-Digit (2008)	NIC 3-Digit Activity (2008)
39.9	3999	OTHER SERVICES	941, 942, 949, 331, 332, 390, 531, 532, 561, 562, 563, 631, 639, 361, 662, 663, 691, 692, 801, 802, 803, 811, 812, 813, 881, 889, 900, 910, 951, 952, 960	Repair of fabricated metal products, machinery and equipment [331]; Installation of industrial machinery and equipment [332]; Activities of business, employers and professional membership organisations [941]; Activities of trade unions [942]; Activities of other membership organisations [949]; Remediation activities and other waste management services [390]; Postal activities [531]; Courier activities [532]; Restaurants and mobile food service activities [561]; Event catering and other food service activities [562]; Beverage serving activities [563]; Data processing, hosting and related activities [631]; Other information service activities [639]; Activities auxiliary to financial service activities, except insurance and pension funding [661]; Activities auxiliary to insurance and pension funding [662]; Fund management activities [663]; Legal activities [691]; Accounting, bookkeeping and auditing activities; tax consultancy [692]; Private security activities [801]; Security systems service activities [802]; Investigation activities [803]; Combined facilities support activities [811]; Cleaning activities [812]; Landscape care and maintenance service activities [813]; Social work activities without accommodation for the elderly and disabled [881]; Other social work activities without accommodation n.e.c. [889]; Creative, arts and entertainment activities [900]; Libraries, archives, museums and other cultural activities [910]; Repair of computers and communications equipment [951]; Repair of personal and household goods [952]; Other personal service activities [960]
40	4000	HOTEL & TOURISM	551, 552	Short term accommodation activities [551]; Camping grounds, recreational vehicle parks and trailer parks [552]
40.1	4001	HOTELS & RESTAURANTS	551, 552	Short term accommodation activities [551]; Camping grounds, recreational vehicle parks and trailer parks [552]
40.2	4002	TOURISM	791, 799	Travel agency and tour operator activities [791]; Other reservation service activities [799]
40.3	4099	OTHERS (HOTEL & TOURISM)	559	Other accommodation
41	4100	TRADING	461, 471, 462, 463, 464, 465, 466, 472, 473, 474, 475, 476, 477, 478	Wholesale on a fee or contract basis [461]; Retail sale in non-specialised stores [471]; Retail sale of food, beverages and tobacco in specialised stores [472]; Retail sale of automotive fuel in specialised stores [473]; Retail sale of information and communications equipment in specialised stores [474]; Retail sale of other household equipment in specialised stores [475]; Retail sale of cultural and recreation goods in specialised stores [476]; Retail sale of other goods in specialised stores [477]; Retail sale via stalls and markets [478]; Wholesale on a fee or contract basis [461]; Wholesale of agricultural raw materials and live animals [462]; Wholesale of food, beverages and tobacco [463]; Wholesale of household goods [464]; Wholesale of machinery, equipment and supplies [465]; Other specialised wholesale [466]
41.1	4101	TRADING (FOR EXPORTS)	461, 471, 462, 463, 464, 465, 466, 472, 473, 474, 475, 476, 477, 478	Wholesale on a fee or contract basis [461]; Retail sale in non-specialised stores [471]; Retail sale of food, beverages and tobacco in specialised stores [472]; Retail sale of automotive fuel in specialised stores [473]; Retail sale of information and communications equipment in specialised stores [474]; Retail sale of other household equipment in specialised stores [475]; Retail sale of cultural and recreation goods in specialised stores [476]; Retail sale of other goods in specialised stores [477]; Retail sale via stalls and markets [478]; Wholesale on a fee or contract basis [461]; Wholesale of agricultural raw materials and live animals [462]; Wholesale of food, beverages and tobacco [463]; Wholesale of household goods [464]; Wholesale of machinery, equipment and supplies [465]; Other specialised wholesale [466]
41.2	4102	TRADING (ACTIVITIES)	461, 462, 463, 464, 465, 466, 471, 472, 473, 474, 475, 476, 477, 478	Wholesale on a fee or contract basis [461]; Retail sale in non-specialised stores [471]; Retail sale of food, beverages and tobacco in specialised stores [472]; Retail sale of automotive fuel in specialised stores [473]; Retail sale of information and communications equipment in specialised stores [474]; Retail sale of other household equipment in specialised stores [475]; Retail sale of cultural and recreation goods in specialised stores [476]; Retail sale of other goods in specialised stores [477]; Retail sale via stalls and markets [478]; Wholesale on a fee or contract basis [461]; Wholesale of agricultural raw materials and live animals [462]; Wholesale of food, beverages and tobacco [463]; Wholesale of household goods [464]; Wholesale of machinery, equipment and supplies [465]; Other specialised wholesale [466]
41.3	4103	E-COMMERCE	469, 479	Non-specialised wholesale trade [469]; Retail trade not in stores, stalls or markets [479]



S. No.	DIPP Code	DIPP Activity	NIC 3-Digit Activity (2008)
42	4200	MISCELLANEOUS INDUSTRIES	
42.1	4201	HORTICULTURE	11,912 Growing of non-perennial crops [011]; Growing of perennial crops [012]
42.2	4202	AGRICULTURE (HYBRID SEEDS & PLANTATION)	011, 013, 016,014, 015,017,021,022, 023,024,031,032 Silviculture and other forestry activities [016]; Support services to agriculture and post-harvest crop activities [016]; Gathering of non-wood forest products [023]; Support services to forestry [024]; Fishing [031]; Aquaculture [032]
42.3	4203	FLORICULTURE	11 Growing of non-perennial crops
42.4	4204	DIAMOND	321 Manufacture of jewellery, bijouterie and related articles
42.5	4205	ORNAMENT & GOLD	321 Manufacture of jewellery, bijouterie and related articles
42.6	4206	CONSTRUCTION ACTIVITIES	410,421,711,712 Construction of buildings [410]; Construction of roads and railways [421]; Architectural and engineering activities and related technical consultancy [711]; Technical testing and analysis [712]
42.7	4207	TEA/COFFEE	
42.8	4209	PRINTING OF BOOKS, ETC.	181,182 Printing and service activities related to printing [181]; Reproduction of recorded media [182]
42.9	4210	COIR	139 Manufacture of other textiles
42.11	4211	REAL ESTATE	681,682,771,772, 773,774, 871, 872, 873, 879 Leasing of non-financial intangible assets [774]; Nursing care facilities [871]; Residential care activities for mental retardation, mental health and substance abuse [872]; Residential care activities for the elderly and disabled [873]; Other residential care activities n.e.c. [879]
42.11	4299	OTHERS (MISC INDUSTRIES)	329,120, 141,142, 143,581, 582,981,982, 203,301,303,304, 322,323,324,252 Manufacture of man-made fibres [203];Other manufacturing n.e.c. [329]; Manufacture of tobacco products [120]; Manufacture of wearing apparel, except fur apparel [141]; Manufacture of articles of fur [142]; Manufacture of knitted and crocheted apparel [143]; Publishing of books, periodicals and other publishing activities [581]; Software publishing [582]; Undifferentiated goods-producing activities of private households for own use [981]; Undifferentiated service-producing activities of private households for own use [982]; Building of ships and boats [301]; Manufacture of air and spacecraft and related machinery [303]; Manufacture of military fighting vehicles [304]; Manufacture of musical instruments [322]; Manufacture of sports goods [323]; Manufacture of games and toys [324]; Manufacture of weapons and ammunition [252]
43	4300	OTHERS NOT COVERED ABOVE	360, 370, 381,382, 383, 521, 522, 591, 592, 731, 732, 750, 781, 782, 783, 841, 842, 843, 920, 931, 932, 970, 990 Water collection, treatment and supply [360]; Sewerage [370]; Waste collection [381]; Waste treatment and disposal [382]; Materials recovery [383]; Warehousing and storage [521]; Support activities for transportation [522]; Motion picture, video and television programme activities [591]; Sound recording and music publishing activities [592]; Advertising [731]; Market research and public opinion polling [732]; Veterinary activities [750]; Activities of employment placement agencies [781]; Temporary employment agency activities [782]; Human resources provision and management of human resources functions [783]; Administration of the State and the economic and social policy of the community [841]; Provision of services to the community as a whole [842]; Compulsory social security activities [843]; Gambling and betting activities [920]; Sports activities [931]; Other amusement and recreation activities [932]; Activities of households as employers of domestic personnel [970]; Activities of extraterritorial organisations and bodies [990]

Chapter 9: Maps of Spatial Spread of FDI-Enabled Firms

9.1 Introduction

The spatial spread of FDI-enabled firms (both services and manufacturing) is one of the major objectives of the study. With the help of the Capitaline database, as described in Chapter 6 of the study, an attempt has been made to further depict the spatial spread of FDI firms, both services and manufacturing, using thematic maps.

Capitaline data provided us with 503 FDI companies, of which 403 were manufacturing and 100 were service companies. The 403 manufacturing companies comprised 1240 plants, which are spread across 306 towns in various states of India. Similarly, 100 service companies operate through 1,257 facilities that are distributed across 381 towns in various states. In total, the plants and facilities of FDI companies are located in 687 towns.

Using the addresses of the plants and service firms, the 1,240 plants and 1,257 facilities were arranged district-wise with pin codes and plotted on a map of India with state boundaries to see the spatial spread of FDI-enabled firms across the states. The Equal Ranges method was used to group the plants/facilities into district clusters before plotting them on the map.

The Equal Ranges method is a common classification technique that provides the values of ranges to plot maps.¹ The range values obtained from the Equal Ranges Method best represent the data values of the map.

Using the Equal Ranges Method, we plotted 10 maps (five for manufacturing firms and five for service facilities) by super-imposing the cluster of FDI plants/facilities on a different base each time. The maps are described below and appended to this section.

Box 1: Equal Range Method

This method establishes the minimum and maximum values of the data items. The difference between the minimum and maximum is calculated and then divided by the number of ranges (i.e., 5) to establish the equal range value. For example, the minimum number of persons born overseas is 578 and the maximum number of persons born overseas is 14,547. The difference is 13,969, which is divided by the number of ranges (i.e., 5), which equals 2793. The ranges are divided into segments of 2,800, i.e., 500 to 3,300, 3300 to 6,100, etc.

Source: Australian Bureau of Statistics, Hints and Tips - Range Methods of Thematic Maps.

9.2 Spread of FDI-enabled Manufacturing Plants

Map 1: Spatial spread of FDI-enabled plants in India

The spatial spread of FDI-enabled plants shows that there are 1,240 plants spread across 306 cities across India. Of these 1,240 plants, 721 plants are located in 264 Class-3 cities, 85 plants in 21 Class-2 cities and 434 plants in 21 Class-1 cities.

1. Other classification techniques include the Equal Count Method, Natural Break Method, Standard Deviation Method, and Quantile Method.



In a cluster of plants comprising more than 49 plants, there are 181 plants and all these plants are Class-1 cities. In the cluster ranging between 25-49 plants, there are 109 plants in Class-1 cities and 100 plants in Class-3 cities. There are no plants in Class-2 cities in this range. In the cluster ranging up to 25 plants, the maximum number of plants (621) is in 261 Class-3 cities, 144 plants are located in 15 Class-1 cities and 85 plants are in 21 Class-3 cities.

Map 2: Based on Population (2001) in Lakhs

The spatial spread of FDI-enabled plants superimposed on population (2001) in lakhs in different districts of India shows that there are 14 plants in 11 Class-3 cities in districts with populations above 77 lakh. There are 36 plants in two Class-1 cities located in districts with populations above 77 lakh, and 26 plants in two Class-2 cities.

In districts with populations ranging between 58-77 lakh, there are 152 plants in three Class-1 cities and 13 plants in eight Class-3 cities. However, there are no plants in Class-2 cities in districts with populations in the range of 58-77 lakh.

In districts with populations between 38-58 lakh, there are 140 plants in eight Class-1 cities, 12 plants in four Class-2 cities and 20 plants in 13 Class-3 cities.

In districts with populations ranging between 19-38 lakh, there are 97 plants in 7 Class-1 cities, 65 plants in 13 Class-2 cities and 223 plants in 89 Class-3 cities.

In districts with populations up to 19 lakh, there are 9 plants in one Class-1 city, 2 plants in two Class-2 cities and 451 plants spread across 143 Class-3 cities. The average population per city is the maximum for Class-1 cities in all ranges. Overall, FDI plants tend to get located in Class-3 cities in districts with populations between 19-38 lakh and up to 19 lakh, whereas FDI-enabled plants in Class-1 cities are generally located in districts with populations in the range of 58-77 lakh and 38-58 lakh.

Map 3: Based on Population Density (persons per square kilometre)

The spatial spread of FDI-enabled plants superimposed on population density (persons per square kilometre) shows that there are 235 plants spread across seven Class-1 cities in districts with a population density above 2,000 persons per square kilometre. There is only 1 plant in one Class-2 city and 23 plants in eight Class-3 cities.

In districts with a population density between 1000-2000 persons per square kilometre, there are 18 plants in 3 Class-1 cities, 18 plants in 3 Class-2 cities and 35 plants in 18 Class-3 cities. There are, in total, 71 plants in 24 Class-1, Class-2, and Class-3 cities in districts with a population density between 1000-2000 persons per square kilometre.

There are 74 plants in 6 Class-1 cities in districts with a population density ranging between 500-1000 persons per square kilometre. In the same range, there are 38 plants in 10 Class-2 cities and 209 plants in 65 Class-3 cities spread across India.

In districts with populations ranging from 200-500 persons per square kilometre, there are 107 plants in 5 Class-1 cities, 25 plants in 6 Class-2 cities and 383 plants in 142 Class-3 cities.

In districts with a population density of 200 persons per square kilometre there are no plants in Class-1 cities, 3 plants in Class-2 cities and 71 plants in 31 Class-3 cities.

Therefore, the map of the spatial spread of FDI-enabled plants based on population density shows that population density is not an important determinant for the location of FDI-enabled plants. The majority of the plants are located



in Class-1 and Class-3 cities, with a population density in the range of 500-1000 and 200-500 persons per square kilometre, respectively.

Map 4: Based on Literacy Rates

High literacy rates are important determinants of the location of FDI-enabled plants across districts in India. In districts with literacy rates of >74 per cent, there are 398 plants spread across 16 Class-1 cities, 27 plants spread across 8 Class-2 cities and 255 plants in 108 Class-3 cities.

In districts with literacy rates ranging between 52-74 per cent, there are a large number of plants in Class-3 cities. There are 448 plants in 141 Class-3 cities, 56 plants in 11 Class-2 cities and 36 plants in 5 Class-1 cities.

In districts with literacy rates up to 52 per cent, there are no plants in Class-1 cities, 2 plants in Class-2 cities and 18 plants in 15 Class-3 cities. The largest numbers of FDI plants (680) are found in 132 Class-1, Class-2, and Class-3 cities in districts with literacy rates above 74 per cent.

Map 5: Based on Poverty Levels

The maximum number of FDI-enabled plants (630) is concentrated in districts (162 Class-1, Class-2, and Class-3 cities) where the percentage of people living below the poverty line is up to 26 per cent.

In districts where the percentage of people living below the poverty line is above 53 per cent, there are 155 plants in 6 Class-1 cities, 33 plants in 7 Class-2 cities and 176 plants in 62 Class-3 cities.

In districts where the percentage of people living below the poverty line is between 26-53 per cent, there are 32 plants in 4 Class-1 cities, 9 plants in 3 Class-2 cities and 205 plants in 62 Class-3 cities.

In districts with poverty levels up to 26 per cent there are 247 plants in 11 Class-1 cities, 43 plants in 11 Class-2 cities and 340 plants in 140 Class-3 cities.

Districts with a lower number of people living below poverty (< 26 per cent) attract more FDI-enabled plants across all three categories of cities.

9.3 Spread of FDI-enabled Service Facilities

Map 6: Spatial Spread of FDI-enabled Facilities in India

The map of spatial spread of FDI-enabled service facilities shows that there are 1,257 service-enabled FDI facilities spread across 381 Class-1, Class-2, and Class-3 cities with the average size of the service facility per city being 3.3. The maximum FDI-enabled service facilities (774) are in a cluster comprising up to 47 service facilities. In this cluster, there are 173 plants in 19 Class-1 cities, 156 plants in 39 Class-3 cities and 445 plants in 318 Class-3 cities.

In the cluster of 47-93 FDI-enabled service facilities, there are 125 facilities in two Class -1 cities and no facilities in Class-2 and Class-3 cities.

In the cluster of >93 FDI-enabled facilities, there are 358 facilities in three Class-1 cities and no facilities in Class-2 and Class-3 cities.

The map shows that FDI-enabled service facilities are largely concentrated in Class-1 cities.



Map 7: Based on Population (2001) in Lakhs.

In districts with populations up to 19 lakh, there are 64 FDI-enabled service facilities in 3 Class-1 cities, 20 facilities in 8 Class-2 cities and 178 facilities in 103 Class-3 cities.

In districts with populations ranging between 19-38 lakh, there are 241 facilities in 10 Class-1 cities, 102 facilities in 25 Class 2 cities and 220 facilities in 180 Class-3 cities.

In districts with population between 38-58 lakh, there are 171 facilities in 3 Class-1 cities, and 6 facilities in 6 Class-3 cities, with no facilities in Class-2 cities.

In districts with populations between 58-77 lakh, there are 171 facilities in 3 Class-1 cities, and 6 facilities in 6 Class-3 cities, with no facilities in Class-2 cities.

In districts with populations above 77 lakh, there is one facility in Class-1 city, 8 facilities in one Class-2 city and 9 facilities in one Class-3 city. Therefore, districts with large populations of above 77 lakh have fewer FDI-enabled service facilities.

Map 8: Based on Population Density (Persons per square kilometre)

The maximum number of FDI-enabled service facilities (550) is in districts with a population density above 2000 persons per square kilometre spread across 21 cities. Of these 550 facilities, 526 facilities are in 7 Class-1 cities, 8 in 1 Class-2 city and 16 facilities in 13 Class-3 cities.

In districts with a population density ranging between 1000-2000 persons per square kilometre, there are altogether 68 facilities spread across 24 cities of India. Of these 68 facilities, 16 are in 7 Class-1 cities, 31 in 4 Class-2 cities and 21 facilities in 15 Class-3 cities.

In districts with a population density between 500-1000 persons per square kilometre, there are 190 FDI-enabled service facilities spread across 68 Class-1, Class-2 and Class-3 cities. Of these 190 facilities, 46 facilities are in 8 Class-1 cities, 47 facilities in 14 Class-2 cities and 97 facilities in 46 Class-3 cities.

In districts where the population density is low, i.e., ranging between 200-500 persons per square kilometre, there are 353 facilities spread across 196 Class-1, Class-2, and Class-3 cities. Of these 353 facilities, 68 facilities are spread across 4 Class-1 cities, 61 facilities are spread across 17 Class-2 cities and 224 facilities are situated in 175 Class-3 cities.

In districts with a population density up to 200 persons per square kilometre, there are no facilities in Class-1 cities. There are 9 facilities in 3 Class-2 cities and 87 facilities in 318 Class-3 cities.

Based on the above analysis, it can be concluded that less densely populated regions (up to 200 and between 200-500 persons per square kilometre) do not attract FDI-enabled service facilities in Class-1 cities.

Map 9: Based on Literacy Levels

In districts with literacy levels above 74 per cent, there are 818 facilities, of which 614 are in Class-1 cities, 80 in Class-2 cities and 124 in Class-3 cities.

In districts with literacy rates between 52-74 per cent, there are 416 facilities spread across the three categories of cities,



of which 42 are in Class-1 cities, 75 in Class-2 cities and 299 in Class-3 cities.

In districts with literacy rates up to 52 per cent, there are no facilities in Class-1 cities, only 1 facility in Class-2 cities and 22 facilities in 19 Class-3 cities. Overall, FDI-enabled service facilities tend to concentrate in districts with high literacy rates in all classes of cities.

Map 10: Based on Poverty Levels

The map of spatial spread of FDI-enabled service facilities based on poverty shows that in districts with up to 26 per cent of the population living below the poverty line, there are 746 service facilities spread across 233 Class-1, Class-2, and Class-3 cities. Of the 746 facilities, 384 facilities are in Class-1 cities, 88 in Class-2 cities and 274 in Class-3 cities. In districts where the percentage of people below the poverty line is between 26-53 per cent, there are 116 facilities of which 31 are in Class-1 cities, 13 in Class-2 cities and 72 in Class-3 cities.

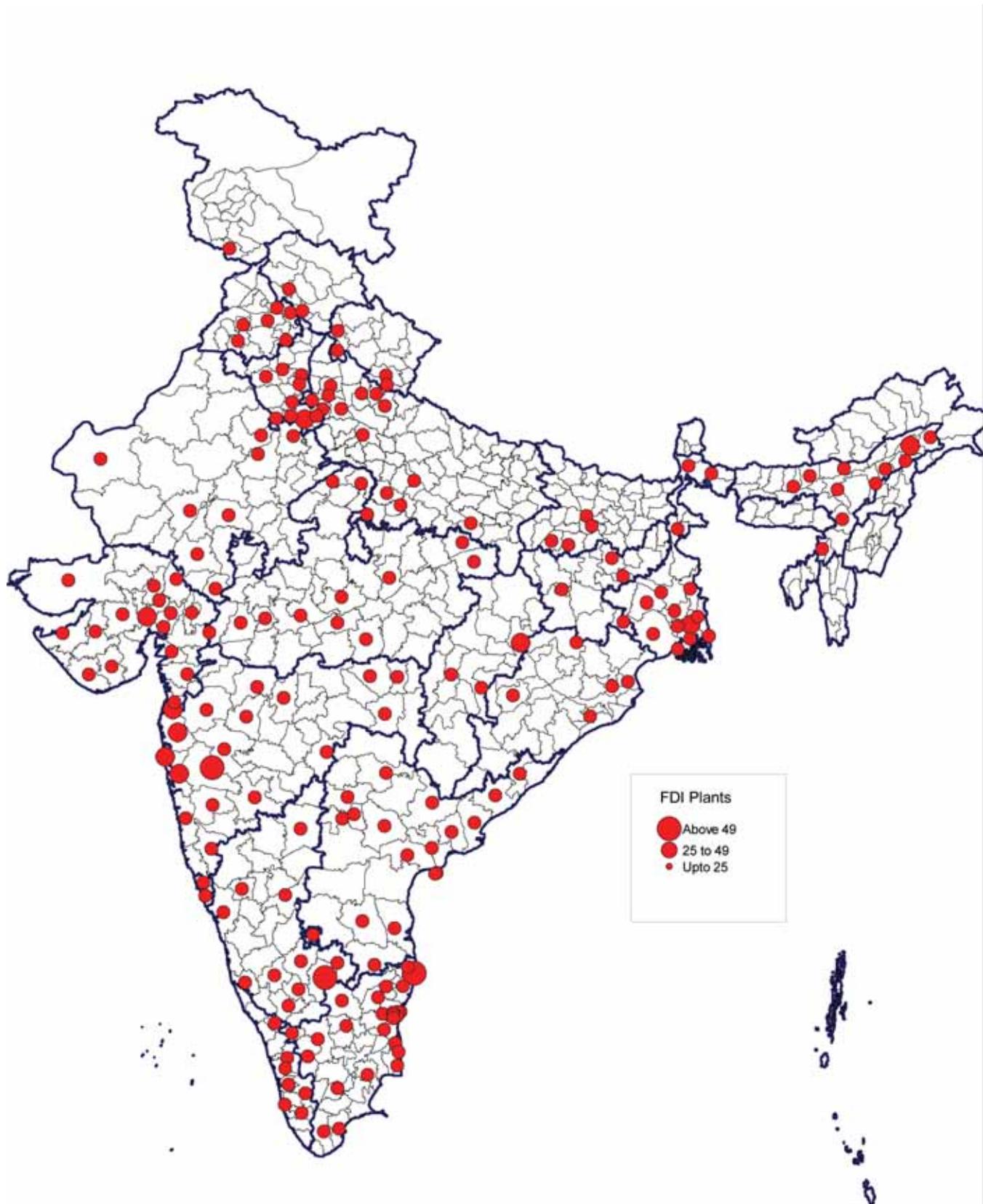
In districts where poverty levels are above 53 per cent, there are 395 facilities of which 241 are in Class-1 cities, 55 are in Class-2 cities and 99 are in Class-3 facilities.

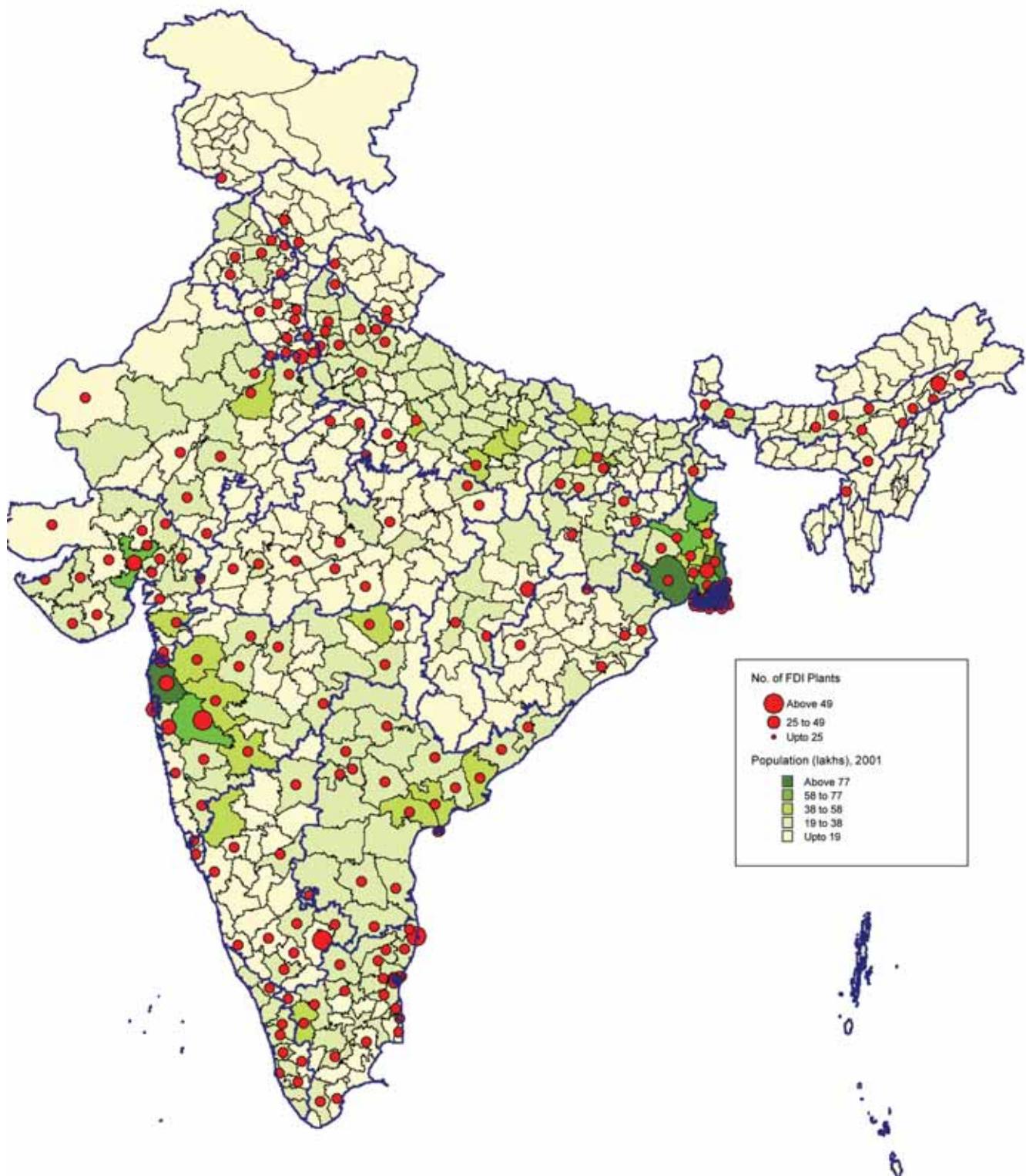
Overall, nearly 60 per cent of the FDI-enabled service facilities are located in districts where poverty levels are low, i.e., only 26 per cent of the population lives below the poverty line.

The maps are a graphical/pictorial representation of the spatial spread of FDI-enabled plants/ facilities in India. They are only indicative and the inferences drawn from the maps have to be matched or corroborated with the analysis based on secondary data.



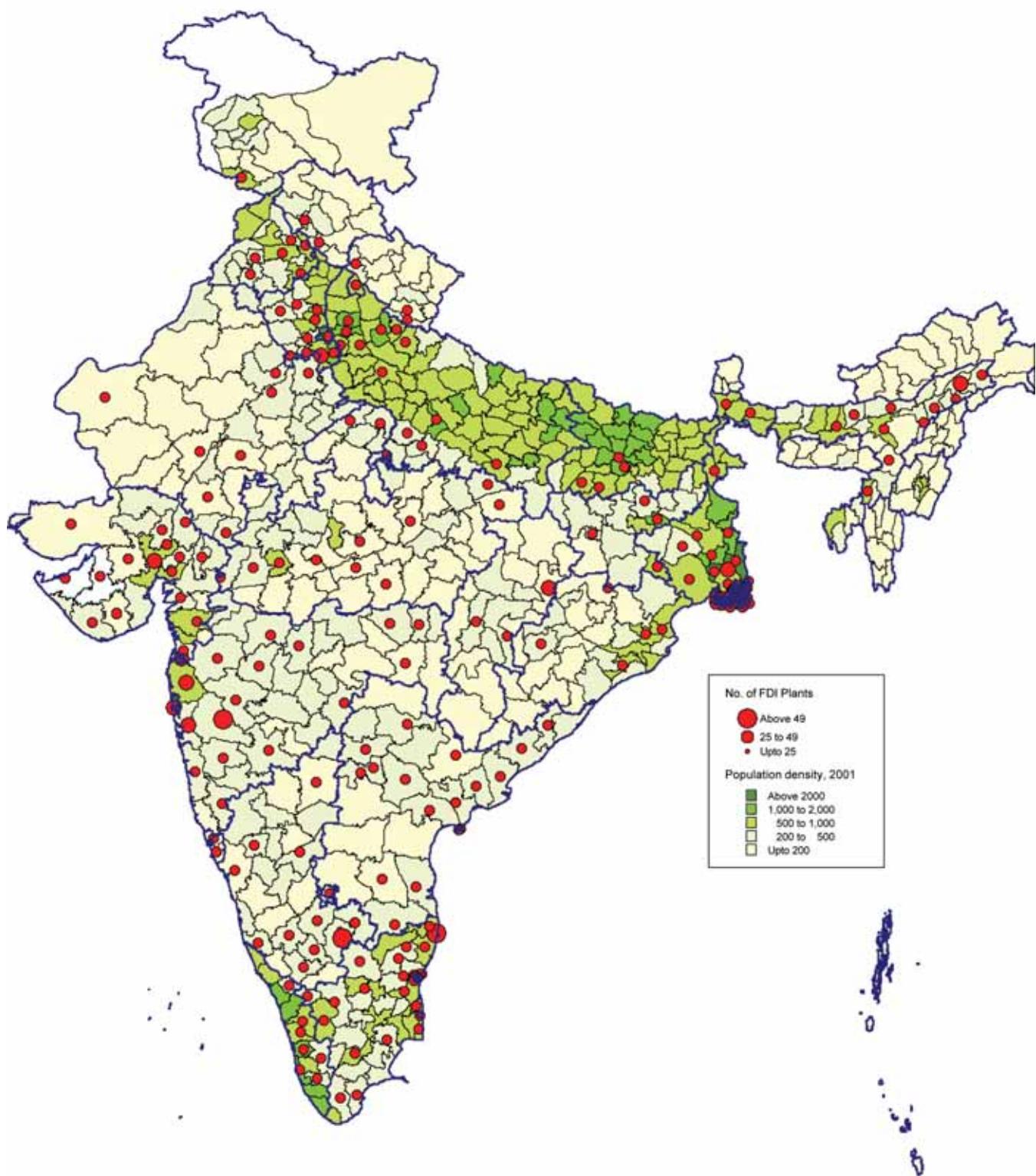
Map 1: Spatial Spread of FDI-enabled Manufacturing Plants



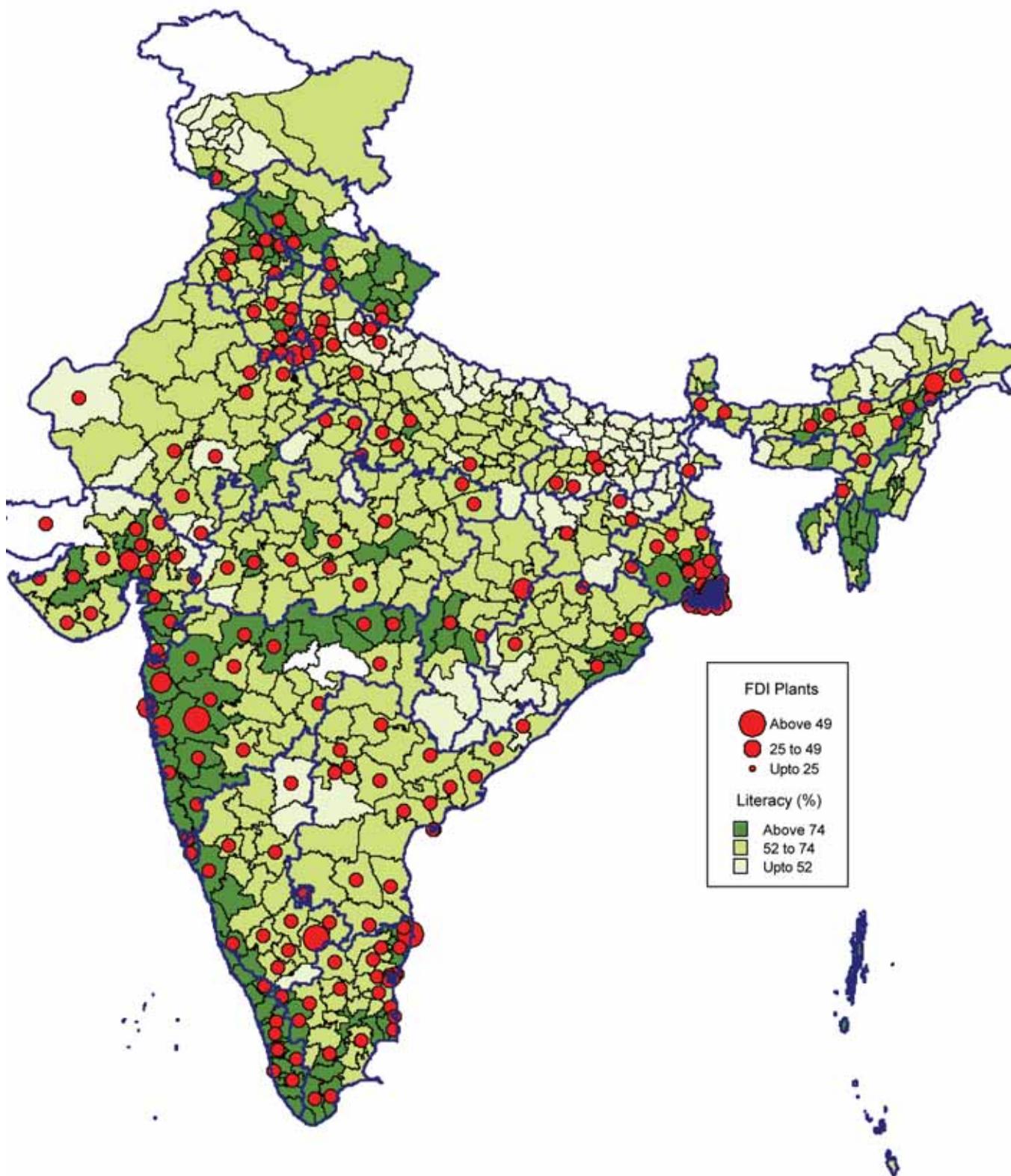
**Map 2: FDI-enabled Plants Mapped with Population: District Level**



Map 3: FDI-enabled Plants Mapped with Population Density: District Level

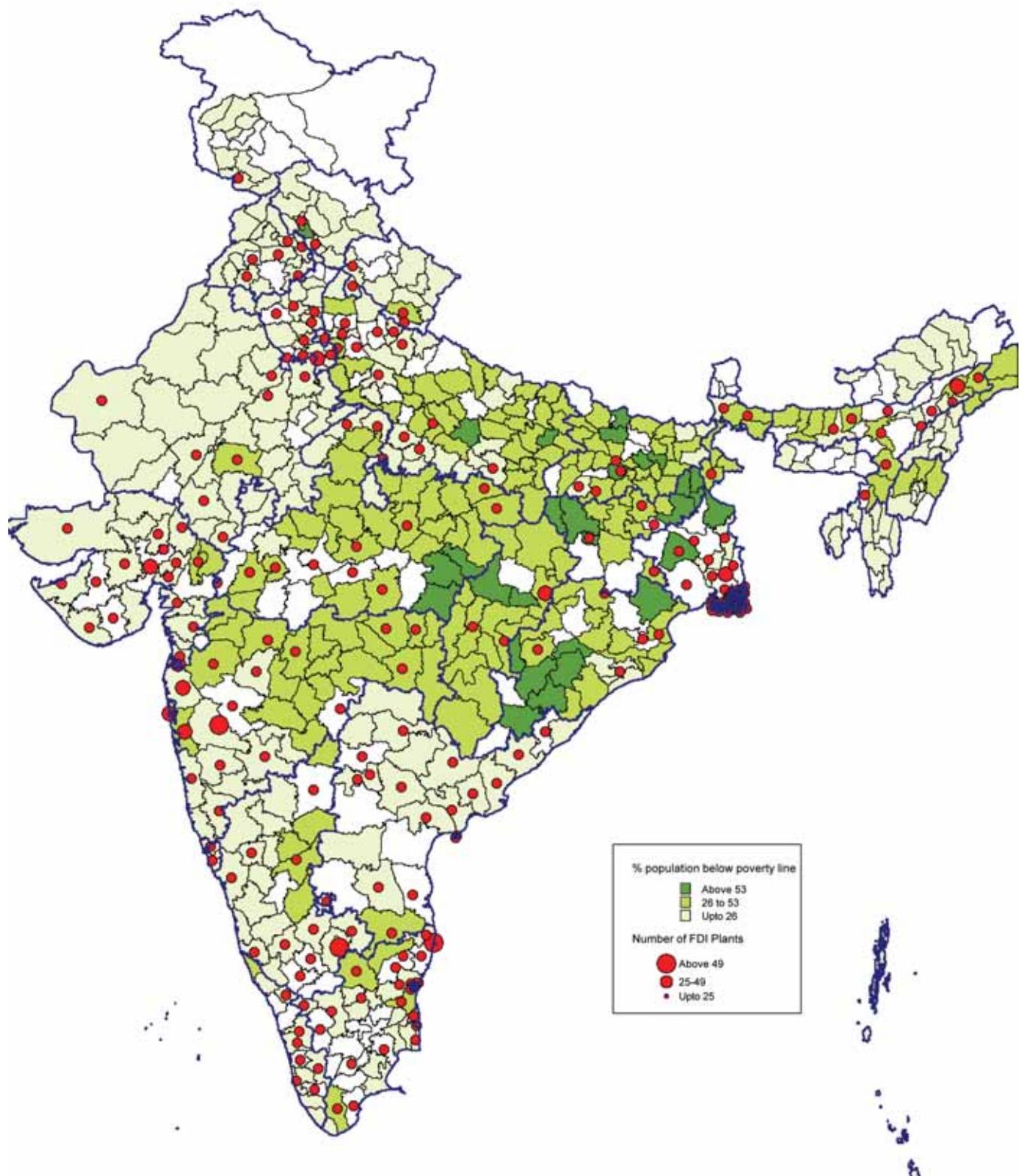


Map 4: FDI-enabled Plants Mapped with Literacy Rates: District Level



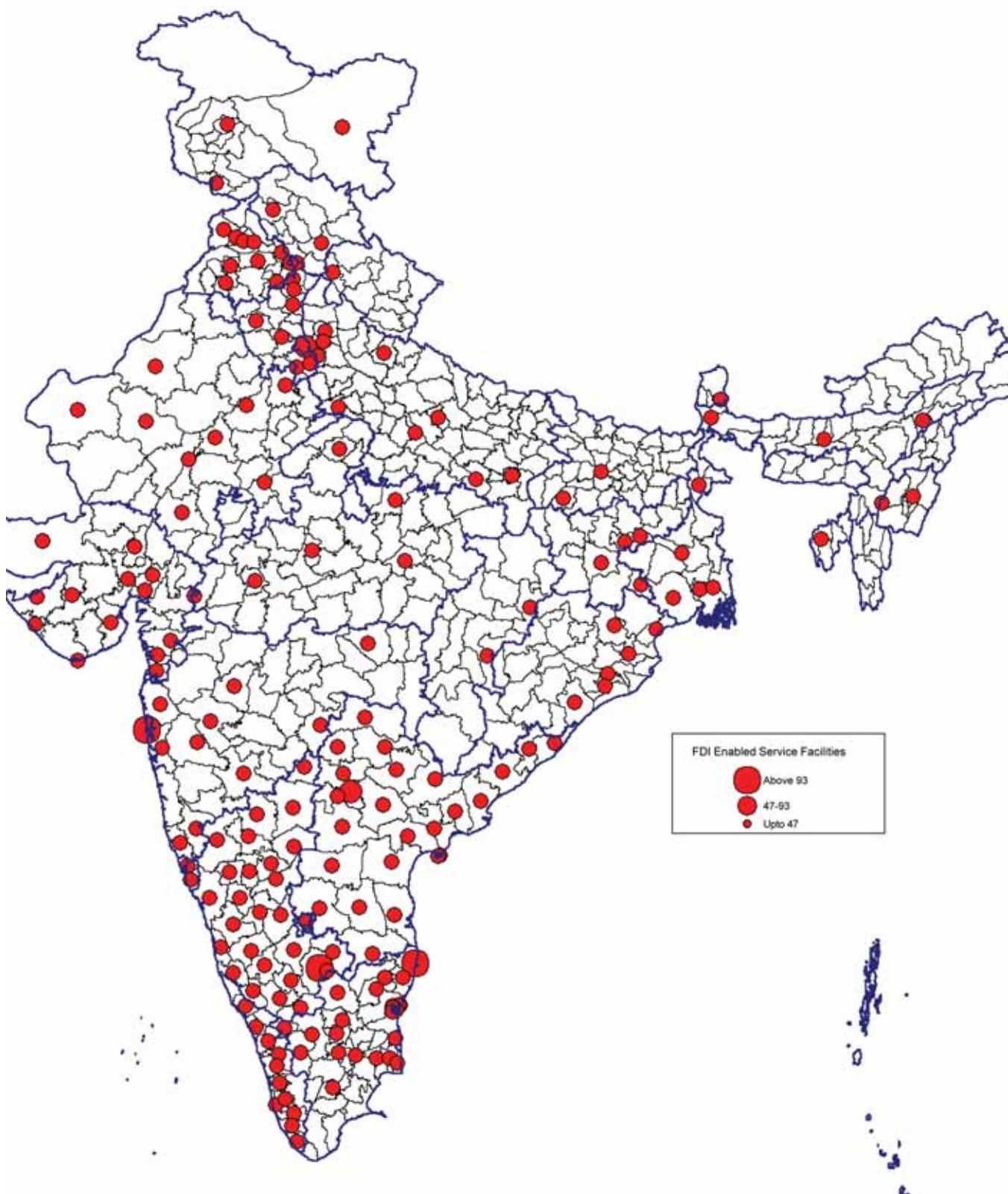


Map 5: FDI-enabled Plants Mapped with Poverty Levels: District Level



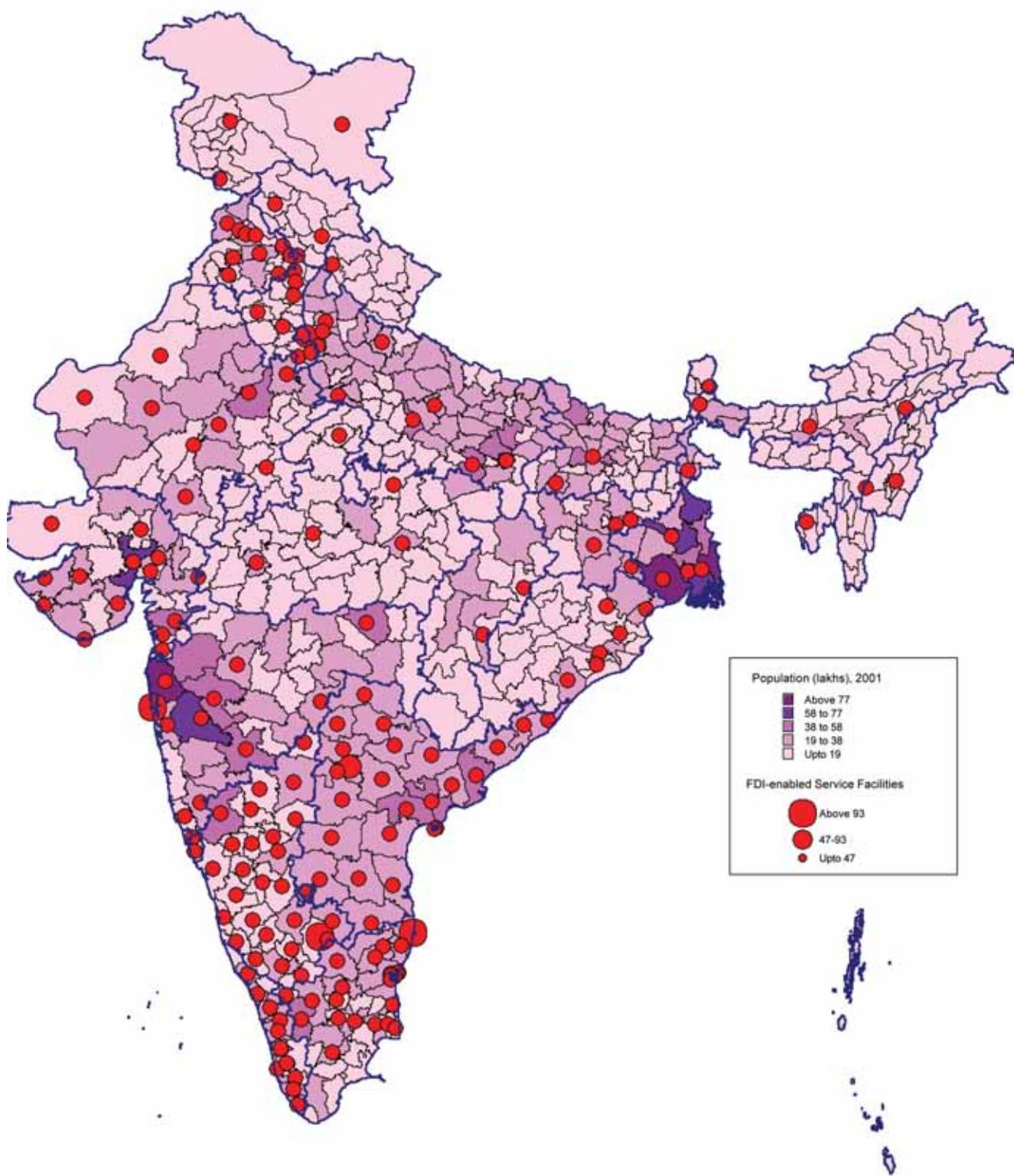


Map 6: Spatial Spread of FDI-enabled Service Facilities in India



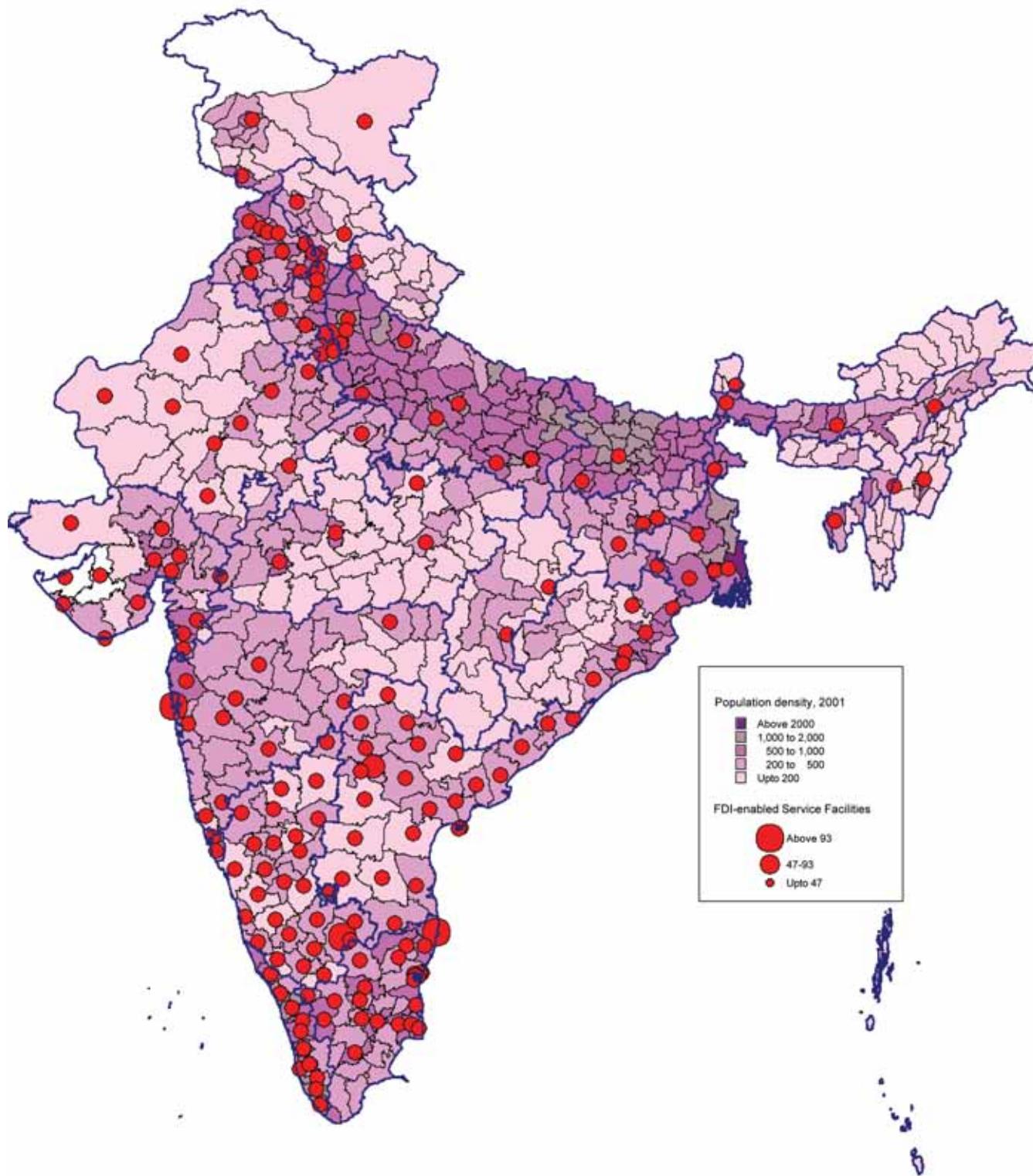


Map 7: FDI-enabled Service Facilities Mapped with Population: District Level



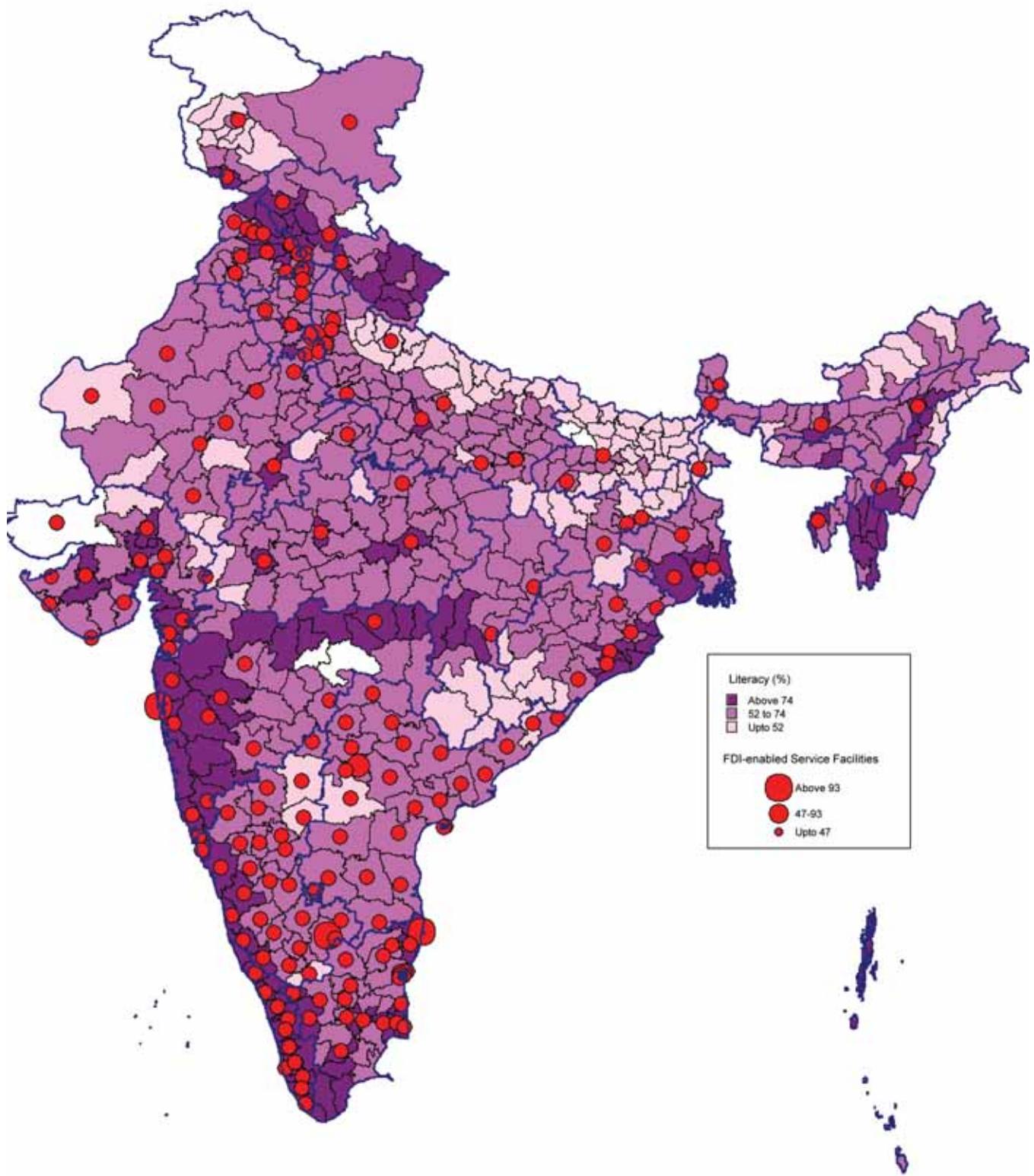


Map 8: FDI-enabled Service Facilities Mapped with Population Density: District Level



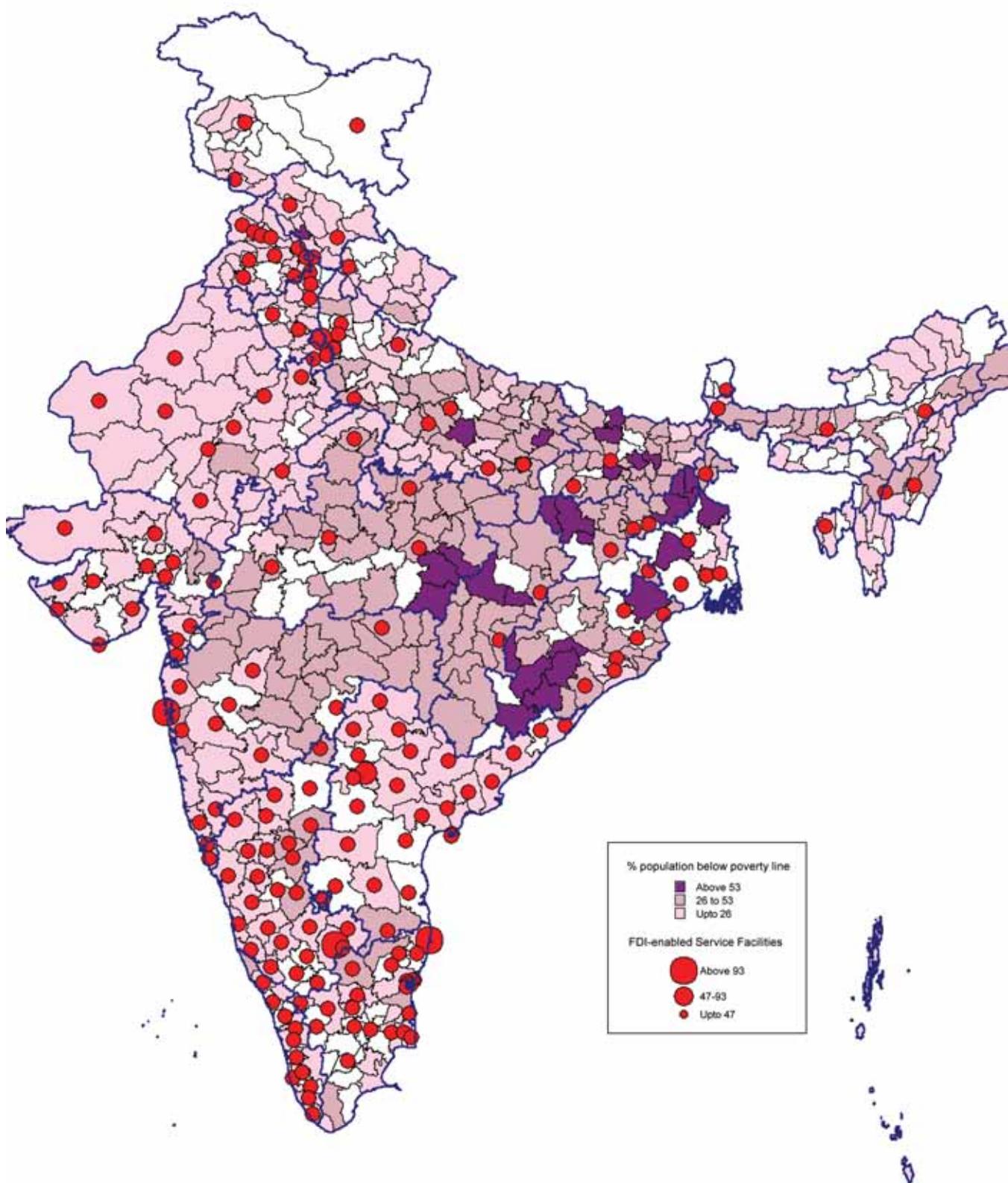


Map 9: FDI-enabled Service Facilities Mapped with Literacy Rates: District Level





Map 10: FDI-enabled Service Facilities Mapped with Poverty Levels: District Level



Chapter 10: Key Findings and Salient Conclusions¹

1. Spatial Spread: To take stock of the spatial spread of the FDI-enabled production facilities in India during the past five years (2001 to 2006). The production facilities to be studied include manufacturing plants as well as service-providing facilities as these evolved either as greenfield or as M&A processes, located in cities other than metros and Tier 1 cities, and in rural areas, in particular.

Findings

- 401 FDI-enabled manufacturing firms; 1,273 plants; 294 cities
- 84% of 294 cities are Class-3
- 54% of 1,273 plants located in Class-3 cities
- 20% manufacturing plants in Maharashtra; 11% in Gujarat; 10% in Tamil Nadu; 9% in Karnataka; and 7% in West Bengal
- The state-wise share of Class-3 cities in all cities having FDI-enabled manufacturing plants: 90% in Gujarat; 87% in Andhra Pradesh; 85% in Tamil Nadu; 82% in Karnataka; 67% in Maharashtra
- 100 FDI-enabled service firms; 1,257 facilities; 369 cities
- 84% of 369 cities are Class-3
- 35% of 1,257 facilities are located in Class-3 cities
- 20% service facilities in Andhra Pradesh; 18% in Karnataka; 17% in Maharashtra; 12% in Tamil Nadu
- The state-wise share of FDI-enabled service facilities located in Class-3 cities: 61% in Andhra Pradesh; 43% in Karnataka; 18% in Tamil Nadu; and 3% in Maharashtra

Conclusions

FDI-enabled plants are spread across various states with relatively high concentration in Maharashtra, Gujarat, Tamil Nadu, Karnataka and West Bengal. A significant proportion (54 %) of manufacturing plants is located in Class-3 cities. FDI-enabled service facilities have relatively high concentration in Andhra Pradesh, Karnataka, Maharashtra, and Tamil Nadu. The proportion of service facilities located in Class-3 cities is relatively less significant (35 %) vis-à-vis manufacturing plants.

2. Sectoral Clustering: To bring out the sectoral clustering across states and sub-state regions (cities, towns and rural areas of districts) with a view to assessing the types of production facilities which have entered relatively small towns and rural areas outside municipal limits (2006 to 2008).

Findings

- 351 firms with 1,171 plants have reported recent data
- Plants widespread across states
- Foreign equity: Rs. 56 billion
- Foreign equity worth Rs. 49 billion in FDI-enabled manufacturing firms (41% of total equity in FDI-enabled manufacturing firms and 88% of the FDI received in manufacturing sector); 44% of Rs. 49 billion worth of foreign equity has moved to Class-3 cities

1. Discussion in this section is based on information drawn from various chapters of this report. Special focus has been given to the secondary data-based tables, including Tables of Chapter 6.



- Market capitalisation of FDI-enabled manufacturing firms at Rs. 4,870 billion; 46% originates in Class-3 cities
- Firms included in the top 25 National Industrial Classification (NIC) 3-digit sectors, based on market capitalisation of FDI-enabled firms, account for 90% of the total market capitalisation
- The top 5 NIC 3-digit sectors based on market capitalisation include firms producing chemical products (other than basic chemicals); non-ferrous metals; electricity distribution & control apparatus; motor vehicles; and non-metallic mineral products
- Market capitalisation of firms producing chemical products (other than basic chemicals) has high clustering in Maharashtra, Karnataka, West Bengal, Himachal Pradesh and Goa
- Market capitalisation of firms producing precious and non-ferrous metals has high clustering in Maharashtra, Dadra & Nagar Haveli, Tamil Nadu, Madhya Pradesh and Andhra Pradesh
- Market capitalisation of firms producing electricity distribution and control apparatus has high concentration in Maharashtra, Karnataka, Gujarat, Haryana and West Bengal
- About 46% of the market capitalisation and 50% of the net fixed capital of the FDI-enabled manufacturing firms originate in Class-3 cities. The corresponding number is 44% for the foreign equity component
- Sectors with a relatively high share of market capitalisation in Class-3 cities include non-ferrous metals; non-metallic mineral products; dairy products; basic iron and steel; and transport equipment
- Sectors with a relatively low share of market capitalisation in Class-3 cities include electricity distribution and control apparatus; medical appliances; general purpose machinery; and tobacco products
- States with a relatively high share of market capitalisation in Class-3 cities include Andhra Pradesh, Assam, Haryana, Rajasthan and Uttar Pradesh
- Maharashtra has a relatively high clustering of market capitalisation of sectors including chemical products; non-ferrous metals; and medical appliances
- Karnataka has a relatively high clustering of market capitalisation of sectors including motor parts; chemical products; and electricity distribution and control apparatus
- Haryana has a relatively high clustering of market capitalisation of sectors including transport equipment; motor vehicles; and electricity distribution and control apparatus
- Gujarat has a relatively high concentration of sectors including electricity generation and control apparatus; non-metallic mineral products; and chemical products
- Tamil Nadu has a relatively high concentration of non-ferrous metals; petroleum products; and dairy products
- The estimated market capitalisation of the foreign equity component in total equity in the manufacturing sector is Rs. 2,462 billion in the case of FDI-enabled firms
- Foreign equity worth Rs.18 billion in FDI-enabled service firms (31% of the total equity in FDI-enabled service firms); only 8% of Rs. 18 billion worth of FDI has moved into small cities
- Market capitalisation of FDI-enabled service firms at Rs. 2,956 billion; only 5% originates in Class-3 cities

Conclusions

Foreign equity in FDI-enabled manufacturing sectors has relatively significant penetration (44 %) in Class-3 cities compared with that in service sectors (8 %). The same is true for market capitalisation and net fixed capital. Sectors with a relatively high share of market capitalisation in Class-3 cities include non-ferrous metals; non-metallic mineral products; dairy products; basic iron and steel; and transport equipment. States with a relatively high share of market capitalisation in Class-3 cities include Andhra Pradesh, Assam, Haryana, Rajasthan and Uttar Pradesh.

3. Depth of Value-Added: To enable a comprehensive understanding of the value-added features of the FDI-linked production facilities and its role in employment opportunities.



Findings

- About half the total output of FDI-enabled manufacturing firms originates in Class-3 cities
- 48% of value-added originates in Class-3 cities
- 45% of the payments to employees originates in small cities
- The share of Class-3 cities in total output, value-added and employee cost is relatively high in sectors including non-metallic mineral products; building and construction parts; mining of iron ores; textiles; and growing and processing of crops
- The overall share of value-added in output in FDI-enabled manufacturing firms is 18%
- The share of value-added in output is relatively high in sectors including software and publishing; mining of iron ore; growing and processing of crops; non-metallic mineral products; special purpose machinery; tobacco products; and footwear
- The share of value-added to output is relatively high in Andhra Pradesh, Gujarat and Karnataka
- The overall share of employee cost in value-added in FDI-enabled manufacturing firms is 29%
- The share of employee cost in value-added is relatively high in software and publishing; footwear; basic chemicals; textiles; and domestic appliances

Conclusions

About half the total output, valued-added and wages paid in the FDI-enabled manufacturing firms originate in Class-3 cities. Class-3 cities account for relatively high shares of output, value-added and wages paid in sectors including non-metallic mineral products; building and construction parts; mining of iron ores; textiles; and growing and processing of crops. The share of value-added in output is relatively high in sectors including software and publishing; mining of iron ores; growing and processing of crops; non-metallic mineral products; special purpose machinery; tobacco products; and footwear.

4. Analysis of FDI inflows and their impact on rural activities with special emphasis on employment-generating effects:

To analyse the impact of FDI in various rural activities especially in the sectors of agriculture and food processing, and to assess the positive and negative impact of employment through FDI-enabled production activities

Findings

- More than 40% of the market capitalisation originates in Class-3 cities
- More than 50% of the total FDI-enabled manufacturing sectors' employment of 15,64,920 persons originates in small cities
- Sectors providing a relatively high share of employment in Class-3 cities include transport equipment; growing and processing of crops; construction parts; textiles; and non-metallic mineral products
- For other details, refer to the findings of Section 3 above

Conclusions

More than two-fifth of the market capitalisation originates in Class-3 cities. FDI-enabled firms in manufacturing sectors provide employment to about 15.6 lakh persons, accounting for about 4 to 5% of the total employment in the organised sector. Class-3 cities provide employment to about 7.9 lakh workers (more than 50% of the total). Sectors providing a relatively high share of employment in Class-3 cities include transport equipment; growing and processing of crops; construction parts; textiles; and non-metallic mineral products.

5. Labour and capital intensity:

To identify FDI-enabled sectors by their levels of skill, scale, capital and labour requirements and compare these features with the domestically invested production facilities producing similar products



and services and provide comprehensive documentation of FDI-enabled production facilities by their labour and capital requirements.

Findings

- Net fixed capital per plant is Rs. 81 crore in Class-3 cities; Rs. 57 crore in others
- Market capitalisation per plant is Rs. 466 crore in Class-3 cities; Rs. 381 crore in others
- Value-added per plant is Rs. 50 crore in Class-3 cities; Rs. 38 crores in others
- Employee cost per plant is Rs. 14 crore in Class-3 cities; Rs. 12 crore in others
- Output per plant is Rs. 286 crore in Class-3 cities; Rs. 206 crore in others
- Employment per plant is 2,058 in Class-3 cities; 1,243 in others

Conclusions

Class-3 cities have relatively high scale, market capitalisation, value-added, wages paid, output and employment per plant vis-à-vis medium and large cities. The information on skill composition of workers employed in manufacturing plants is not available.

6. Comparative performance: To compare the efficiency of MNC affiliates established in India with firms under their parent companies operating outside India and their profit levels. To make similar comparisons between FDI-enabled production facilities in a sector with domestically invested production facilities in the same sector

Findings

- Data for comparison with firms of the parent companies located out of India is not available
- Employee cost per rupee of net fixed capital is 19 paise in FDI-enabled manufacturing firms and 15 paise in domestically invested firms
- Employee cost per rupee of net fixed capital in FDI-enabled manufacturing firms is relatively high in sectors including footwear; medical appliances; electricity distribution and control apparatus; general purpose machinery; and building of construction parts
- Ratio of output to net fixed capital is 3.55 in FDI-enabled manufacturing firms and 2.92 in domestically invested firms
- Ratio of output to net fixed capital is significantly high in FDI-enabled sectors including medical appliances; electricity distribution and control apparatus; petroleum products; mining of iron ores; and transport equipment. The corresponding values in these sectors are much lower in the case of domestically invested firms
- Ratio of output to capital has wider spread across sectors in FDI-enabled firms than in domestically invested firms

Conclusions

FDI-enabled manufacturing firms pay higher wage per rupee of net fixed capital than domestically invested manufacturing firms. Within FDI firms, the value is relatively high in sectors such as footwear; medical appliances; electricity distribution and control apparatus; general purpose machinery; and building of construction parts.

Output-capital ratio is also higher in FDI firms than in domestic firms. Within FDI-enabled firms, the output-capital ratio is relatively high in sectors such as medical appliances; electricity distribution and control apparatus; petroleum products; mining of iron ores; and transport equipment. The corresponding values in these sectors are much lower in domestically invested firms. Data for comparison with firms of the parent companies located outside India is not available.



7. Forex Implications: To understand the implications of repatriation of profits earned in India versus profits retained and invested

Findings

- There is no restriction on repatriation of profits
- The overall net foreign exchange earning is negative for FDI-enabled manufacturing sectors. The same is true of domestically invested manufacturing sectors
- The sector of petroleum products accounts for a major share of the overall deficit on foreign exchange earnings for both FDI-enabled and domestically invested sectors of production
- Sectors with positive net foreign exchange earnings include chemicals; mining of iron ores; textiles; and software and publishing

Conclusions

The overall net foreign exchange earning is negative for FDI-enabled as well as domestically invested firms mainly due to deficit in the manufacture of petroleum products. Sectors with positive net foreign exchange earnings include chemicals; mining of iron ores; textiles; and software and publishing.

8. Backward and forward linkages: To estimate the backward and forward linkages of FDI-enabled sectors through mapping these on the latest available input-output tables for India

Findings

- The top FDI-attracting DIPP 4-digit sectors have strong backward and forward linkages with other sectors of the economy
- Four sectors among the top 15 FDI-receiving sectors have strong backward and forward linkages with other sectors of the economy: miscellaneous industries including construction; fuels including power and oil refinery; chemicals other than fertilisers; and metallurgical industries
- Eight sectors have strong backward linkages, viz., electrical equipment; transportation industry; drugs and pharmaceuticals; cement and gypsum products; food-processing industries; hotel and tourism; miscellaneous mechanical & engineering; and textiles
- The remaining three aggregate DIPP sectors have strong forward linkages. These are the service sector; telecommunications; and consultancy services

Conclusions

The top FDI-receiving sectors, as per the DIPP 4-digit classification, have strong backward and/or forward linkages with the economy. Sectors with strong backward and forward linkages include construction, fuels, chemicals, and metallurgical industries. Sectors with strong backward linkages include electrical equipment, drugs and pharmaceuticals, food processing, and textiles, among others. Services sectors, telecommunications, and consultancy services have strong forward linkages.

9. FDI in Service Sectors: To study the impact of FDI in service sectors on the rural economy

Findings

- Market capitalisation of the FDI-enabled service firms is Rs. 2,956 billion compared with Rs. 4,870 billion of the FDI-enabled manufacturing sectors. Sectors with high market capitalisation include telecommunications; software publishing and consultancy; transport services; and construction activities



- FDI in service sectors has an insignificant presence in Class-3 cities
- The share of market capitalisation in Class-3 cities accounts for about 5% of the total market capitalisation of the FDI-enabled service sectors
- The share of foreign equity in Class-3 cities accounts for about 8% of the total foreign equity of the FDI-enabled service sectors
- The share of net fixed capital in Class-3 cities accounts for about 14% of the total net fixed capital in the FDI-enabled service sectors
- Only 10.4% of the output of FDI-enabled service facilities originates in Class-3 cities
- Only 10% of the value-added of FDI-enabled service facilities originates in Class-3 cities

Conclusions

Market capitalisation of the FDI-enabled service firms is less than two-fifth the combined market capitalisation of manufacturing and service firms. However, it has insignificant reach in Class-3 cities compared with the impressive presence of FDI-enabled manufacturing firms in Class-3 cities. Only one-tenth of output and value-added of the FDI-enabled service sectors originates in Class-3 cities.

10. Special Economic Zones: To study the concentration of production facilities in SEZs, and analyse the relative performance of such plants inside and outside SEZs and the impact of such production on the Index of Industrial Production

Findings

- The secondary database does not have information on FDI in SEZs
- As of March 31, 2008 total investment in SEZs was Rs. 693 billion including FDI investment of Rs. 55 billion: Rs. 26 crore by the developers and Rs. 29 crore by the units established in SEZs
- Total exports from SEZs in 2007-08 amounted to Rs. 666 billion
- As of December 31, 2008 the total employment generated by SEZs was 3,66,333 persons.

Conclusions

The secondary database does not have information on the amount of FDI or the number of FDI-enabled firms/plants in Special Economic Zones. However, we do have information on the number of FDI plants located in cities having SEZs but not on whether these firms are within or outside a particular SEZ in a specified city. The FDI component accounts for about 8% of the total investment in SEZs.

11. Export Potential: To assess the share of export-seeking FDI in various sectors of production to gauge the untapped potential of exports of labour-intensive goods from India

Findings

- FDI-enabled manufacturing firms account for 13% of total sales by all firms: FDI and domestic
- FDI-enabled manufacturing firms account for 12% of exports by all firms: FDI and domestic
- Exports constitute 13% of total sales of FDI-enabled manufacturing firms
- Mining of iron ores; non-ferrous metals; special purpose machinery; textiles; and software and publishing have relatively high export-to-sales ratios

Conclusions

FDI-enabled manufacturing firms account for 12% of total exports by FDI-enabled and domestically invested



manufacturing firms taken together. About 13% of total sales by FDI-enabled firms are exported. This implies that FDI has entered India mainly to seek domestic markets. Mining of iron ores; non-ferrous metals; special purpose machinery; textiles; and software and publishing have relatively high export-to-sales ratios.

12. Greenfield FDI versus FDI through Mergers & Acquisitions: To document the sectoral distribution of FDI through these two routes and to compare the rural and suburban linkages through these two routes

Findings

- The database and other available information does not provide information on firm-wise FDI equity on greenfield and M&A components
- Issues related to rural and suburban (Class-3 cities) linkages have been discussed under TORs 1 to 5 and TOR 9.
- DIPP data indicates that about one-fifth of FDI equity inflows are acquisitions

Conclusions

The database does not provide information on firm-wise FDI equity into greenfield and M&A components. However, DIPP data indicates that one-fifth of FDI equity inflows are acquisitions.

13. Country-wise and sector-wise analysis of FDI

Findings

- Total FDI equity inflows were US\$90 billion during April 2000 to March 2009
- Services sector; computer hardware & software; telecommunications; real estate; construction; automobile; power; metallurgical industries; petroleum and natural gas; and chemicals received high FDI during 2000-2009.
- Mauritius is the main source of FDI, followed by Singapore, the US, the UK, the Netherlands and Japan

Conclusions

Total FDI inflows are estimated at US\$90 billion during April 2000 to March 2009. Services sector; computer hardware & software; telecommunications; real estate; construction; automobiles; power; metallurgical industries; petroleum and natural gas; and chemicals received the highest FDI. Mauritius is the main source, followed by Singapore, the US, the UK, the Netherlands and Japan.

14. Data Reporting by the RBI / Sectoral Classification: To identify issues of sectoral classification and data-reporting in unison with the ongoing work of the Technical Monitoring Group of Foreign Direct Investment which brought out its First Action Report in June 2003

Findings

- To compile FDI statistics, the DIPP follows the methodology proposed by the Technical Monitoring Group (TMG)
- DIPP follows a sectoral classification that has been modified on the basis of the Industrial Development and Regulation Act (1951) to report FDI data by sector
- The current industrial classification available is the National Industrial Classification (NIC), 2004
- NCAER provides a concordance between DIPP and NIC 2- and 3-digit sectors to facilitate adaptation to and adoption of the NIC classification

Conclusions

To compile FDI statistics, the DIPP follows the methodology proposed by the Technical Monitoring Group (TMG).



The sectoral FDI data reporting by the DIPP follows the modified sectoral classification of the Industrial Development and Regulation Act (1951). The current industrial classification available is the National Industrial Classification (NIC) 2008. NCAER has provided concordance between DIPP and NIC 2- and 3-digit sectors to facilitate adaptation and adoption for the DIPP data reporting according to the NIC-2008 classification. ●

References

- Australian Bureau of Statistics (2001). CDATA96 - Information for users - *CDATA96 hints and tips – Range Methods of Thematic Maps*, Statistical Mapping Unit, Australian Bureau of Statistics.
- A.T. Kearney (2007). *New Concerns in an Uncertain World: The 2007 A.T. Kearney FDI Confidence Index*. Global Business Policy Council, Virginia, USA.
- Aggarwal, Aradhna (2001). *Liberalisation, multinational enterprises and export performance: Evidence from Indian manufacturing* (ICRIER Working Paper No. 69). New Delhi: Indian Council for Research on International Economic Relations.
- Aggarwal, Aradhna (2007, February). *The influence of labour markets on FDI: Some empirical explorations in export oriented and domestic market seeking FDI across Indian states*. Paper presented at the seminar on India and Globalisation: A Seminar in Honour of Professor N.S. Siddharthan, New Delhi.
- Alfaro, Laura (2003). *Foreign Direct Investment and growth: Does the sector matter?* (Harvard Business School Working Paper). Harvard, USA.
- Bajpai, Nirupam (2004). *Foreign Direct Investment in China's provinces: Lessons for the state of Gujarat*. (CGSD Working Paper No. 13). Center on Globalization and Sustainable Development, Columbia University.
- Banga, Rashmi (2003). *Differential impact of Japanese and US Foreign Direct Investments on Productivity Growth: A Firm Level Analysis* (ICRIER Working Paper No. 112). New Delhi: Indian Council for Research on International Economic Relations.
- Beena, P.L. (2000). *An analysis of mergers in the private corporate sector in India*. (Working Paper 301). Trivandrum: Centre for Development Studies.
- Bergman, Annika (2006). *FDI and spillover effects in the Indian pharmaceutical industry*. (RIS-DP # 113). New Delhi: Research and Information System for Developing Countries.
- Bloodgood, Laura (2007). *Competitive conditions for Foreign Direct Investment in India*. (Staff Research Study 30). U.S. International Trade Commission.
- Borenstein, Eduardo, Jose De Gregorio and Jong-Wha Lee (1998). How does Foreign Direct Investment affect economic growth? *Journal of International Economics*, 45:115-135.
- Chen, Chunlai (1999). The impact of FDI and Trade. In Yanrui Wu (Ed.), *Foreign Direct Investment and Economic Growth in China* (pp.71-99). Cheltenham, UK: Edward Elgar Publishing.
- Chen, Chunlai (1997). *The Evolution and Main Features of China's Foreign Direct Investment Policies*. (Working Paper No. 97/15), Chinese Economies Research Centre, University of Adelaide.
- Cheng, S. (2007). Structure of firm location choices: An examination of Japanese greenfield investment in China, *Asian Economic Journal*, 21(1): 47-73.
- CSIRO (2007). *Information Technology, Manufacturing and Source* (Annual Report 2006-07). Commonwealth Scientific and Industrial Research Organisation.



- CSO (2004). *National Industrial Classification -2004*. New Delhi: Ministry of Statistics and Programme Implementation.
- CSO (2008). *National Industrial Classification -2008*. New Delhi: Ministry of Statistics and Programme Implementation.
- CUTS (2003). *How is FDI related to economic development?* CUTS Briefing Paper.
- De Melo, Luiz R. Jr. (1999). Foreign direct investment-led growth: evidence from time series and panel data, *Oxford Economic Papers*, 51(1): 133-151.
- Doanh, Le Dang (2002). *Foreign direct investment in Vietnam: Results, achievement, challenges, prospect*. Paper presented at the International Monetary Fund Conference on Foreign Direct Investment, Hanoi, August 16-17.
- Ellison, Glenn and Glaeser, Edward L. (1997). Geographic concentration in U.S. manufacturing industries: a dartboard approach, *Journal of Political Economy*, 105, 5, 889-927.
- Government of India (2003). *Technical Monitoring Group on Foreign Direct Investment: First Action Taken Report*. New Delhi: Department of Industrial Promotion and Policy, Ministry of Commerce and Industry.
- Government of India (March 2004). *Manual on Foreign Direct Investment in India - Policy and Procedures*. Secretariat for Industrial Assistance.
- Government of India. *Annual Report 2007-08*. New Delhi: Ministry of Commerce.
- Government of India, *Economic Survey 2003-04*. New Delhi: Ministry of Finance.
- Government of India. *Economic Survey 2007-08*. New Delhi: Ministry of Finance.
- Government of India (various issues). *SIA Annual Issue*, Department of Industrial Policy & Promotion, Ministry of Commerce & Industry.
- Government of India (various issues). *SIA Newsletter*, Department of Industrial Policy & Promotion, Ministry of Commerce & Industry.
- Government of India (various issues). *Annual Survey of Industries*. New Delhi: Ministry of Statistics and Programme Implementation.
- Goldar, Bishwanath (2007, February). *Location of Plants of Foreign Companies*. Paper presented at the seminar on India and Globalisation: A Seminar in Honour of Professor N.S. Siddharthan, New Delhi.
- Goldman Sachs (2003). *Dreaming with BRICs: The Path to 2050*. (Global Economic Paper 99). GS Global Economic Website <http://www2.goldmansachs.com/ideas/brics/book/99-dreaming.pdf>
- Graham, Edward H. (1995). *Foreign Direct Investment in the world economy*. (IMF Working Paper WP 95/59). Washington, D.C.: International Monetary Fund.
- Hirschman, A. O. (1958). *The Strategy of Economic Development*. New Haven: Yale.
- IMF (2006). *Balance of Payments Statistics*. International Monetary Fund, Statistics Division
- Jalilian, Hossein and John Weiss (2001). Foreign Direct Investment and poverty in the ASEAN region, *ASEAN Economic Bulletin*, 19:231-253.
- Jenkins, Carolyn and Lynne Thomas (2002). *Foreign Direct Investment in South Africa: Determinants, characteristics and implications*



- for economic growth and poverty alleviation. Globalisation and Poverty Project, Centre for the Study of African Economies, University of Oxford.
- Kathuria Vinish (2009). *What determines the locational choice of firm-policy or infrastructure?* (CMDR Working Paper Version 4). Dharwad: Center for Multidisciplinary Research.
- Klein, Michael, Carl Aaron and Bita Hadjimichael (2001). *Foreign Direct Investment*. (Policy Research Working Paper 2613). Washington, D.C.: The World Bank.
- KPMG (2008). *Emerging Markets International Acquisitions Tracker* –April 1.
- Long, J. Scott and Jeremy Freese (2003): *Regression Models for Categorical Dependent Variables Using Stata*, College Station, TX: Stata Press.
- Morris, Sebastian (2004). *A study of the regional determinants of Foreign Direct Investments in India and the case of Gujarat*. (CGSD Working Paper No. 14). Center on Globalization and Sustainable Development, Columbia University.
- ODI (2002). *Foreign Direct Investment: Who gains?* (ODI Briefing Paper). London: Overseas Development Institute (ODI).
- OECD (2008). *OECD Benchmark Definition of Foreign Direct Investment* (4th Edition). Paris, France: Investment Division, Organisation for Economic Cooperation and Development.
- Pant, Manoj (1995). *Foreign Direct Investment in India: Issues involved*. New Delhi: Lancer Books.
- Ramakrishnan, K. (2008). *Mergers & acquisitions in India; the long-term post-merger performance of firms and the strategic factors leading to M&A success*. Unpublished doctoral dissertation, Indian Institute of Management, Calcutta.
- Raman, A. Thothathri and Parag Diwan (2002). *Free Trade Zones to Special Economic Zones: The Great Indian Dream*. New Delhi: Pentagon Press.
- Rasmussen P. N. (1958): *Studies in Intersectoral Relations*. North-Holland, Amsterdam
- Reserve Bank of India (2000). Notification 20/2000-RM, May 3.
- Reserve Bank of India (2005-06). *Master Circular No. 5/2005-06: Investments in India* (Section 6.1.1).
- Reserve Bank of India (2007-08). *Annual Report*.
- Reserve Bank of India (2007). *Handbook of Statistics on Indian Economy (2007)*. Mumbai: Reserve Bank of India.
- Reserve Bank of India (2008). *Handbook of Statistics on Indian Economy (2008)*. Mumbai:
- Reserve Bank of India (various issues). Monthly Bulletin.
- Secretariat for Industrial Assistance (SIA) (various issues). Annual Issue, DIPP, Ministry of Commerce and Industry, Government of India.
- Secretariat for Industrial Assistance (SIA) (various issues). Newsletters, DIPP, Ministry of Commerce and Industry, Government of India.
- Siddharthan, N.S and Stanley Nollen (2004). MNE affiliation, firm size and exports revisited: A study of information technology firms in India, *Journal of Development Studies*, 40(6): 146-168.



Tambunan, Tulus (2005, May). *The impact of Foreign Direct Investment on poverty reduction: A survey of literature and a temporary finding from Indonesia*. Paper presented at consultative meeting on Foreign Direct Investment and Policy Changes: Areas for New Research, United Nations Conference Centre, Bangkok, Thailand.

UNCTAD (2000). Press Release, October 3.

UNCTAD (various years). *World Investment Report*. New York and Geneva: The United Nations.

World Bank (2000). *World Development Report*, World Bank, Washington, D.C.

World Bank (2007). *World Bank Report*. Washington, D.C.: World Bank.

World Economic Forum (2008). *The Global Competitiveness Report* (GCR), 2007-2008.

Yao, Fang (2008). *Lumpy labor adjustment as a propagation mechanism of business cycles*. (SFB 649 Discussion Papers SFB649DP2008-022). Berlin: Humboldt University.

Websites

- [http://commerce.nic.in/annual2003_04/html/lesson-5.htm\]](http://commerce.nic.in/annual2003_04/html/lesson-5.htm)
- <http://dipp.gov.in>
- <http://sisdipp.nic.in/sis/filia.htm>
- <http://www.about.com>
- <http://www.blonnet.com>
- <http://www.capitaline.com>
- <http://www.cmie.com/database/?service=database-products/firm-level-data-services/prowess-corporate-database.htm>
- <http://www.eouindia.com>
- <http://www.fepz.com>
- <http://www.gujexim.com>
- <http://www.ireport.com>
- <http://www.iimcal.ac.in/programs/fpm/ThesisAbstracts/Thesis%20abstractRamki.pdf>
- <http://www.ilo.org>
- <http://www.itatindia.com/datafolder/News/News4756.htm>
- <http://www.kasez.com>
- <http://www.nepz.org>
- <http://www.projectstoday.com>
- <http://www.seepz.com>
- <http://www.sezindia.nic.in>
- <http://www.sursez.com>
- <http://www.vepz.com>

Tables for Chapter 6



Chapter 6: Tables Index

Table 6.1:	Sample of Capitaline Database	149
Table 6.2:	Sample for March 1999 to September 2008 (Manufacturing Sector)	149
Table 6.3:	Distribution of FDI Office Types (Manufacturing Sector)	150
Table 6.4:	Distribution of Domestic Office Types (Manufacturing Sector)	150
Table 6.5:	Distribution of FDI Companies' Registered Office by State (Manufacturing Sector)	151
Table 6.6:	Distribution of Domestic Companies' Registered Office by State (Manufacturing Sector)	152
Table 6.7:	Distribution of Domestic Plants by State and Class (Manufacturing Sector)	153
Table 6.8:	State-wise and Class-wise Distribution of FDI Plants (Manufacturing Sector)	154
Table 6.9:	State-wise and City-wise Distribution of Domestic Cities (Manufacturing Sector)	155
Table 6.10:	State-wise and Class-wise Distribution of FDI Cities (Manufacturing Sector)	156
Table 6.11:	Number of Matched and Unmatched Cities (Manufacturing Sector)	156
Table 6.12:	Overall Distribution of Plants in Matched and Unmatched Cities (Manufacturing Sector)	157
Table 6.13:	State-wise and City-wise Distribution of Matched Cities (Manufacturing Sector)	157
Table 6.14:	State-wise and Class-wise Distribution of Domestic Plants in Matched Cities (Manufacturing Sector)	158
Table 6.15:	State-wise and Class-wise Distribution of FDI Plants in Matched Cities (Manufacturing Sector)	159
Table 6.16:	Summary Statement of Distribution of Cities and Plants Across States (Manufacturing Sector)	160
Table 6.17:	Distribution of Cities by State and Size for FDI Services Facilities	160
Table 6.18:	Distribution of FDI-Enabled Service Facilities by State and Size	162
Table 6.19:	Sample for March 2006 to March 2008 (Manufacturing Sector)	162
Table 6.20:	Distribution of FDI Plants in Large and Small Cities According to the Spread of Firms in Number of States (Manufacturing Sector)	163
Table 6.21:	Distribution of Domestic Plants in Large and Small Cities According to the Spread of Firms in Number of States (Manufacturing Sector)	163
Table 6.22:	Distribution of FDI Plants for Top 7 States in FDI-Enabled Manufacturing Sectors	163
Table 6.23:	Sectoral Distribution of Capital, Equities and Market Capitalisation for Top 25 Market Capitalisation-Based Firms (Manufacturing Sector)	164
Table 6.24:	Sectoral Distribution of Net Fixed Capital, Market Capitalisation and Equities into Large and Small Cities for Top 25 Market Capitalisation-Based FDI Firms (Manufacturing Sector)	167
Table 6.25:	Distribution of Sectoral Market Capitalisation Across States in Manufacturing Sector (Rs. crore)	170
Table 6.26:	Distribution of State Total Market Capitalisation in Manufacturing Sector Across NIC Sectors (Rs. crore)	171
Table 6.27:	Estimated Market Capitalisation of Foreign Equity in Manufacturing Sector	172
Table 6.28:	State-wise and City-wise Distribution of Fixed Capital, Market Capitalisation and Equities in FDI Enabled Service Sectors	175
Table 6.29:	Output, Value-Added, Employee Cost and Share of FDI Firm's Share in Total Firms of Top 25 Market Capitalisation-Based Firms (Manufacturing Sector)	179
Table 6.30:	Depth of Value-Added and Share of Labour in Value-Added of Top 25 Market Capitalisation-Based Sectors (Manufacturing Sector)	181
Table 6.31:	Distribution of State-wise Value-Added and Total Output for FDI-Enabled Manufacturing Sectors	182
Table 6.32:	Distribution of Output, Value-Added and Employee Cost into Large and Small Cities of Top 25	184



Market Capitalisation-Based Sectors (Manufacturing Sector)	
Table 6.33: Sectoral FDI Intensity and Ratio of Foreign Equity to Total Equity in Top 25 Sectors Based on Market Capitalisation (Manufacturing Sector)	186
Table 6.34: Distribution of Employment of FDI Firms Based on Top 25 Market Capitalisation Sectors Across Cities (Manufacturing Sector)	187
Table 6.35: State-wise Share of Employment of FDI Firms (Manufacturing Sector)	188
Table 6.36: Sectoral Sales, Exports and Export Intensity of Top 25 Sectors of Market Capitalisation (Manufacturing Sector)	189
Table 6.37: Sector-wise Labour Intensity of Top 25 Sectors Based on Market Capitalisation (Manufacturing Sector)	192
Table 6.38: Distribution of Net Fixed Capital in Large and Small Cities in FDI-Enabled Manufacturing Sectors	194
Table 6.39: Distribution of Market Capitalisation in Large and Small Cities in FDI-Enabled Manufacturing Sector	195
Table 6.40: Distribution of Value-Added into Large and Small Cities in FDI-Enabled Manufacturing Sectors	196
Table 6.41: Distribution of Employee Cost into Large and Small Cities in FDI-Enabled Manufacturing Sectors	197
Table 6.42: Distribution of Output into Large and Small Cities in FDI-Enabled Manufacturing Sectors	198
Table 6.43: Distribution of Employment of FDI Firms in FDI-Enabled Manufacturing Sectors	199
Table 6.44: NIC Sector-wise and City-wise Distribution of Fixed Capital, Market Capitalisation and Equities in FDI-Enabled Service Sectors	200
Table 6.45: NIC Sector-wise and City-wise Distribution of Output, Value-Added and Employee Cost in FDI Enabled Service Sector	202
Table 6.46: State-wise Distribution of Net Fixed Capital, Total Equity, Foreign Equity, Domestic Equity and Market Capitalisation Across Cities for FDI Firms (Manufacturing Sector)	204
Table 6.47: Number of Sectors by Level of Agglomeration (Manufacturing Sector)	207
Table 6.48: Agglomeration of Industry Based on Ellison and Glaeser Index (Employment-Based) Sorted by FDI Employment (Manufacturing Sector)	208
Table 6.49: Share of Industry Employment in States Based on Ellison and Glaeser Index of Agglomeration (Employment-Based) Sorted by FDI Employment (Manufacturing Sector)	210
Table 6.50: Agglomeration of Industry Based on Ellison and Glaeser Index (Output-Based) Sorted by FDI Output (Manufacturing Sector)	212
Table 6.51: Share of Industry Output in States Based on Ellison and Glaeser Index of Agglomeration (Output-Based) Sorted by FDI Output (Manufacturing Sector)	214
Table 6.52: Class-wise Number of Plants and Cities Used in Model (Manufacturing Sector)	216
Table 6.53: State-wise distribution of FDI plants and Matched Domestic Plants Used in Model Sample (Manufacturing Sector)	216
Table 6.54: Distribution of Plants in Model Sample: By Region and Class (Manufacturing Sector)	217
Table 6.55: Logistic Regression* for FDI Firms (Manufacturing Sector)	218
Annex 1: Unmatched Cities- Only FDI Plants Located	219
Annex 2: Matched Cities- Number of FDI and Domestic Plants	220
Annex 3: Classification of Companies According to NIC Codes and Activities (values in Rs. crore)	226



Table 6.1

Sample of Capitaline Database

Sector	Domestic Firms	FDI Firms	Total
Manufacturing	4453	401	4854
Service	9338	100	9438
Total	13791	501	14292

Table 6.2

Sample for March 1999 to September 2008 (Manufacturing Sector)

Firms	Number of Firms	Number of Plants/Facilities	Number of Cities	Spread of Plants/ Facilities
FDI Manufacturing Firms	401	1273	294	4.3
Domestic Manufacturing Firms	4453	10665	1069	10.0
All Manufacturing Firms	4854	11938	1119	10.7
FDI Service Firms	100	1257	369	3.4



Table 6.3

Distribution of FDI Office Types (Manufacturing Sector)

Office Type	Frequency	Percent	Cumulative (%)
Administrative	33	1.2	1.2
Branch	155	5.7	6.9
Corporate	154	5.6	12.5
Development Centre	34	1.2	13.8
Head Office	43	1.6	15.3
Marketing	34	1.2	16.6
Others	226	8.3	24.9
Plants	1,273	46.6	71.5
Regional	139	5.1	76.5
Registered Office	400	14.6	91.2
Sales	213	7.8	99.0
Zonal	28	1.0	100.0
Total	2,732	100.0	

Table 6.4

Distribution of Domestic Office Types (Manufacturing Sector)

Office Type	Frequency	Percent	Cumulative (%)
Administrative	436	2.1	2.1
Branch	1,552	7.4	9.5
Corporate	1,143	5.4	14.9
Development Centre	195	0.9	15.8
Head Office	333	1.6	17.4
Marketing	279	1.3	18.7
Others	1,214	5.8	24.5
Plants	10,666	50.8	75.3
Regional	306	1.5	76.7
Registered Office	4,449	21.2	97.9
Sales	375	1.8	99.7
Software Tech	8	0.0	99.7
Zonal	55	0.3	100.0
Total	21,011	100.0	



Table 6.5

Distribution of FDI Firms' Registered Offices by State (Manufacturing Sector)

State	Frequency	Percent	Cumulative (%)
Andhra Pradesh	23	5.8	5.8
Assam	7	1.8	7.5
Dadra & Nagar Haveli (U T)	1	0.3	7.8
Daman & Diu	1	0.3	8.0
Delhi	33	8.3	16.3
Goa	5	1.3	17.5
Gujarat	47	11.8	29.3
Haryana	15	3.8	33.0
Jharkhand	2	0.5	33.5
Karnataka	34	8.5	42.0
Kerala	5	1.3	43.3
Madhya Pradesh	2	0.5	43.8
Maharashtra	130	32.5	76.3
Orissa	3	0.8	77.0
Pondicherry	1	0.3	77.3
Punjab	4	1.0	78.3
Rajasthan	5	1.3	79.5
Tamil Nadu	42	10.5	90.0
Uttar Pradesh	5	1.3	91.3
Uttarakhand	3	0.8	92.0
West Bengal	32	8.0	100.0
Total	400	100.0	



Table 6.6

Distribution of Domestic Firms' Registered Offices by State (Manufacturing Sector)

State	Frequency	Percent	Cumulative (%)
Andhra Pradesh	407	9.1	9.1
Assam	16	0.4	9.5
Bihar	16	0.4	9.9
Chandigarh (U T)	24	0.5	10.4
Chhattisgarh	20	0.4	10.9
Dadra & Nagar Haveli (U T)	16	0.4	11.2
Daman & Diu	9	0.2	11.4
Delhi	359	8.1	19.5
Goa	27	0.6	20.1
Gujarat	517	11.6	31.7
Haryana	110	2.5	34.2
Himachal Pradesh	30	0.7	34.9
Jammu & Kashmir	2	0.0	34.9
Jharkhand	12	0.3	35.2
Karnataka	190	4.3	39.4
Kerala	67	1.5	41.0
Madhya Pradesh	118	2.7	43.6
Maharashtra	1,180	26.5	70.1
Meghalaya	3	0.1	70.2
Orissa	39	0.9	71.1
Pondicherry	9	0.2	71.3
Punjab	115	2.6	73.9
Rajasthan	143	3.2	77.1
Tamil Nadu	476	10.7	87.8
Uttar Pradesh	169	3.8	91.6
Uttarakhand	11	0.2	91.8
West Bengal	364	8.2	100.0
Total	4,449	100.0	



Table 6.7

Distribution of Domestic Plants by State and Class (Manufacturing Sector)

State	Class-1	Class-2	Class-3	Total	Class-3's	State-wise
					Share in State's Total Domestic Plants (%)	Share in Total Plants (%)
Andaman & Nicobar (U T)	-	-	14	14	100.0	0.1
Andhra Pradesh	185	109	671	965	69.5	9.0
Assam	-	8	130	138	94.2	1.3
Bihar	14	-	71	85	83.5	0.8
Chandigarh (U T)	-	13	25	38	65.8	0.4
Chhattisgarh	-	33	48	81	59.3	0.8
Dadra & Nagar Haveli (U T)	-	-	212	212	100.0	2.0
Daman & Diu	-	-	99	99	100.0	0.9
Delhi	140	-	-	140	-	1.3
Goa	-	108	1	109	0.9	1.0
Gujarat	495	56	793	1,344	59.0	12.6
Haryana	116	-	348	464	75.0	4.4
Himachal Pradesh	-	-	187	187	100.0	1.8
Jammu & Kashmir	-	7	24	31	77.4	0.3
Jharkhand	-	38	40	78	51.3	0.7
Karnataka	318	68	236	622	37.9	5.8
Kerala	-	74	108	182	59.3	1.7
Madhya Pradesh	54	10	285	349	81.7	3.3
Maharashtra	1,275	195	509	1,979	25.7	18.6
Meghalaya	-	-	3	3	100.0	0.0
Mizoram	-	-	1	1	100.0	0.0
Nagaland	-	-	1	1	100.0	0.0
Orissa	1	22	126	149	84.6	1.4
Pondicherry	-	101	-	101	-	0.9
Punjab	88	31	145	264	54.9	2.5
Rajasthan	81	44	280	405	69.1	3.8
Sikkim	-	-	3	3	100.0	0.0
Tamil Nadu	288	250	673	1,211	55.6	11.4
Tripura	-	-	9	9	100.0	0.1
Uttar Pradesh	132	203	413	748	55.2	7.0
Uttarakhand	-	-	137	137	100.0	1.3
West Bengal	272	-	244	516	47.3	4.8
Total	3,459	1,370	5,836	10,665	54.7	100.0



Table 6.8

State-wise and Class-wise Distribution of FDI Plants (Manufacturing Sector)

State	Class-1	Class-2	Class-3	Total	Class-3's	State-wise
					Share in State's Total Domestic Plants (%)	Share in Total Plants (%)
Andhra Pradesh	23	7	50	80	62.5	6.3
Assam	-	1	68	69	98.6	5.4
Bihar	1	-	5	6	83.3	0.5
Chandigarh (U T)	-	1	3	4	75.0	0.3
Chhattisgarh	-	2	2	4	50.0	0.3
Dadra & Nagar Haveli (U T)	-	-	30	30	100.0	2.4
Daman & Diu	-	-	11	11	100.0	0.9
Delhi	14	-	-	14	-	1.1
Goa	-	23	3	26	11.5	2.0
Gujarat	53	3	87	143	60.8	11.2
Haryana	14	-	70	84	83.3	6.6
Himachal Pradesh	-	-	17	17	100.0	1.3
Jammu & Kashmir	-	-	6	6	100.0	0.5
Jharkhand	-	6	5	11	45.5	0.9
Karnataka	69	14	32	115	27.8	9.0
Kerala	-	5	16	21	76.2	1.6
Madhya Pradesh	1	-	19	20	95.0	1.6
Maharashtra	166	18	64	248	25.8	19.5
Orissa	-	2	12	14	85.7	1.1
Pondicherry	-	16	-	16	-	1.3
Punjab	2	-	10	12	83.3	0.9
Rajasthan	4	-	24	28	85.7	2.2
Tamil Nadu	56	14	61	131	46.6	10.3
Uttar Pradesh	7	14	33	54	61.1	4.2
Uttarakhand	-	-	17	17	100.0	1.3
West Bengal	46	-	46	92	50.0	7.2
Total	456	126	691	1,273	54.3	100.0



Table 6.9

State-wise and City-wise Distribution of Domestic Cities having Domestic Manufacturing Plants

State	Class-1	Class-2	Class-3	Total
Andaman & Nicobar (U T)	-	-	2	2
Andhra Pradesh	2	5	113	120
Assam	-	1	47	48
Bihar	1	-	28	29
Chandigarh (U T)	-	1	1	2
Chhattisgarh	-	1	13	14
Dadra & Nagar Haveli (U T)	-	-	1	1
Daman & Diu	-	-	1	1
Delhi	1	-	-	1
Goa	-	1	-	1
Gujarat	3	3	80	86
Haryana	1	-	31	32
Himachal Pradesh	-	-	21	21
Jammu & Kashmir	-	1	9	10
Jharkhand	-	2	17	19
Karnataka	1	2	65	68
Kerala	-	2	34	36
Madhya Pradesh	2	2	48	52
Maharashtra	6	5	82	93
Meghalaya	-	-	2	2
Mizoram	-	-	1	1
Nagaland	-	-	1	1
Orissa	-	2	34	36
Pondicherry	-	1	-	1
Punjab	1	2	26	29
Rajasthan	1	2	46	49
Sikkim	-	-	3	3
Tamil Nadu	1	4	146	151
Tripura	-	-	4	4
Uttar Pradesh	5	6	57	68
Uttarakhand	-	-	18	18
West Bengal	2	-	67	69
Total	27	43	998	1,068



Table 6.10

State-wise and Class-wise Distribution of FDI Cities (Manufacturing Sector)

State	Class-1	Class-2	Class-3	Total	Class-3's Share in State's Total FDI Cities (%)
Andhra Pradesh	1	2	20	23	87.0
Assam	-	1	25	26	96.2
Bihar	1	-	4	5	80.0
Chandigarh (U T)	-	1	1	2	50.0
Chhattisgarh	-	1	2	3	66.7
Dadra & Nagar Haveli (U T)	-	-	1	1	100.0
Daman & Diu	-	-	1	1	100.0
Delhi	1	-	-	1	-
Goa	-	-	1	1	100.0
Gujarat	3	1	34	38	89.5
Haryana	1	-	15	16	93.8
Himachal Pradesh	-	-	5	5	100.0
Jammu & Kashmir	-	-	3	3	100.0
Jharkhand	-	1	5	6	83.3
Karnataka	1	2	14	17	82.4
Kerala	-	1	9	10	90.0
Madhya Pradesh	1	-	12	13	92.3
Maharashtra	6	4	20	30	66.7
Orissa	-	2	8	10	80.0
Pondicherry	-	1	-	1	-
Punjab	1	-	7	8	87.5
Rajasthan	1	-	8	9	88.9
Tamil Nadu	1	3	22	26	84.6
Uttar Pradesh	3	4	10	17	58.8
Uttarakhand	-	-	6	6	100.0
West Bengal	2	-	14	16	87.5
Total	23	24	247	294	84.0

Table 6.11

Number of Matched and Unmatched Cities (Manufacturing Sector)

Types of Plants Existing in Cities	Number of Cities	Percentage
Only FDI Plants	50	4.5
Only Domestic Plants	824	73.7
Both FDI and Domestic Plants (Matched)	244	21.8
Total	1118	100.0



Table 6.12

Overall Distribution of Plants in Matched and Unmatched Cities (Manufacturing Sector)

Type of Plants	Number of Plants	Percent of Total Plants	Average Number of Plants Per City	Percent of Total Cities	Number of Cities	Type of City/Town
Only FDI Plants	51	0.4	1.0	4.5	50	Only FDI Located
Only Domestic Plants	2,330	19.5	2.8	73.7	824	Only Domestic Located
Both Domestic and FDI Plants						
A FDI	1,222	10.2				
B Domestic	8,335	69.8				
Total (A+B)	9,557	80.1	39.2	21.8	244	Both FDI and Domestic Located
Total Number of Plants	11,938	100.0	10.7	100.0	1,118	Total Number of Cities

Note: Shows the highly concentrated nature of the cities where FDI plants have been located

Table 6.13

State-wise and City-wise Distribution of Matched Cities (Manufacturing Sector)

State	Class-1	Class-2	Class-3	Total	Class-3's Share in State's Total Matched FDI Cities (%)
Andhra Pradesh	1	2	17	20	85.0
Assam	-	1	11	12	91.7
Bihar	1	-	2	3	66.7
Chhattisgarh	-	1	2	3	66.7
Chandigarh (U T)	-	1	1	2	50.0
Dadra & Nagar Haveli (U T)	-	-	1	1	100.0
Daman & Diu	-	-	1	1	100.0
Delhi	1	-	-	1	-
Goa	-	-	1	1	100.0
Gujarat	3	1	26	30	86.7
Haryana	1	-	13	14	92.9
Himachal Pradesh	-	-	5	5	100.0
Jammu & Kashmir	-	-	3	3	100.0
Jharkhand	-	1	3	4	75.0
Karnataka	1	2	12	15	80.0
Kerala	-	1	8	9	88.9
Madhya Pradesh	1	-	12	13	92.3
Maharashtra	6	4	16	26	61.5
Orissa	-	2	7	9	77.8
Pondicherry	-	1	-	1	-
Punjab	1	-	5	6	83.3
Rajasthan	1	-	7	8	87.5
Tamil Nadu	1	3	20	24	83.3
Uttar Pradesh	3	4	7	14	50.0
Uttarakhand	-	-	6	6	100.0
West Bengal	2	-	11	13	84.6
Total	23	24	197	244	80.7



Table 6.14

**State-wise and Class-wise Distribution of Domestic Plants in Matched Cities
(Manufacturing Sector)**

State	Class-1	Class-2	Class-3	Total	Class-3's Share in State's Total Domestic Plants (%)
Andhra Pradesh	184	85	377	646	58.4
Assam	-	8	56	64	87.5
Bihar	14	-	17	31	54.8
Chandigarh (U T)	-	13	25	38	65.8
Chhattisgarh	-	33	10	43	23.3
Dadra & Nagar Haveli (U T)	-	-	212	212	100.0
Daman & Diu	-	-	99	99	100.0
Delhi	140	-	-	140	-
Goa	-	108	1	109	0.9
Gujarat	495	31	685	1,211	56.6
Haryana	116	-	266	382	69.6
Himachal Pradesh	-	-	136	136	100.0
Jammu & Kashmir	-	-	14	14	100.0
Jharkhand	-	21	18	39	46.2
Karnataka	318	68	124	510	24.3
Kerala	-	58	67	125	53.6
Madhya Pradesh	41	-	176	217	81.1
Maharashtra	1,275	194	338	1,807	18.7
Orissa	1	22	29	52	55.8
Pondicherry	-	101	-	101	-
Punjab	88	-	74	162	45.7
Rajasthan	81	-	187	268	69.8
Tamil Nadu	288	230	355	873	40.7
Uttar Pradesh	103	193	210	506	41.5
Uttarakhand	-	-	115	115	100.0
West Bengal	272	-	163	435	37.5
Total	3,416	1,165	3,754	8,335	45.0



Table 6.15

State-wise and Class-wise Distribution of FDI Plants in Matched Cities (Manufacturing Sector)

State	Class-1	Class-2	Class-3	Total	Class-3's Share in State's Total Domestic Plants (%)
Andhra Pradesh	23	7	47	77	61.0
Assam	-	1	53	54	98.1
Bihar	1	-	3	4	75.0
Chandigarh (U T)	-	1	3	4	75.0
Chhattisgarh	-	2	2	4	50.0
Dadra & Nagar Haveli (U T)	-	-	30	30	100.0
Daman & Diu	-	-	11	11	100.0
Delhi	14	-	-	14	-
Goa	-	23	3	26	11.5
Gujarat	53	3	79	135	58.5
Haryana	14	-	68	82	82.9
Himachal Pradesh	-	-	17	17	100.0
Jammu & Kashmir	-	-	6	6	100.0
Jharkhand	-	6	3	9	33.3
Karnataka	69	14	30	113	26.5
Kerala	-	5	15	20	75.0
Madhya Pradesh	1	-	19	20	95.0
Maharashtra	166	18	60	244	24.6
Orissa	-	2	11	13	84.6
Pondicherry	-	16	-	16	-
Punjab	2	-	8	10	80.0
Rajasthan	4	-	23	27	85.2
Tamil Nadu	56	14	59	129	45.7
Uttar Pradesh	7	14	30	51	58.8
Uttarakhand	-	-	17	17	100.0
West Bengal	46	-	43	89	48.3
Total	456	126	640	1,222	52.4



Table 6.16

Summary Statement of Distribution of Cities and Plants Across States (Manufacturing Sector)

State	All Matched Cities	Domestic Plants in Matched Cities	FDI Plants In Matched Cities	Correlation Between Matched Domestic and FDI Plants' Cities
Andaman & Nicobar (U T)	-	-	-	-
Andhra Pradesh	20	646	77	0.97
Assam	12	64	54	0.23
Bihar	3	31	4	0.60
Chandigarh (U T)	2	38	4	1.00
Chhattisgarh	3	43	4	1.00
Dadra & Nagar Haveli (U T)	1	212	30	.
Daman & Diu	1	99	11	.
Delhi	1	140	14	.
Goa	1	109	26	.
Gujarat	30	1,211	135	0.93
Haryana	14	382	82	0.89
Himachal Pradesh	5	136	17	0.97
Jammu & Kashmir	3	14	6	0.74
Jharkhand	4	39	9	0.76
Karnataka	15	510	113	1.00
Kerala	9	125	20	0.84
Madhya Pradesh	13	217	20	0.75
Maharashtra	26	1,807	244	0.93
Meghalaya	-	-	-	.
Mizoram	-	-	-	.
Nagaland	-	-	-	.
Orissa	9	52	13	-0.09
Pondicherry	1	101	16	-
Punjab	6	162	10	0.58
Rajasthan	8	268	27	0.85
Sikkim	-	-	-	.
Tamil Nadu	24	873	129	0.87
Tripura	-	-	-	.
Uttar Pradesh	14	506	51	0.91
Uttarakhand	6	115	17	0.72
West Bengal	13	435	89	0.96
Total	244	8,335	1,222	0.89



Table 6.17

Distribution of Cities by State and Size for FDI-Enabled Service Facilities

State	Class-1	Class-2	Class-3	Total
Andaman & Nicobar	-	-	1	1
Andhra Pradesh	1	4	121	126
Assam	-	1	1	2
Bihar	1	-	1	2
Chandigarh	-	1	-	1
Chhattisgarh	-	1	-	1
Daman & Diu	-	-	1	1
Delhi	1	-	-	1
Goa	-	-	8	8
Gujarat	3	2	14	19
Haryana	1	-	7	8
Himachal Pradesh	-	-	2	2
Jammu & Kashmir	-	1	2	3
Jharkhand	-	2	2	4
Karnataka	1	2	73	76
Kerala	-	2	20	22
Madhya Pradesh	2	2	1	5
Maharashtra	4	3	6	13
Manipur	-	-	1	1
Orissa	-	2	4	6
Pondicherry	-	-	1	1
Punjab	1	2	7	10
Rajasthan	1	3	5	9
Sikkim	-	-	1	1
Tamil Nadu	1	4	21	26
Tripura	-	-	1	1
Uttar Pradesh	4	3	3	10
Uttarakhand	-	-	1	1
West Bengal	2	-	6	8
Total	23	35	311	369



Table 6.18

Distribution of FDI-Enabled Service Facilities by State and Size

State	Class-1	Class-2	Class-3	Total
Andaman & Nicobar	-	-	1	1
Andhra Pradesh	65	33	150	248
Assam	-	4	1	5
Bihar	4	-	1	5
Chandigarh	-	8	-	8
Chhattisgarh	-	3	-	3
Daman & Diu	-	-	1	1
Delhi	60	-	-	60
Goa	-	-	16	16
Gujarat	30	8	18	56
Haryana	1	-	22	23
Himachal Pradesh	-	-	2	2
Jammu & Kashmir	-	1	3	4
Jharkhand	-	6	2	8
Karnataka	115	13	96	224
Kerala	-	29	27	56
Madhya Pradesh	10	2	1	13
Maharashtra	192	11	6	209
Manipur	-	-	1	1
Orissa	-	5	4	9
Pondicherry	-	-	6	6
Punjab	5	5	9	19
Rajasthan	11	5	7	23
Sikkim	-	-	1	1
Tamil Nadu	106	19	27	152
Tripura	-	-	1	1
Uttar Pradesh	14	4	31	49
Uttarakhand	-	-	3	3
West Bengal	43	-	8	51
Total	656	156	445	1257

Table 6.19

Sample for March 2006 to March 2008 (Manufacturing Sector)

Firms	Number of Firms	Number of Plants/Facilities	Number of Cities	Spread of Plants/Facilities
FDI Manufacturing Firms	351	1171	275	4.3
Domestic Manufacturing Firms	3107	8485	958	8.9
All Manufacturing Firms	3458	9656	1003	9.6
FDI Service Firms	94	1248	369	3.4



Table 6.20

Distribution of FDI Plants in Large and Small Cities According to the Spread of Firms in Number of States (Manufacturing Sector)

Classification	FDI Plants						
	Large Cities (Class-1 & Class-2)	Small Cities (Class-3)	Total Plants	Share of Small Cities in Total Plants (%)	Number of FDI Firms	Average number of Plants per Firm	Average number of Plants per Firm per State
Firms Spread in only 1 State	136	181	317	57.1	190	1.7	1.7
Firms Spread in 2 States	98	150	248	60.5	72	3.4	1.7
Firms Spread in 3 States	107	84	191	44.0	46	4.2	1.4
Firms Spread in 4 States	42	70	112	62.5	17	6.6	1.6
Firms Spread in 5 States	60	36	96	37.5	11	8.7	1.7
Firms Spread in more than 5 States	106	101	207	48.8	15	13.8	2.3
Total	549	622	1,171	53.1	351	3.3	

Table 6.21

Distribution of Domestic Plants in Large and Small Cities According to the Spread of Firms in Number of States (Manufacturing Sector)

Classification	FDI Plants						
	Large Cities (Class-1 & Class-2)	Small Cities (Class-3)	Total Plants	Share of Small Cities in Total Plants (%)	Number of FDI Firms	Average number of Plants per Firm	Average number of Plants per Firm per State
Firms Spread in only 1 State	1,520	1,750	3,270	53.5	2,098	1.6	1.6
Firms Spread in 2 States	943	1,052	1,995	52.7	591	3.4	1.7
Firms Spread in 3 States	443	620	1,063	58.3	201	5.3	1.8
Firms Spread in 4 States	293	386	679	56.8	94	7.2	1.8
Firms Spread in 5 States	194	268	462	58.0	52	8.9	1.8
Firms Spread in more than 5 States	463	553	1,016	54.4	71	14.3	2.4
Total	3,856	4,629	8,485	54.6	3,107	2.7	

Table 6.22

Distribution of FDI Plants for Top 7 States in FDI-Enabled Manufacturing Sectors

State	Total Number of Plants	Plants in Class-3 City	Class-3 City's Share	State-wise Share in Total
Andhra Pradesh	109	46	42.2	13.0
Gujarat	122	48	39.3	14.5
Haryana	72	31	43.1	8.6
Karnataka	98	48	49.0	11.7
Maharashtra	247	100	40.5	29.4
Tamil Nadu	131	48	36.6	15.6
West Bengal	62	21	33.9	7.4
Total for 7 States	841	342	40.7	100



Table 6.23

Sectoral Distribution of Capital, Equities and Market Capitalisation for Top 25 Market Capitalisation-Based Firms (Manufacturing Sector)

S. No.	NIC 3-Digit	NIC Activity	Variables	Total for FDI Firms	Total for Domestic Firms	Total for All Firms	Share of FDI Firms in All Firms	Share of FDI Firms in Total of Corresponding Variables
				(Rs cr)	(Rs cr)	(Rs cr)	(%)	(%)
1	242	Other Chemical Products	Net Fixed capital	8797	25694	34492	25.5	11.2
			Equity Capital	1256	4131	5387	23.3	11.1
			Foreign Equity	598	18	616	97.1	12.1
			Domestic Equity	121	1939	2060	5.9	6.5
			Market Capitalisation	107537	157777	265314	40.5	22.1
2	272	Basic precious and non-ferrous metals	Net Fixed capital	1992	21670	23661	8.4	2.5
			Equity Capital	203	2421	2625	7.7	1.8
			Foreign Equity	119	1	120	99.5	2.4
			Domestic Equity	13	1397	1409	0.9	0.7
			Market Capitalisation	51829	110050	161878	32.0	10.6
3	312	Electricity distribution and control apparatus	Net Fixed capital	523	566	1088	48.0	0.7
			Equity Capital	90	99	189	47.7	0.8
			Foreign Equity	57	0	57	100.0	1.1
			Domestic Equity	0	32	32	0.0	0.0
			Market Capitalisation	43538	3347	46885	92.9	8.9
4	341	Motor vehicles	Net Fixed capital	4841	10843	15684	30.9	6.1
			Equity Capital	288	3097	3385	8.5	2.6
			Foreign Equity	134	13	147	91.1	2.7
			Domestic Equity	1	238	239	0.6	0.1
			Market Capitalisation	28994	42549	71544	40.5	6.0
5	269	Non-metallic mineral products n.e.c.	Net Fixed capital	3773	27684	31458	12.0	4.8
			Equity Capital	689	3736	4426	15.6	6.1
			Foreign Equity	337	122	458	73.5	6.8
			Domestic Equity	49	1405	1455	3.4	2.7
			Market Capitalisation	25592	76013	101604	25.2	5.3
6	331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	Net Fixed capital	554	201	756	73.4	0.7
			Equity Capital	59	136	195	30.3	0.5
			Foreign Equity	36	0	37	99.5	0.7
			Domestic Equity	0	28	28	0.0	0.0
			Market Capitalisation	25110	202	25312	99.2	5.2
7	343	Parts and accessories for motor vehicles and their engines	Net Fixed capital	2571	5870	8441	30.5	3.3
			Equity Capital	274	677	952	28.8	2.4
			Foreign Equity	131	0	131	99.9	2.7
			Domestic Equity	59	262	322	18.4	3.2
			Market Capitalisation	22701	5721	28421	79.9	4.7
8	152	Dairy products	Net Fixed capital	1314	51	1365	96.3	1.7
			Equity Capital	196	26	222	88.1	1.7
			Foreign Equity	121	0	121	100.0	2.4
			Domestic Equity	0	16	16	0.0	0.0
			Market Capitalisation	20779	42	20821	99.8	4.3
9	291	General purpose machinery	Net Fixed capital	1425	4386	5810	24.5	1.8
			Equity Capital	372	1421	1793	20.8	3.3
			Foreign Equity	236	5	241	98.0	4.8
			Domestic Equity	14	345	360	4.0	0.8
			Market Capitalisation	19663	35420	55082	35.7	4.0
10	271	Basic Iron & Steel	Net Fixed capital	23693	60615	84308	28.1	30.1
			Equity Capital	2972	13969	16942	17.5	26.4
			Foreign Equity	1169	41	1210	96.6	23.7
			Domestic Equity	675	5500	6175	10.9	36.4
			Market Capitalisation	17637	218026	235663	7.5	3.6
11	359	Transport equipment n.e.c.	Net Fixed capital	1156	2015	3171	36.5	1.5
			Equity Capital	40	255	295	13.5	0.4
			Foreign Equity	10	0	10	100.0	0.2
			Domestic Equity	12	128	140	8.3	0.6
			Market Capitalisation	13783	2639	16423	83.9	2.8



S. No.	NIC 3-Digit	NIC Activity	Variables	Total for FDI Firms	Total for Domestic Firms	Total for All Firms	Share of FDI Firms in All Firms	Share of FDI Firms in Total of Corresponding Variables
				(Rs cr)	(Rs cr)	(Rs cr)	(%)	(%)
12	452	Building of complete constructions or parts thereof; civil engineering	Net Fixed capital	1238	7405	8642	14.3	1.6
			Equity Capital	252	1163	1415	17.8	2.2
			Foreign Equity	136	1	137	99.5	2.8
			Domestic Equity	17	252	269	6.3	0.9
			Market Capitalisation	13660	106649	120309	11.4	2.8
13	921	Motion picture, radio, television and other entertainment activities	Net Fixed capital	149	1027	1176	12.7	0.2
			Equity Capital	68	669	737	9.2	0.6
			Foreign Equity	20	1	20	96.6	0.4
			Domestic Equity	13	117	130	10.2	0.7
			Market Capitalisation	12531	6340	18872	66.4	2.6
14	131	Mining of iron ores	Net Fixed capital	398	1321	1719	23.2	0.5
			Equity Capital	39	674	713	5.5	0.3
			Foreign Equity	20	0	20	100.0	0.4
			Domestic Equity	0	667	667	0.0	0.0
			Market Capitalisation	12321	0	12321	100.0	2.5
15	232	Refined petroleum products	Net Fixed capital	3169	125938	129108	2.5	4.0
			Equity Capital	283	12646	12929	2.2	2.5
			Foreign Equity	114	301	415	27.4	2.3
			Domestic Equity	80	7234	7314	1.1	4.3
			Market Capitalisation	8637	517294	525931	1.6	1.8
16	319	Electrical equipment n.e.c.	Net Fixed capital	1338	1099	2437	54.9	1.7
			Equity Capital	184	213	397	46.3	1.6
			Foreign Equity	83	1	84	99.2	1.7
			Domestic Equity	36	52	88	41.2	2.0
			Market Capitalisation	6732	1616	8347	80.6	1.4
17	241	Manufacture of basic chemicals	Net Fixed capital	3000	37718	40718	7.4	3.8
			Equity Capital	683	9436	10119	6.8	6.1
			Foreign Equity	239	41	280	85.2	4.8
			Domestic Equity	187	3666	3853	4.8	10.1
			Market Capitalisation	3890	68056	71946	5.4	0.8
18	292	Special purpose machinery	Net Fixed capital	517	4146	4664	11.1	0.7
			Equity Capital	142	1330	1472	9.7	1.3
			Foreign Equity	84	2	86	98.1	1.7
			Domestic Equity	5	989	994	0.5	0.3
			Market Capitalisation	2224	14002	16226	13.7	0.5
19	11	Growing of crops; market gardening; horticulture	Net Fixed capital	870	1103	1974	44.1	1.1
			Equity Capital	89	302	391	22.8	0.8
			Foreign Equity	42	9	51	82.4	0.9
			Domestic Equity	11	112	122	8.6	0.6
			Market Capitalisation	2098	7443	9541	22.0	0.4
20	192	Footwear	Net Fixed capital	104	263	367	28.4	0.1
			Equity Capital	64	84	148	43.3	0.6
			Foreign Equity	33	0	33	99.3	0.7
			Domestic Equity	0	49	49	0.0	0.0
			Market Capitalisation	1846	350	2196	84.1	0.4
21	160	Tobacco products	Net Fixed capital	251	6307	6558	3.8	0.3
			Equity Capital	26	424	450	5.7	0.2
			Foreign Equity	9	0	9	100.0	0.2
			Domestic Equity	4	24	27	13.7	0.2
			Market Capitalisation	1827	78722	80549	2.3	0.4
22	171	Spinning, weaving and finishing of textiles	Net Fixed capital	3608	33086	36694	9.8	4.6
			Equity Capital	374	4876	5251	7.1	3.3
			Foreign Equity	108	11	119	90.9	2.2
			Domestic Equity	111	2090	2201	5.1	6.0
			Market Capitalisation	996	46494	47491	2.1	0.2
23	293	Domestic appliances, n.e.c.	Net Fixed capital	323	5790	6113	5.3	0.4
			Equity Capital	135	472	607	22.3	1.2
			Foreign Equity	100	0	100	99.6	2.0
			Domestic Equity	2	257	259	0.6	0.1
			Market Capitalisation	604	9685	10288	5.9	0.1



S. No.	NIC 3-Digit	NIC Activity	Variables	Total for FDI Firms	Total for Domestic Firms	Total for All Firms	Share of FDI Firms in All Firms	Share of FDI Firms in Total of Corresponding Variables
				(Rs cr)	(Rs cr)	(Rs cr)	(%)	(%)
24	722	Software publishing, consultancy and supply	Net Fixed capital	355	7651	8007	4.4	0.5
			Equity Capital	154	1464	1619	9.5	1.4
			Foreign Equity	68	2	70	96.9	1.4
			Domestic Equity	11	513	524	2.1	0.6
			Market Capitalisation	573	164141	164714	0.3	0.1
25	323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	Net Fixed capital	406	447	853	47.6	0.5
			Equity Capital	154	133	286	53.7	1.4
			Foreign Equity	114	0	114	100.0	2.3
			Domestic Equity	17	56	73	23.8	0.9
			Market Capitalisation	172	625	798	21.6	0.0
		Total Top 25	Net Fixed capital	66366	392896	459262	14.5	84.2
			Equity Capital	9089	63855	72944	12.5	80.6
			Foreign Equity	4117	568	4685	87.9	83.3
			Domestic Equity	1438	27369	28807	5.0	77.6
			Market Capitalisation	445274	1673203	2118476	21.0	91.4
		Total	Net Fixed capital	78799	640547	719346	11.0	100.0
			Equity Capital	11272	120363	131635	8.6	100.0
			Foreign Equity	4941	683	5624	87.9	100.0
			Domestic Equity	1853	59566	61419	3.0	100.0
			Market Capitalisation	487022	2743966	3230988	15.1	100.0
		Share of Top 25 in Total	Net Fixed capital	84.2	61.3	63.8		
			Equity Capital	80.6	53.1	55.4		
			Foreign Equity	83.3	83.2	83.3		
			Domestic Equity	77.6	45.9	46.9		
			Market Capitalisation	91.4	61.0	65.6		



Table 6.24

Sectoral Distribution of Net Fixed Capital, Market Capitalisation and Equities in Large and Small Cities for Top 25 Market Capitalisation-Based FDI Firms (Manufacturing Sector)

S. No.	NIC 3-Digit	NIC Activity	Variables	Large Cities (Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	All cities (Rs cr)	Share of small cities in All FDI cities (%)
1	242	Other Chemical products	Net Fixed capital	14452	9241	23693	39.0
			Equity Capital	1800	1172	2972	39.4
			Foreign Equity	819	351	1169	30.0
			Domestic Equity	458	217	675	32.1
			Market Capitalisation	53864	53672	107537	49.9
2	272	Basic precious and non-ferrous metals	Net Fixed capital	3862	4935	8797	56.1
			Equity Capital	645	611	1256	48.6
			Foreign Equity	317	280	598	46.9
			Domestic Equity	56	66	121	54.1
			Market Capitalisation	21448	30381	51829	58.6
3	312	Electricity distribution and control apparatus	Net Fixed capital	478	44	523	8.4
			Equity Capital	82	8	90	8.9
			Foreign Equity	51	5	57	9.1
			Domestic Equity	0	0	0	-
			Market Capitalisation	39924	3614	43538	8.3
4	341	Motor vehicles	Net Fixed capital	1013	2760	3773	73.1
			Equity Capital	127	563	689	81.6
			Foreign Equity	60	277	337	82.2
			Domestic Equity	4	45	49	91.3
			Market Capitalisation	14071	14924	28994	51.5
5	269	Non-metallic mineral products n.e.c.	Net Fixed capital	1663	1338	3000	44.6
			Equity Capital	474	209	683	30.6
			Foreign Equity	147	92	239	38.4
			Domestic Equity	160	27	187	14.5
			Market Capitalisation	7067	18524	25592	72.4
6	331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	Net Fixed capital	511	43	554	7.8
			Equity Capital	50	9	59	15.7
			Foreign Equity	34	3	36	8.1
			Domestic Equity	0	0	0	-
			Market Capitalisation	23033	2077	25110	8.3
7	343	Parts and accessories for motor vehicles and their engines	Net Fixed capital	988	436	1425	30.6
			Equity Capital	301	71	372	19.2
			Foreign Equity	199	37	236	15.8
			Domestic Equity	6	8	14	57.6
			Market Capitalisation	19587	3114	22701	13.7
8	152	Dairy product	Net Fixed capital	192	1046	1238	84.5
			Equity Capital	169	83	252	33.0
			Foreign Equity	107	29	136	21.0
			Domestic Equity	4	13	17	79.0
			Market Capitalisation	8777	12003	20779	57.8
9	291	General purpose machinery	Net Fixed capital	2326	2515	4841	51.9
			Equity Capital	131	157	288	54.4
			Foreign Equity	62	72	134	53.7
			Domestic Equity	0	1	1	100.0
			Market Capitalisation	14633	5029	19663	25.6
10	271	Basic Iron & Steel	Net Fixed capital	1196	1375	2571	53.5
			Equity Capital	114	160	274	58.4
			Foreign Equity	55	77	131	58.4
			Domestic Equity	25	34	59	57.6
			Market Capitalisation	3391	14247	17637	80.8
11	359	Transport equipment n.e.c.	Net Fixed capital		1156	1156	100.0
			Equity Capital		40	40	100.0
			Foreign Equity		10	10	100.0
			Domestic Equity		12	12	100.0
			Market Capitalisation		13783	13783	100.0
12	452	Building of complete constructions or parts thereof; civil engineering	Net Fixed capital	614	700	1314	53.3
			Equity Capital	83	113	196	57.8
			Foreign Equity	56	65	121	53.7
			Domestic Equity	0	0	0	-
			Market Capitalisation	2906	10754	13660	78.7



S. No.	NIC 3-Digit	NIC Activity	Variables	Large Cities [Class-2] (Rs cr)	Small Cities [Class-3] (Rs cr)	All cities (Rs cr)	Share of small cities in All FDI cities (%)
13	921	Motion picture, radio, television and other entertainment activities	Net Fixed capital	149		149	0.0
			Equity Capital	68		68	0.0
			Foreign Equity	20		20	0.0
			Domestic Equity	13		13	0.0
			Market Capitalisation	12531		12531	0.0
14	131	Mining of iron ores	Net Fixed capital	100	299	398	75.0
			Equity Capital	10	30	39	75.0
			Foreign Equity	5	15	20	75.0
			Domestic Equity	0	0	0	
			Market Capitalisation	3080	9241	12321	75.0
15	232	Refined petroleum products	Net Fixed capital	959	1033	1992	51.9
			Equity Capital	92	111	203	54.6
			Foreign Equity	56	63	119	53.0
			Domestic Equity	5	8	13	59.3
			Market Capitalisation	2826	5811	8637	67.3
16	319	Electrical equipment n.e.c.	Net Fixed capital	363	43	406	10.6
			Equity Capital	95	59	154	38.2
			Foreign Equity	78	36	114	31.4
			Domestic Equity	4	14	17	79.5
			Market Capitalisation	2653	4079	6732	60.6
17	241	Manufacture of basic chemicals	Net Fixed capital	323		323	0.0
			Equity Capital	135		135	0.0
			Foreign Equity	100		100	0.0
			Domestic Equity	2		2	0.0
			Market Capitalisation	2513	1377	3890	35.4
18	292	Special purpose machinery	Net Fixed capital	207	310	517	60.0
			Equity Capital	73	69	142	48.9
			Foreign Equity	43	41	84	49.0
			Domestic Equity	2	3	5	61.4
			Market Capitalisation	1436	788	2224	35.4
19	11	Growing of crops; market gardening; horticulture	Net Fixed capital	54	816	870	93.8
			Equity Capital	6	84	89	93.8
			Foreign Equity	1	41	42	97.4
			Domestic Equity	2	9	11	83.9
			Market Capitalisation	35	2063	2098	98.3
20	192	Footwear	Net Fixed capital	52	52	104	50.0
			Equity Capital	32	32	64	50.0
			Foreign Equity	16	16	33	50.0
			Domestic Equity	0	0	0	
			Market Capitalisation	923	923	1846	50.0
21	160	Tobacco products	Net Fixed capital	251		251	0.0
			Equity Capital	26		26	0.0
			Foreign Equity	9		9	0.0
			Domestic Equity	4		4	0.0
			Market Capitalisation	1827		1827	0.0
22	171	Spinning, weaving and finishing of textiles	Net Fixed capital	1173	2435	3608	67.5
			Equity Capital	149	226	374	60.3
			Foreign Equity	37	72	108	66.0
			Domestic Equity	49	63	111	56.2
			Market Capitalisation	413	584	996	58.6
23	293	Domestic appliances, n.e.c.	Net Fixed capital	323		323	0.0
			Equity Capital	135		135	0.0
			Foreign Equity	100		100	0.0
			Domestic Equity	2		2	0.0
			Market Capitalisation	604		604	0.0
24	722	Software publishing, consultancy and supply	Net Fixed capital	241	114	355	32.1
			Equity Capital	97	58	154	37.3
			Foreign Equity	46	22	68	32.7
			Domestic Equity	11	0	11	0.7
			Market Capitalisation	496	78	573	13.5
25	323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	Net Fixed capital	187			
			Equity Capital	73			
			Foreign Equity	63			
			Domestic Equity	0			
			Market Capitalisation	116		56	



S. No.	NIC 3-Digit	NIC Activity	Variables	Large Cities (Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	All cities (Rs cr)	Share of small cities in All FDI cities (%)
Total Top 25		Net Fixed capital	31679	30690	62369	49.2	
		Equity Capital	4966	3864	8831	43.8	
		Foreign Equity	2479	1604	4083	39.3	
		Domestic Equity	805	519	1324	39.2	
		Market Capitalisation	238153	207121	445274	46.5	
Total		Net Fixed capital	39531	39268	78799	49.8	
		Equity Capital	5887	5384	11272	47.8	
		Foreign Equity	2762	2179	4941	44.1	
		Domestic Equity	1030	823	1853	44.4	
		Market Capitalisation	262491	224532	487022	46.1	
Share of Top 25 in Total		Net Fixed capital	80.1	78.2	79.1		
		Equity Capital	84.4	71.8	78.3		
		Foreign Equity	89.7	73.6	82.6		
		Domestic Equity	78.2	63.1	71.5		
		Market Capitalisation	90.7	92.2	91.4		



**Table 6.25
Distribution of Sectoral Market Capitalisation Across States in Manufacturing Sector (Rs. crore)**

S. No.	NIC 3-Digit State	Total Market Capitalization (MC)	State-1	MC-1 State Share in Market Total	State-2 Market	MC-2 State Share in Market Total	State-3	MC-3 State Share in Market Total	State-4	MC-4 State Share in Market Total	State-4	MC-4 State Share in Market Total	State-4	MC-4 State Share in Market Total	
1	242	Other chemical products	107537	Maharashtra	33954 31.6	Karnataka	10695 9.9	West Bengal	7893 7.3	Himachal Pradesh	7383 6.9	Goa	7016 6.5		
2	272	Basic precious and non-ferrous metals	51829	Maharashtra	20283 39.1	Dadra & Nagar Haveli (UT)	20232 39.0	Tamil Nadu	6222 12.0	Madhya Pradesh	5058 9.8	Andhra Pradesh	33 0.1		
3	312	Electricity distribution and control apparatus	43538	Maharashtra	9861 22.6	Karnataka	8545 19.6	Gujarat	7395 17.0	Haryana	4930 11.3	West Bengal	4596 10.6		
4	341	Motor vehicles	28994	Haryana	11984 41.3	Delhi	11984 41.3	Karnataka	1565 5.4	Tamil Nadu	1565 5.4	Rajasthan	522 1.8		
5	269	Non-metallic mineral products n.e.c.	25592	Gujarat	6555 25.6	Maharashtra	4278 16.7	Punjab	4066 15.9	West Bengal	2216 8.7	Chhattisgarh	2033 7.9		
6	331	Medical appliances and instruments and appliances	25110	Maharashtra	14614 58.2	Gujarat	2203 8.8	Goa	2072 8.3	Andhra Pradesh	2072 8.3	Haryana	2072 8.3		
7	343	Parts and accessories for motor vehicles and their engines	22701	Karnataka	11527 50.8	Maharashtra	4198 18.5	Rajasthan	3407 15.0	Tamil Nadu	1814 8.0	Haryana	1156 5.1		
8	152	Dairy products	20779	Goa	4132 19.9	Punjab	3097 14.9	Haryana	3097 14.9	Uttarakhand	2711 13.0	Tamil Nadu	2711 13.0		
9	291	General purpose machinery	19663	Maharashtra	10783 54.8	Gujarat	3040 15.6	Karnataka	1844 9.4	Daman & Diu	1573 8.0	Andhra Pradesh	1100 5.6		
10	271	Basic Iron & Steel	17637	Maharashtra	7149 40.5	Dadra & Nagar Haveli (UT)	4553 26.0	Haryana	1854 10.5	Odisha	1305 7.4	Daman & Diu	919 5.2		
11	359	Transport equipment n.e.c.	13783	Haryana	13783 10.0										
12	452	Building of complete constructions or parts thereof, civil engineering	13660	Madhya Pradesh	9454 69.2	Uttar Pradesh	1300 9.5	Tamil Nadu	834 6.1	Karnataka	773 5.7	Bihar	650 4.8		
13	921	Motion picture, radio, television and other entertainment activities	12531	Maharashtra	5459 43.6	Uttar Pradesh	3536 28.2	Delhi	3536 28.2						
14	131	Mining of iron ores	12321	Goa	6161 50.0	Andhra Pradesh	3080 25.0	Odisha	3080 25.0						
15	232	Refined petroleum products	8637	Tamil Nadu	4908 56.8	Maharashtra	747 8.7	Haryana	743 8.6	Dadra & Nagar Haveli (UT)	743 8.6	Karnataka	743 8.6		
16	319	Other electrical equipment n.e.c.	6732	Uttar Pradesh	2099 31.2	Maharashtra	912 13.6	Haryana	764 11.4	Tamil Nadu	632 9.4	Madhya Pradesh	472 7.0		
17	314	Accumulators, primary cells and primary batteries	5671	Maharashtra	1789 31.6	Tamil Nadu	1193 21.0	West Bengal	1193 21.0	Gujarat	704 12.4	Haryana	596 10.5		
18	155	Beverages	4582	Maharashtra	764 16.7	Karnataka	672 14.7	Kerala	672 14.7	West Bengal	520 11.3	Andhra Pradesh	428 9.3		
19	701	Real estate activities with own or leased property	4384	Karnataka	4384 10.0										
20	731	Research and experimental development on natural sciences and engineering	4307	Karnataka	4307 10.0										
21	241	Basic chemicals	3890	Maharashtra	1268 32.6	Tamil Nadu	719 18.5	Andhra Pradesh	554 14.2	Goa	332 8.5	Karnataka	263 6.8		
22	519	Other wholesale	3141	Karnataka	1770 56.3	Gujarat	905 28.8	Tamil Nadu	330 10.5	Fundicherry	82 2.6	Andhra Pradesh	41 1.3		
23	292	Special purpose machinery	2224	Karnataka	639 28.7	Andhra Pradesh	635 28.6	Maharashtra	495 22.2	Gujarat	287 12.9	Goa	91 4.1		
24	402	Gas, distribution of gaseous fuels through mains	2200	Gujarat	2200 10.0	Andhra Pradesh	0								
25	512	Wholesale of agricultural raw material, live animals, food beverages and tobacco	2137	Kerala	534 25.0	Goa	267 12.5	Karnataka	267 12.5	Andhra Pradesh	267 12.5	Maharashtra	267 12.5		
	Total	All Sectors	487022												



Table 6.26
Distribution of State Total Market Capitalisation in Manufacturing Sector Across NIC Sectors (Rs. crore)

S. No.	State No.	Total Market Capitalisation (MC)	NIC 3-Digit 1	NIC MC-1 Sector Share in State	NIC 3-Digit 2	NIC MC-2 Sector Share in State	NIC 3-Digit 3	NIC MC-3 Sector Share in State	NIC 3-Digit 4	NIC MC-4 Sector Share in State	NIC 3-Digit 5	NIC MC-5 Sector Share in State	NIC MC-6	NIC MC-5 Sector Share in State
		MC-1	MC-2	MC-3	MC-4	MC-5	MC-6	MC-7	MC-8	MC-9	MC-10	MC-11	MC-12	MC-13
1	Maharashtra	122802	242	33954	27.6	272	20283	16.5	331	14614	11.9	291	10783	8.8
2	Karnataka	55389	343	11527	20.8	242	10695	19.3	312	8545	15.4	701	4384	7.9
3	Haryana	44686	359	13783	30.8	341	11984	26.8	312	4930	11.0	152	3097	6.9
4	Gujarat	31154	312	7395	23.7	269	6555	21.0	242	5094	16.4	291	3060	9.8
5	Dadra & Nagar Haveli (UT)	28261	272	20232	71.6	271	4593	16.3	242	1716	6.1	232	743	2.6
6	Tamil Nadu	26585	272	6222	23.4	232	4908	18.5	152	2711	10.2	312	2298	8.6
7	Goa	20891	242	7016	33.6	131	6161	29.5	152	4132	19.8	331	2072	9.9
8	West Bengal	19844	242	7893	39.7	312	4596	23.1	269	2216	11.2	314	1193	6.0
9	Andhra Pradesh	18080	242	5713	31.6	131	3080	17.0	331	2072	11.5	291	1100	6.1
10	Madhya Pradesh	18004	452	9454	52.5	272	5058	28.1	242	1708	9.5	269	487	2.7
11	Delhi	17538	341	11984	68.3	921	3536	20.2	551	669	3.8	152	645	3.7
12	Uttar Pradesh	16594	242	5759	34.7	921	3536	21.3	312	2298	13.8	319	2099	12.6
13	Himachal Pradesh	9856	242	7383	74.9	269	2033	20.6	749	134	1.4	333	107	1.1
14	Punjab	9281	269	4066	43.8	152	3097	33.4	242	1027	11.1	155	336	3.6
15	Daman & Diu	8880	242	6333	71.3	291	1573	17.7	271	919	10.3	252	55	0.6
16	Rajasthan	7235	343	3407	47.1	269	2033	28.1	341	522	7.2	242	360	5.0
17	Uttarakhand	7140	152	2711	38.0	312	2465	34.5	242	1068	15.0	261	214	3.0
18	Orissa	5289	131	3080	58.2	271	1305	24.7	155	336	6.3	621	245	4.6
19	Pondicherry	4847	242	3143	64.8	312	1149	23.7	293	189	3.9	515	95	2.0
20	Kerala	3685	242	2158	58.6	155	672	18.2	512	534	14.5	322	228	6.2
21	Assam	3389	11	1796	53.0	242	1027	30.3	611	486	14.3	269	66	2.0
22	Chhattisgarh	2269	269	2033	89.6	319	236	10.4	171	0	0.0	273	0	0.0
23	Bihar	2075	232	743	35.8	452	650	31.3	192	615	29.6	242	67	3.2
24	Jharkhand	1603	291	925	57.7	242	404	25.2	241	120	7.5	273	114	7.1
25	Chandigarh (UT)	1249	242	1240	99.3	171	9	0.7	323	0	0.0	0.0	0.0	0.0
26	Jammu & Kashmir	374	319	236	631	291	66	17.8	242	63	16.8	292	9	2.4
	All States	487022												0.0



Table 6.27

Estimated Market Capitalisation of Foreign Equity in Manufacturing Sector

S. No.	NIC Activity	Total Market Capitalization to Total Equity Ratio			Estimated Market Capitalization of Foreign Equity Component (Rs cr)		
		FDI	Domestic	All	FDI	Domestic	All
1	242 Manufacture of other chemical products	85.6	38.2	49.3	51178	682	51859
2	272 Manufacture of basic precious and non-ferrous metals	255.1	45.4	61.7	30357	28	30385
3	312 Manufacture of electricity distribution and control apparatus	482.7	33.8	247.7	27318	0	27318
4	331 Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	425.1	1.5	129.7	15498	0	15498
5	341 Manufacture of motor vehicles	100.7	13.7	21.1	13472	180	13652
6	152 Manufacture of dairy products	106.2	1.6	93.8	12855		12855
7	269 Manufacture of non-metallic mineral products n.e.c.	37.1	20.3	23.0	12496	2472	14968
8	291 Manufacture of general purpose machinery	52.8	24.9	30.7	12463	118	12581
9	343 Manufacture of parts and accessories for motor vehicles and their engines	82.7	8.4	29.9	10847	1	10848
10	452 Building of complete constructions or parts thereof; civil engineering	54.3	91.7	85.0	7380	57	7437
11	271 Manufacture of Basic Iron & Steel	5.9	15.6	13.9	6939	639	7578
12	131 Mining of iron ores	313.0		17.3	6306		6306
13	701 Real estate activities with own or leased property.	60.1	226.6	205.5	3809		3809
14	921 Motion picture, radio, television and other entertainment activities	183.7	9.5	25.6	3626	7	3632
15	359 Manufacture of transport equipment n.e.c.	345.1	10.4	55.7	3584		3584
16	232 Manufacture of refined petroleum products	30.5	40.9	40.7	3472	12325	15797
17	314 Manufacture of accumulators, primary cells and primary batteries	48.9	8.7	29.1	3164		3164
18	319 Manufacture of other electrical equipment n.e.c.	36.7	7.6	21.0	3048	5	3053
19	155 Manufacture of beverages	65.8	21.7	27.0	1911	47	1958
20	519 Other wholesale	51.3	12.0	16.8	1684	12	1697
21	241 Manufacture of basic chemicals	5.7	7.2	7.1	1360	299	1659
22	292 Manufacture of special purpose machinery	15.6	10.5	11.0	1316	18	1334
23	11 Growing of crops; market gardening; horticulture	23.5	24.6	24.4	993	223	1216
24	551 Hotels; camping sites and other provision of short-stay accommodation	29.3	24.8	25.1	953	43	996
25	192 Manufacture of footwear	28.7	4.2	14.8	942	1	943
26	731 Research and experimental development on natural sciences and engineering (NSE).	86.1	54.0	70.6	882		882
27	611 Sea and coastal water transport	28.7	54.2	40.1	761		761
28	402 Manufacture of gas; distribution of gaseous fuels through mains	34.2	7.0	9.1	655		655
29	160 Manufacture of tobacco products	70.7	185.6	179.0	615		615
30	512 Wholesale of agricultural raw material, live animals, food beverages and tobacco.	31.9	2.4	17.9	551	0	551
31	749 Business activities n.e.c.	38.0	11.3	14.2	542	12	554
32	181 Manufacture of wearing apparel, except fur apparel	11.0	6.2	7.8	504	8	512
33	293 Manufacture of domestic appliances, n.e.c.	4.5	20.5	16.9	444	8	451
34	313 Manufacture of insulated wire and cable	17.7	4.7	5.6	396	10	405
35	261 Manufacture of glass and glass produc	16.4	9.7	11.1	327	544	870
36	322 Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	14.9	3.7	4.2	293	1	294
37	171 Spinning, weaving and finishing of textiles	2.7	9.5	9.0	289	104	393
38	252 Manufacture of plastic products	4.6	12.5	11.6	287	45	332



S. No.	NIC Activity	Total Market Capitalization to Total Equity Ratio			Estimated Market Capitalization of Foreign Equity Component (Rs cr)		
		FDI	Domestic	All	FDI	Domestic	All
39	515 Wholesale of machinery, equipment and supplies	8.1	101.5	89.3	270	7	277
40	251 Manufacture of rubber products	3.3	17.6	12.0	260	44	304
41	722 Software publishing, consultancy and supply	3.7	112.1	101.7	251	241	493
42	333 Manufacture of watches and clocks	23.9	91.9	75.8	250		250
43	221 Publishing	23.4	24.5	24.5	242		242
44	311 Manufacture of electric motors, generators and transformers	9.5	114.9	112.7	175	45	220
45	289 Manufacture of other fabricated metal products;	8.0	28.6	26.2	171	63	234
46	511 Wholesale on a fee or contract basis	16.0	33.3	32.9	165	23	188
47	273 Casting of metals	8.9	7.1	7.3	159		159
48	323 Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	1.1	4.7	2.8	128		128
49	621 Scheduled air transport	4.1		4.1	127		127
50	210 Manufacture of paper and paper product	4.9	4.5	4.5	127	10	136
51	151 Production, processing and preservation of meat, fish, fruit vegetables, oils and fats	6.4	9.3	9.2	116	29	146
52	300 Manufacture of office, accounting and computing machinery	36.0	8.0	8.1	79	2	80
53	112 Service activities incidental to oil and gas extraction excluding surveying	14.0	96.7	96.1	52	233	285
54	154 Manufacture of other food products	4.3	13.2	13.0	34	10	44
55	321 Manufacture of electronic valves and tubes and other electronic components	2.9	16.7	15.7	22	122	145
56	369 Manufacturing n.e.c.	4.7	7.3	7.2	7	22	29
57	659 Other financial intermediation	1.3	20.2	19.6	6	19	25
58	141 Quarrying of stone, sand and clay	0.8	10.9	9.2	6	31	37
59	332 Manufacture of optical instruments and photographic equipment	1.3	0.4	0.7	2		2
60	630 Supporting and auxiliary transport activities; activities of travel agencies	1.0	0.6	0.7	1		1
61	514 Wholesale of non-agricultural intermediate products, waste and scrap	0.4	2.5	2.3	1		1
62	12 Raising of poultry (including broiler) and other domesticated birds; production of eggs and operation of poultry hatcheries						
63	50 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing		1.1	0.9		0	0
64	100 Mining of Coal and Lignite		84.1	84.1			
65	101 Mining and agglomeration of hard coal		1.3	1.3		0	0
66	102 Mining and agglomeration of lignite		146.0	146.0			0
67	111 Extraction of crude petroleum and natural gas		100.8	100.8			
69	120 Mining of uranium and thorium ores (e.g., pitchblende), including concentrating of such ores		7.1	7.1			
70	132 Mining of non-ferrous metal ores, except uranium and thorium ores		0.7	0.7			
71	142 Mining and quarrying, n.e.c.						
72	153 Manufacture of grain mill products, starches and starch products, and prepared animal feeds		32.6	32.6		10	10
73	172 Manufacture of other textiles		7.9	7.9		22	22
74	173 Manufacture of knitted and crocheted fabrics and articles		6.0	6.0		0	0
75	182 Dressing and dyeing of fur; manufacture of articles of fur		3.6	3.4			
76	202 Manufacture of products of wood, cork, straw and plaiting materials		10.4	9.0		8	8



S. No.	NIC Activity	Total Market Capitalization to Total Equity Ratio			Estimated Market Capitalization of Foreign Equity Component (Rs cr)		
		FDI	Domestic	All	FDI	Domestic	All
77	222 Printing and service activities related to printing						
78	223 Reproduction of recorded media	7.3	7.3				
79	231 Manufacture of coke oven products	13.3	13.3		4	4	
80	243 Manufacture of man-made fibres	3.0	3.0		6	6	
81	281 Manufacture of structural metal products, tanks, reservoirs and steam generators						
82	315 Manufacture of electric lamps and lighting equipment	0.1	0.1				
83	351 Building and repair of ships & boats	0.0	0.0				
84	353 Manufacture of aircraft and spacecraft	2.2	2.2				
85	361 Manufacture of furniture	5.4	5.4		0		
86	401 Production, collection and distribution of electricity	9.6	9.6		50	50	
87	453 Building installation	11.6	11.6				
88	513 Wholesale of household goods	1.5	1.5				
89	520 Non-specialised retail trade in stores	237.4	237.4				
90	526 Repair of personal and household goods	1.4	1.4				
91	602 Other land transport						
92	642 Telecommunications	45.7	45.7				
93	671 Activities auxiliary to financial intermediation, except insurance and pension funding	4.6	4.6				
94	721 Hardware consultancy.						
95	729 Other computer-related activities	29.4	29.4				
96	742 Architectural, engineering and other technical activities	12.0	12.0		0	0	
97	743 Advertising						
98	803 Higher education						
99	851 Human health activities	10.4	10.4		50	50	
100	924 Sporting and other recreational activities	2.8	2.8				
101	930 Other service activities	41.9	41.9				
Total		246163	18942	265105			



Table 6.28

State-wise and City-wise Distribution of Fixed Capital, Market Capitalisation and Equities in FDI-Enabled Service Sectors

State	Variables	Large Cities (Class 1 & Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	Total	Share of Small Cities in Total (%)
Andaman & Nicobar	Net Fixed Capital	335.3	335.3	335.3	100.0
	Market Capitalisation	114.4	114.4	114.4	100.0
	Total Equity	2.1	2.1	2.1	100.0
	Foreign Equity	1.6	1.6	1.6	100.0
	Domestic Equity	0.0	0.0	0.0	100.0
Andhra Pradesh	Net Fixed Capital	766.0	145.5	911.6	16.0
	Market Capitalisation	11391.4	1293.0	12684.4	10.2
	Total Equity	372.0	66.8	438.7	15.2
	Foreign Equity	163.7	22.0	185.8	11.9
	Domestic Equity	73.6	3.9	77.6	5.1
Assam	Net Fixed Capital	339.9	335.3	675.2	49.7
	Market Capitalisation	157.5	114.4	271.9	42.1
	Total Equity	4.4	2.1	6.5	31.6
	Foreign Equity	2.4	1.6	4.0	40.6
	Domestic Equity	0.0	0.0	0.0	50.0
Bihar	Net Fixed Capital	340.1	335.3	675.5	49.6
	Market Capitalisation	153.7	114.4	268.1	42.7
	Total Equity	4.6	2.1	6.6	31.0
	Foreign Equity	2.4	1.6	4.1	40.4
	Domestic Equity	0.0	0.0	0.0	15.5
Chandigarh (U T)	Net Fixed Capital	12.9		12.9	0.0
	Market Capitalisation	105.8		105.8	0.0
	Total Equity	8.8		8.8	0.0
	Foreign Equity	2.7		2.7	0.0
	Domestic Equity	1.3		1.3	0.0
Chhattisgarh	Net Fixed Capital	339.5		339.5	0.0
	Market Capitalisation	145.5		145.5	0.0
	Total Equity	4.3		4.3	0.0
	Foreign Equity	2.3		2.3	0.0
	Domestic Equity	0.0		0.0	0.0
Daman & Diu	Net Fixed Capital		335.3	335.3	100.0
	Market Capitalisation		114.4	114.4	100.0
	Total Equity		2.1	2.1	100.0
	Foreign Equity		1.6	1.6	100.0
	Domestic Equity		0.0	0.0	100.0
Delhi	Net Fixed Capital	20135.5		20135.5	0.0
	Market Capitalisation	160531.0		160531.0	0.0
	Total Equity	2047.9		2047.9	0.0
	Foreign Equity	451.6		451.6	0.0
	Domestic Equity	902.7		902.7	0.0
Goa	Net Fixed Capital	460.9		460.9	100.0
	Market Capitalisation	373.4		373.4	100.0
	Total Equity	28.8		28.8	100.0
	Foreign Equity	6.9		6.9	100.0
	Domestic Equity	11.2		11.2	100.0



State	Variables	Large Cities (Class 1 & Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	Total	Share of Small Cities in Total (%)
Gujarat	Net Fixed Capital	4254.3	717.8	4972.1	14.4
	Market Capitalisation	24792.4	618.3	25410.7	2.4
	Total Equity	495.2	18.9	514.1	3.7
	Foreign Equity	103.6	7.5	111.0	6.7
	Domestic Equity	268.3	0.3	268.6	0.1
Haryana	Net Fixed Capital	0.6	124.1	124.7	99.5
	Market Capitalisation	8.2	2534.8	2543.0	99.7
	Total Equity	0.2	49.8	50.1	99.5
	Foreign Equity	0.1	13.4	13.5	99.2
	Domestic Equity	0.0	9.9	9.9	100.0
Himachal Pradesh	Net Fixed Capital		4.4	4.4	100.0
	Market Capitalisation		28.4	28.4	100.0
	Total Equity		2.2	2.2	100.0
	Foreign Equity		0.6	0.6	100.0
	Domestic Equity		0.0	0.0	0.0
Jammu & Kashmir	Net Fixed Capital	335.3	671.0	1006.4	66.7
	Market Capitalisation	114.4	240.7	355.1	67.8
	Total Equity	2.1	4.2	6.3	67.2
	Foreign Equity	1.6	3.4	5.0	67.2
	Domestic Equity	0.0	0.0	0.0	66.7
Jharkhand	Net Fixed Capital	12.2	8.0	20.2	39.6
	Market Capitalisation	90.4	32.7	123.1	26.6
	Total Equity	9.3	4.2	13.4	31.0
	Foreign Equity	2.8	1.1	3.8	27.9
	Domestic Equity	0.8	0.0	0.8	0.0
Karnataka	Net Fixed Capital	1922.2	404.5	2326.7	17.4
	Market Capitalisation	18790.8	1055.4	19846.2	5.3
	Total Equity	563.9	37.9	601.8	6.3
	Foreign Equity	232.3	17.7	250.1	7.1
	Domestic Equity	81.7	0.9	82.6	1.0
Kerala	Net Fixed Capital	746.6	380.8	1127.4	33.8
	Market Capitalisation	1565.4	436.5	2001.8	21.8
	Total Equity	60.5	32.3	92.8	34.8
	Foreign Equity	23.1	12.4	35.5	35.0
	Domestic Equity	10.8	2.8	13.6	20.5
Madhya Pradesh	Net Fixed Capital	692.0	335.3	1027.3	32.6
	Market Capitalisation	368.6	114.4	483.0	23.7
	Total Equity	16.4	2.1	18.5	11.1
	Foreign Equity	7.6	1.6	9.2	17.8
	Domestic Equity	0.6	0.0	0.6	0.0
Maharashtra	Net Fixed Capital	4653.3	29.4	4682.8	0.6
	Market Capitalisation	27349.5	71.1	27420.6	0.3
	Total Equity	1036.0	4.8	1040.8	0.5
	Foreign Equity	372.2	1.9	374.1	0.5
	Domestic Equity	160.8	0.5	161.3	0.3
Manipur	Net Fixed Capital		335.3	335.3	100.0
	Market Capitalisation		114.4	114.4	100.0
	Total Equity		2.1	2.1	100.0
	Foreign Equity		1.6	1.6	100.0
	Domestic Equity		0.0	0.0	100.0



State	Variables	Large Cities (Class 1 & Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	Total	Share of Small Cities in Total (%)
Orissa	Net Fixed Capital	5.8	12.1	17.9	67.8
	Market Capitalisation	59.6	46.1	105.7	43.6
	Total Equity	2.9	5.4	8.3	65.3
	Foreign Equity	1.0	2.0	2.9	66.9
	Domestic Equity	0.0	0.0	0.0	33.3
Pondicherry	Net Fixed Capital		9.1	9.1	100.0
	Market Capitalisation		49.6	49.6	100.0
	Total Equity		8.6	8.6	100.0
	Foreign Equity		3.8	3.8	100.0
	Domestic Equity		0.1	0.1	100.0
Punjab	Net Fixed Capital	21.6	21.3	42.8	49.6
	Market Capitalisation	126.9	132.6	259.5	51.1
	Total Equity	10.0	10.9	20.9	52.2
	Foreign Equity	3.3	3.0	6.4	47.7
	Domestic Equity	0.0	0.0	0.0	0.0
Rajasthan	Net Fixed Capital	361.6	345.0	706.7	48.8
	Market Capitalisation	307.6	191.3	498.9	38.3
	Total Equity	15.8	6.8	22.6	30.0
	Foreign Equity	7.1	3.1	10.1	30.2
	Domestic Equity	0.6	0.0	0.6	0.2
Sikkim	Net Fixed Capital		4.0	4.0	100.0
	Market Capitalisation		16.3	16.3	100.0
	Total Equity		2.1	2.1	100.0
	Foreign Equity		0.5	0.5	100.0
	Domestic Equity		0.0	0.0	0.0
Tamil Nadu	Net Fixed Capital	2284.1	41.7	2325.8	1.8
	Market Capitalisation	30176.4	276.9	30453.3	0.9
	Total Equity	474.5	21.2	495.7	4.3
	Foreign Equity	204.4	6.7	211.1	3.2
	Domestic Equity	60.0	0.1	60.1	0.2
Tripura	Net Fixed Capital		335.3	335.3	100.0
	Market Capitalisation		114.4	114.4	100.0
	Total Equity		2.1	2.1	100.0
	Foreign Equity		1.6	1.6	100.0
	Domestic Equity		0.0	0.0	100.0
Uttar Pradesh	Net Fixed Capital	699.3	569.9	1269.3	44.9
	Market Capitalisation	430.6	7093.3	7523.9	94.3
	Total Equity	18.4	89.3	107.7	82.9
	Foreign Equity	7.5	22.0	29.5	74.6
	Domestic Equity	0.0	32.8	32.8	100.0
Uttarakhand	Net Fixed Capital		4.5	4.5	100.0
	Market Capitalisation		43.2	43.2	100.0
	Total Equity		2.4	2.4	100.0
	Foreign Equity		0.8	0.8	100.0
	Domestic Equity		0.0	0.0	0.0
West Bengal	Net Fixed Capital	1937.3	351.7	2289.0	15.4
	Market Capitalisation	3420.7	192.7	3613.4	5.3
	Total Equity	130.8	11.7	142.5	8.2
	Foreign Equity	43.1	4.0	47.0	8.4
	Domestic Equity	32.0	0.3	32.4	1.0



State	Variables	Large Cities (Class 1 & Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	Total	Share of Small Cities in Total (%)
Total	Net Fixed Capital	39860.2	6653.2	46513.3	14.3
	Market Capitalisation	280086.3	15526.8	295613.1	5.3
	Total Equity	5278.0	422.7	5700.7	7.4
	Foreign Equity	1634.8	144.1	1778.9	8.1
	Domestic Equity	1593.5	62.9	1656.4	3.8



Table 6.29
Output, Value-Added, Employee Cost and Share of FDI Firm's Share in Total Firms of Top 25 Market Capitalisation-Based Firms (Manufacturing Sector)

S. No.	NIC 3-Digit Activity	Variables	Sectoral Total of FDI Firms	Sectoral Total of FDI Firms in All Firms	Share of FDI Firms in All Firms	Total Number of Firms	Total Number of Firms in All Firms	Total Share of FDI Number of Firms	Total Plants per City	Plants in Top 25 FDI Plants	Share Sector-wise Firm Class-3 for City	Share of Firm Class-3 in Top 25 Plants
		(Rs cr)	(Rs cr)	(Rs cr)	(%)			(%)		Plants	(%)	(%)
1	242 Other chemical products	Output	39047	68811	107857	36.2	14.0	48	259	307	15.6	4.8
		Value-Added	7775	15001	22776	34.1	15.5					
		Employee Cost	2597	4941	7538	34.5	17.7					
2	272 Basic precious and non-ferrous metals	Output	13534	40755	54289	24.9	4.8	6	49	55	10.9	3
		Value-Added	978	13705	14683	6.7	1.9					
		Employee Cost	89	2051	2141	4.2	0.6					
3	312 Electricity distribution and control apparatus	Output	7976	3081	11057	72.1	2.9	2	12	14	14.3	23
		Value-Added	1550	488	2038	76.1	3.1					
		Employee Cost	457	159	615	74.2	3.1					
4	341 Motor vehicles	Output	26927	59330	86257	31.2	9.6	3	8	11	27.3	12
		Value-Added	4070	8098	12168	33.5	8.1					
		Employee Cost	988	3000	3988	24.8	6.7					
5	269 Non-metallic mineral products n.e.c.	Output	8022	44508	54530	14.7	3.9	12	93	105	11.4	36
		Value-Added	2768	15148	17916	15.5	5.5					
		Employee Cost	392	2543	2935	13.3	2.7					
6	331 Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	Output	9277	867	10144	91.5	3.3	5	17	22	22.7	18
		Value-Added	1336	166	1501	89.0	2.7					
		Employee Cost	598	115	713	83.9	4.1					
7	343 Parts and accessories for motor vehicles and their engines	Output	11235	14459	25694	43.7	4.0	20	77	97	20.6	51
		Value-Added	2439	2879	5318	45.9	4.9					
		Employee Cost	1043	1226	2269	46.0	7.1					
8	152 Dairy products	Output	8754	101	8855	98.9	3.1	4	1	5	80.0	18
		Value-Added	1829	9	1838	99.5	3.6					
		Employee Cost	597	2	600	99.6	4.1					
9	291 General purpose machinery	Output	11074	23956	35050	31.7	4.1	25	84	109	22.9	57
		Value-Added	2458	4864	7322	33.6	4.9					
		Employee Cost	830	1944	2775	29.9	5.6					
10	271 Basic Iron & Steel	Output	32578	156247	188825	17.3	11.7	18	169	187	9.6	47
		Value-Added	5813	47414	53227	10.9	11.6					
		Employee Cost	686	11763	12449	5.5	4.7					
11	359 Transport equipment n.e.c.	Output	10321	6483	16804	61.4	3.7	1	14	15	6.7	2
		Value-Added	1651	515	2166	76.2	3.3					
		Employee Cost	321	482	804	40.0	2.2					
12	452 Building of complete constructions or parts thereof; civil engineering	Output	6332	41585	47717	12.9	2.2	3	43	46	6.5	12
		Value-Added	1118	7191	8309	13.5	2.2					
		Employee Cost	534	2258	2792	19.1	3.6					
13	921 Motion picture, radio, television and other entertainment activities	Output	1328	2198	3526	37.7	0.5	2	22	24	8.3	4
		Value-Added	501	542	1044	48.0	1.0					
		Employee Cost	75	248	324	23.3	0.5					



S. No.	NIC 3-Digit	NIC Activity	Variables	Sectoral Total		Sectoral Total		Share of FDI in All Firms		Share of FDI in Domestic Firms		Total Number of Firms		Total Share of FDI Number of Firms		Total Number of Firms		Share Sector-wise in Class-3 City			
				Total of FDI Firms	Firms in All Firms	Firms in Domestic Firms	Firms in All Firms	Firms in Domestic Firms	Firms in All Firms	Firms in Domestic Firms	Firms in All Firms	Firms in Domestic Firms	Firms in All Firms	Firms in Domestic Firms	Firms in All Firms	Firms in Domestic Firms					
				(Rs cr)	(Rs cr)	(Rs cr)	(Rs cr)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
14	131	Mining of iron ores	Output	3631	4197	7829	46.4	1.3	1	4	5	20.0	4	4	2	50.0	0.5				
			Value-Added	2228	1543	3771	59.1	4.4													
			Employee Cost	53	148	201	26.3	0.4													
15	232	Refined petroleum products	Output	3025	648216	678840	4.5	11.0	3	30	33	9.1	11	4	9	81.8	1.3				
			Value-Added	2895	47245	49840	5.2	5.2													
			Employee Cost	228	7523	7751	2.9	1.5													
16	319	Other electrical equipment n.e.c.	Output	4212	1053	792	1846	54.0	1.5	11	17	28	39.3	57	5	26	45.6	6.9			
			Value-Added	1053	792	1846	57.1	2.1													
			Employee Cost	326	312	638	51.1	2.2													
17	241	Basic chemicals	Output	6904	91072	97976	7.0	2.5	20	239	259	7.7	80	4	28	35.0	9.7				
			Value-Added	533	14143	14676	3.6	1.1													
			Employee Cost	343	3921	4264	8.0	2.3													
18	292	Special purpose machinery	Output	2542	16543	19085	13.3	0.9	15	76	91	16.5	37	2	16	43.2	4.5				
			Value-Added	696	2995	3691	18.9	1.4													
			Employee Cost	240	1052	1293	18.6	1.6													
19	11	Growing of crops; market gardening; horticulture	Output	857	2824	36681	23.3	0.3	6	52	58	10.3	69	12	22	31.9	8.3				
			Value-Added	354	763	1117	31.7	0.7													
			Employee Cost	307	494	801	38.3	2.1													
20	192	Footwear	Output	876	631	1528	58.7	0.3	1	9	10	10.0	6	6	3	50.0	0.7				
			Value-Added	245	84	329	74.6	0.5													
			Employee Cost	181	48	229	79.2	1.2													
21	160	Tobacco products	Output	1248	14343	15591	8.0	0.4	2	6	8	25.0	4	2	0	0.0	0.5				
			Value-Added	345	5193	5537	6.2	0.7													
			Employee Cost	120	762	882	13.6	0.8													
22	171	Spinning, weaving and finishing of textiles	Output	4941	51940	56880	8.7	1.8	15	336	351	4.3	28	2	16	57.1	3.4				
			Value-Added	446	8750	9196	4.9	0.9													
			Employee Cost	224	3592	3816	5.9	1.5													
23	293	Domestic appliances, n.e.c.	Output	1972	14261	16233	12.1	2	18	20	10.0	3	2	0	0	0.0	0.4				
			Value-Added	213	2406	2619	8.1	0.4													
			Employee Cost	126	357	483	26.1	0.9													
24	722	Software publishing, consultancy and supply	Output	1946	39664	41630	4.7	0.7	8	57	65	12.3	30	4	2	6.7	3.6				
			Value-Added	1388	27166	28554	4.9	2.8													
			Employee Cost	1035	17054	18089	5.7	7.0													
25	323	Television and radio receivers, sound or video recording or s reproducing apparatus, and associated good	Output	3905	2906	6811	57.3	1.4	4	10	14	28.6	11	3	2	18.2	1.3				
			Value-Added	553	107	659	83.8	1.1													
			Employee Cost	275	106	381	72.1	1.9													
			Total Top 25			249924	1354568	160442	15.6	89.4	237	1702	1939	12.2	829	3	331	39.9	100.0		
			Value-Added	44934	227206	272141	16.5	89.5													
			Employee Cost	12665	66104	78769	16.1	86.1													
			Output	279575	1871775	2151350	13.0	100.0	351	3,075	3,426	10.2	1171	3	482	41.2					
			Value-Added	50212	343670	393882	12.7	100.0													
			Employee Cost	14701	98789	113490	13.0	100.0													
			Output	894	724	74.6															
			Value-Added	89.5	66.1	69.1															
			Employee Cost	86.1	66.9	69.4															
			Share of Top 25 in Total																		
			Share of Top 25																		
			in Total																		



Table 6.30

**Depth of Value-Added and Share of Labour in Value-Added of Top 25
Market Capitalisation-Based Sectors (Manufacturing Sector)**

S. No.	NIC 3-Digit	NIC Activity	Ratio of Value-Added to Output			Ratio of Employee Cost to Value-Added			Total Market Capitalization (Rs cr)	Sectoral Share of FDI Firms in Total Market Capitalization (%)
			FDI Domestic Firms		All Firms	FDI Domestic Firms		All Firms		
			Firms	Firms	Firms	Firms	Firms	Firms		
1	242	Other chemical products	19.9	21.8	21.1	33.4	32.9	33.1	107537	22.1
2	272	Basic precious and non-ferrous metals	7.2	33.6	27.0	9.1	15.0	14.6	51829	10.6
3	312	Electricity distribution and control apparatus	19.4	15.8	18.4	29.5	32.5	30.2	43538	8.9
4	341	Motor vehicles	15.1	13.6	14.1	24.3	37.0	32.8	28994	6.0
5	269	Non-metallic mineral products n.e.c.	34.5	32.6	32.9	14.1	16.8	16.4	25592	5.3
6	331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	14.4	19.1	14.8	44.8	69.4	47.5	25110	5.2
7	343	Parts and accessories for motor vehicles and their engines	21.7	19.9	20.7	42.8	42.6	42.7	22701	4.7
8	152	Dairy products	20.9	9.1	20.8	32.7	25.5	32.6	20779	4.3
9	291	General purpose machinery	22.2	20.3	20.9	33.8	40.0	37.9	19663	4.0
10	271	Basic Iron & Steel	17.8	30.3	28.2	11.8	24.8	23.4	17637	3.6
11	359	Transport equipment n.e.c.	16.0	7.9	12.9	19.5	93.6	37.1	13783	2.8
12	452	Building of complete constructions or parts thereof; civil engineering	18.2	17.3	17.4	47.8	31.4	33.6	13660	2.8
13	921	Motion picture, radio, television and other entertainment activities	37.7	24.7	29.6	15.1	45.8	31.0	12531	2.6
14	131	Mining of iron ores	61.3	36.8	48.2	2.4	9.6	5.3	12321	2.5
15	232	Refined petroleum products	8.5	7.3	7.3	8.8	15.9	15.6	8637	1.8
16	319	Other electrical equipment n.e.c.	25.0	22.1	23.7	30.9	39.4	34.6	6732	1.4
17	241	Basic chemicals	7.7	15.5	15.0	64.4	27.7	29.1	3890	0.8
18	292	Special purpose machinery	27.4	18.1	19.3	34.5	35.1	35.0	2224	0.5
19	11	Growing of crops; market gardening; horticulture	41.3	27.0	30.4	86.6	64.7	71.6	2098	0.4
20	192	Footwear	27.4	13.2	21.5	74.0	57.0	69.7	1846	0.4
21	160	Tobacco products	27.6	36.2	35.5	34.7	14.7	15.9	1827	0.4
22	171	Spinning, weaving and finishing of textiles	9.0	16.8	16.2	50.3	41.1	41.5	996	0.2
23	293	Domestic appliances, n.e.c.	10.8	16.9	16.1	59.2	14.8	18.4	604	0.1
24	722	Software publishing, consultancy and supply	70.6	68.5	68.6	74.6	62.8	63.4	573	0.1
25	323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	14.2	3.7	9.7	49.7	99.5	57.8	172	0.0
Total Top 25			18.0	16.8	17.0	28.2	29.1	28.9	445274	91.4
Total			18.0	18.4	18.3	29.3	28.7	28.8	487022	100.0



Table 6.31

Distribution of State-wise Value-Added and Total Output for FDI-Enabled Manufacturing Sectors

State	Variables	Large	Small	Total	Large	Small	Total
		Cities (Class-1 & Class-2) (Rs cr)	Cities (Class-3) (Rs cr)		Cities (Class-1 & Class-2) (Rs cr)	Cities (Class-3) (Rs cr)	
Andaman & Nicobar (U T)	Value Added						
	Output						
Andhra Pradesh	Value Added	2030.3	1414.9	3445.2	20.6	22.7	21.4
	Output	9837.4	6237.6	16075.0			
Assam	Value Added	6.1	266.2	272.3	40.6	30.4	30.6
	Output	15.0	875.9	890.9			
Bihar	Value Added	40.9	156.7	197.6	27.4	16.4	17.9
	Output	149.4	956.5	1105.9			
Chandigarh (U T)	Value Added	107.9	89.5	197.4	30.6	15.1	20.9
	Output	352.7	592.2	944.9			
Chhattisgarh	Value Added	208.3	76.6	284.9	37.0	32.2	35.6
	Output	562.2	237.8	800.0			
Dadra & Nagar Haveli (U T)	Value Added		782.2	782.2		10.1	10.1
	Output		7711.4	7711.4			
Daman & Diu	Value Added		489.1	489.1		18.5	18.5
	Output		2645.8	2645.8			
Delhi	Value Added	1868.1		1868.1	16.4		16.4
	Output	11381.2		11381.2			
Goa	Value Added	1556.1	759.9	2316.0	24.7	39.8	28.2
	Output	6296.6	1908.1	8204.8			
Gujarat	Value Added	2588.8	2065.6	4654.5	21.3	21.4	21.4
	Output	12127.9	9633.8	21761.7			
Haryana	Value Added	456.7	4885.4	5342.1	15.6	17.0	16.9
	Output	2929.7	28711.7	31641.4			
Himachal Pradesh	Value Added		747.5	747.5		26.2	26.2
	Output		2857.2	2857.2			
Jammu & Kashmir	Value Added		82.6	82.6		22.0	22.0
	Output		375.1	375.1			
Jharkhand	Value Added	109.5	62.8	172.2	23.3	15.6	19.7
	Output	469.8	402.6	872.4			
Karnataka	Value Added	4075.3	1116.2	5191.6	25.0	18.1	23.1
	Output	16292.2	6166.1	22458.3			
Kerala	Value Added	135.8	195.4	331.1	19.4	20.3	19.9
	Output	701.4	962.7	1664.1			
Madhya Pradesh	Value Added	5.6	1742.3	1747.9	6.3	14.1	14.1
	Output	87.9	12317.4	12405.4			
Maharashtra	Value Added	7989.8	2730.3	10720.1	18.3	19.5	18.6
	Output	43552.0	14032.5	57584.5			
Meghalaya	Value Added						
	Output						
Mizoram	Value Added						
	Output						
Nagaland	Value Added						
	Output						
Orissa	Value Added	-28.5	1048.7	1020.2	-8.6	27.0	24.2
	Output	331.8	3882.5	4214.3			
Pondicherry	Value Added	357.3		357.3	16.2		16.2
	Output	2204.1		2204.1			
Punjab	Value Added	22.3	819.1	841.4	16.3	26.4	26.0
	Output	136.9	3099.1	3235.9			
Rajasthan	Value Added	263.1	720.4	983.5	21.6	20.8	21.0
	Output	1217.0	3469.3	4686.3			
Sikkim	Value Added						
	Output						
Tamil Nadu	Value Added	2714.2	1870.2	4584.4	11.2	9.2	10.3
	Output	24139.1	20435.6	44574.8			
Tripura	Value Added						
	Output						



State	Variables	Large Cities (Class-1 & Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	Total	Large Cities (Class-1 & Class-2)	Small Cities (Class-3)	Total
							Ratio of Value-Added to Output (Depth of Value-Added)
Uttar Pradesh	Value Added	486.9	760.7	1247.6	20.0	19.5	19.7
	Output	2436.3	3902.5	6338.8			
Uttarakhand	Value Added		575.2	575.2		18.3	18.3
	Output		3148.3	3148.3			
West Bengal	Value Added	1286.8	473.5	1760.3	19.6	14.7	18.0
	Output	6562.3	3230.0	9792.4			
Total	Value Added	26281.1	23931.1	50212.2	18.5	17.4	18.0
	Output	141783.0	137791.8	279574.8			



Table 6.32

**Distribution of Output, Value-Added and Employee Cost into Large and Small Cities
of Top 25 Market Capitalisation-Based Sectors (Manufacturing Sector)**

S. No.	NIC 3-Digit	NIC Activity	Variables	FDI Firms				Total Market Capitalization in FDI Firms (Rs cr)	Sectoral Share of FDI Firms in Total Market Capitalization (%)
				Large Cities (Class-1 & Class-2)	Small Cities (Class-3)	All Cities	Share of Small Cities to All Cities		
							(%)		
				(Rs cr)	(Rs cr)	(Rs cr)			
1	242	Other chemical products	Output	19291	19755	39047	50.6	107537	22.1
			Value Added	4154	3621	7775	46.6		
			Employee Cost	1334	1263	2597	48.6		
2	272	Basic precious and non-ferrous metals	Output	5605	7929	13534	58.6	51829	10.6
			Value Added	438	540	978	55.3		
			Employee Cost	50	39	89	43.8		
3	312	Electricity distribution and control apparatus	Output	7316	659	7976	8.3	43538	8.9
			Value Added	1419	131	1550	8.5		
			Employee Cost	418	39	457	8.5		
4	341	Motor vehicles	Output	12678	14249	26927	52.9	28994	6.0
			Value Added	1920	2151	4070	52.8		
			Employee Cost	446	542	988	54.8		
5	269	Non-metallic mineral products n.e.c.	Output	2144	5877	8022	73.3	25592	5.3
			Value Added	740	2028	2768	73.3		
			Employee Cost	106	286	392	73.0		
6	331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	Output	8550	727	9277	7.8	25110	5.2
			Value Added	1246	90	1336	6.7		
			Employee Cost	561	37	598	6.2		
7	343	Parts and accessories for motor vehicles and their engines	Output	6805	4430	11235	39.4	22701	4.7
			Value Added	1692	747	2439	30.6		
			Employee Cost	671	372	1043	35.7		
8	152	Dairy products	Output	4461	4293	8754	49.0	20779	4.3
			Value Added	800	1029	1829	56.3		
			Employee Cost	247	350	597	58.6		
9	291	General purpose machinery	Output	8146	2948	11094	26.6	19663	4.0
			Value Added	1862	596	2458	24.2		
			Employee Cost	664	166	830	20.0		
10	271	Basic Iron & Steel	Output	16070	16508	32578	50.7	17637	3.6
			Value Added	3287	2525	5813	43.4		
			Employee Cost	351	334	686	48.8		
11	359	Transport equipment n.e.c.	Output	10321	10321	100.0		13783	2.8
			Value Added	1651	1651	100.0			
			Employee Cost	321	321	100.0			
12	452	Building of complete constructions or parts thereof; civil engineering	Output	1121	5011	6132	81.7	13660	2.8
			Value Added	229	889	1118	79.5		
			Employee Cost	127	407	534	76.2		
13	921	Motion picture, radio, television and other entertainment activities	Output	1328		1328	0.0	12531	2.6
			Value Added	501		501	0.0		
			Employee Cost	75		75	0.0		
14	131	Mining of iron ores	Output	908	2724	3631	75.0	12321	2.5
			Value Added	557	1671	2228	75.0		
			Employee Cost	13	40	53	75.0		
15	232	Refined petroleum products	Output	14658	15966	30625	52.1	8637	1.8
			Value Added	1160	1435	2595	55.3		
			Employee Cost	85	142	228	62.6		
16	319	Other electrical equipment n.e.c.	Output	1291	2921	4212	69.4	6732	1.4
			Value Added	294	760	1053	72.1		
			Employee Cost	111	215	326	65.9		
17	241	Basic chemicals	Output	4486	2418	6904	35.0	3890	0.8
			Value Added	412	121	533	22.6		
			Employee Cost	190	153	343	44.6		
18	292	Special purpose machinery	Output	1136	1405	2542	55.3	2224	0.5
			Value Added	291	405	696	58.2		
			Employee Cost	129	111	240	46.1		



S. No.	NIC 3-Digit	NIC Activity	Variables	FDI Firms							
				Large Cities (Class-1 & Class-2)		Small Cities (Class-3)	All Cities	Share of Small Cities to All Cities			
				(Rs cr)	(Rs cr)	(Rs cr)	(%)	Total Market Capitalization in FDI Firms (Rs cr)			
19	11	Growing of crops; market gardening; horticulture	Output	61	796	857	92.9	2098	0.4		
			Value Added	25	329	354	93.0				
			Employee Cost	21	286	307	93.2				
20	192	Footwear	Output	448	448	896	50.0	1846	0.4		
			Value Added	123	123	245	50.0				
			Employee Cost	91	91	181	50.0				
21	160	Tobacco products	Output	1248		1248	0.0	1827	0.4		
			Value Added	345		345	0.0				
			Employee Cost	120		120	0.0				
22	171	Spinning, weaving and finishing of textiles	Output	1653	3288	4941	66.5	996	0.2		
			Value Added	122	325	446	72.7				
			Employee Cost	54	171	224	76.0				
23	293	Domestic appliances, n.e.c.	Output	1972		1972	0.0	604	0.1		
			Value Added	213		213	0.0				
			Employee Cost	126		126	0.0				
24	722	Software publishing, consultancy and supply	Output	1390	576	1966	29.3	573	0.1		
			Value Added	988	400	1388	28.8				
			Employee Cost	762	273	1035	26.4				
25	323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	Output	3424	480	3905	12.3	172	0.0		
			Value Added	488	65	553	11.7				
			Employee Cost	239	35	275	12.8				
Total Top 25			Output	126193	123730	249924	49.5	445274	91.4		
Total			Value Added	23303	21631	44934	48.1				
Share of Top 25 in Total			Employee Cost	6992	5673	12665	44.8				
			Output	141783	137792	279575	49.3	487022	100.0		
			Value Added	26281	23931	50212	47.7				
			Employee Cost	8088	6613	14701	45.0				
			Output	89.0	89.8	89.4					
			Value Added	88.7	90.4	89.5					
			Employee Cost	86.5	85.8	86.1					



Table 6.33

Sectoral FDI Intensity and Ratio of Foreign Equity to Total Equity in Top 25 Sectors Based on Market Capitalisation (Manufacturing Sector)

S. No.	NIC 3-Digit	NIC Activity	Variable	Cities			FDI Intensity	
				Large Cities (Class-1 & Class-2)	Small Cities (Class-3)	Total	Large Cities (Class-1 & Class-2)	Small Cities (Class-3)
							(%)	(%)
1	242	Other chemical products	FDI	324	292	616	15.0	9.1
			Total Equity	2162	3225	5387		
2	272	Basic precious and non-ferrous metals	FDI	56	63	120	9.8	3.1
			Total Equity	576	2048	2625		
3	312	Electricity distribution and control apparatus	FDI	51	5	57	39.7	8.6
			Total Equity	129	60	189		
4	341	Motor vehicles	FDI	70	77	147	12.1	2.7
			Total Equity	577	2808	3385		
5	269	Non-metallic mineral products n.e.c.	FDI	61	397	458	9.9	10.4
			Total Equity	618	3808	4426		
6	331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	FDI	34	3	37	23.4	5.8
			Total Equity	144	51	195		
7	343	Parts and accessories for motor vehicles and their engines	FDI	55	77	131	14.7	13.2
			Total Equity	372	579	952		
8	152	Dairy products	FDI	56	65	121	67.8	46.7
			Total Equity	83	139	222		
9	291	General purpose machinery	FDI	200	40	241	15.5	8.1
			Total Equity	1293	500	1793		
10	271	Basic Iron & Steel	FDI	836	375	1210	9.2	4.8
			Total Equity	9091	7851	16942		
11	359	Transport equipment n.e.c.	FDI	0	10	10	0.0	7.4
			Total Equity	154	141	295		
12	452	Building of complete constructions or parts thereof; civil engineering	FDI	108	29	137	18.8	3.4
			Total Equity	573	842	1415		
13	921	Motion picture, radio, television and other entertainment activities	FDI	20	0	20	3.2	0.4
			Total Equity	632	105	737		
14	131	Mining of iron ores	FDI	5	15	20	51.2	2.1
			Total Equity	10	704	713		
15	232	Refined petroleum products	FDI	27	389	415	1.3	3.5
			Total Equity	1982	10947	12929		
16	319	Other electrical equipment n.e.c.	FDI	19	65	84	17.4	22.5
			Total Equity	108	289	397		
17	241	Basic chemicals	FDI	163	117	280	5.2	1.7
			Total Equity	3138	6981	10119		
18	292	Special purpose machinery	FDI	44	42	86	6.1	5.6
			Total Equity	717	755	1472		
19	11	Growing of crops; market gardening; horticulture	FDI	10	41	51	9.4	14.5
			Total Equity	107	284	391		
20	192	Footwear	FDI	16	17	33	22.3	22.2
			Total Equity	74	75	148		
21	160	Tobacco products	FDI	9	0	9	2.9	0.0
			Total Equity	305	145	450		
22	171	Spinning, weaving and finishing of textiles	FDI	41	78	119	2.0	2.5
			Total Equity	2096	3155	5251		
23	293	Domestic appliances, n.e.c.	FDI	100	0	100	29.2	0.1
			Total Equity	342	266	607		
24	722	Software publishing, consultancy and supply	FDI	46	24	70	3.7	6.2
			Total Equity	1240	379	1619		
25	323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	FDI	78	36	114	42.5	34.8
			Total Equity	184	103	286		
		Total Top 25	FDI	2428	2257	4685	9.1	4.9
			Total Equity	26706	46238	72944		
		Total	FDI	2911	2714	5624	6.6	3.1
			Total Equity	44111	87523	131635		
		Shares of Top 25 Sectors in Total	FDI	83.4	83.2			
			Total Equity	60.5	52.8			



Table 6.34

Distribution of Employment of FDI Firms Based on Top 25 Market Capitalisation Sectors Across Cities (Manufacturing Sector)

S. No.	NIC 3-Digit	NIC Activity	FDI				
			Large Cities (Class-1 & Class-2)	Small Cities (Class-3)	Total	Share of Employment of Small Cities in Respective Sector (%)	
Number of Persons Employed						(%)	
1	242	Other chemical products	127356	120496	247852	49	15.8
2	272	Basic precious and non-ferrous metals	3089	2405	5493	44	0.4
3	312	Electricity distribution and control apparatus	30702	2840	33542	8	2.1
4	341	Motor vehicles	16847	20455	37302	55	2.4
5	269	Non-metallic mineral products n.e.c.	16429	44324	60753	73	3.9
6	331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	38170	2506	40676	6	2.6
7	343	Parts and accessories for motor vehicles and their engines	56062	31097	87159	36	5.6
8	152	Dairy products	22016	31220	53236	59	3.4
9	291	General purpose machinery	47671	11941	59612	20	3.8
10	271	Basic Iron & Steel	19597	18652	38249	49	2.4
11	359	Transport equipment n.e.c.		25248	25248	100	1.6
12	452	Building of complete constructions or parts thereof; civil engineering	14123	45262	59385	76	3.8
13	921	Motion picture, radio, television and other entertainment activities	7217		7217	0	0.5
14	131	Mining of iron ores	4158	12475	16634	75	1.1
15	232	Refined petroleum products	2970	4968	7939	63	0.5
16	319	Other electrical equipment n.e.c.	13172	25506	38678	66	2.5
17	241	Basic chemicals	10051	8104	18155	45	1.2
18	292	Special purpose machinery	10066	8622	18688	46	1.2
19	11	Growing of crops; market gardening; horticulture	14396	197558	211954	93	13.5
20	192	Footwear	17006	17006	34012	50	2.2
21	160	Tobacco products	48623		48623	0	3.1
22	171	Spinning, weaving and finishing of textiles.	7993	25360	33353	76	2.1
23	293	Domestic appliances, n.e.c.	11663		11663	0	0.7
24	722	Software publishing, consultancy and supply	63708	22842	86550	26	5.5
25	323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	15957	2347	18304	13	1.2
Total Top 25			619044	681234	1300278	52	83.1
Total			772212	792707	1564920	51	100.0
Share of Top 25 Sectors in Total			80.2	85.9	83.1		



Table 6.35

State-wise Share of Employment of FDI Firms (Manufacturing Sector)

State	FDI				Sector-wise Share in Total FDI Employment (%)
	Large Cities (Class-1 & Class-2)	Small Cities (Class-3)	Total	Small City's Share in Respective State (%)	
				Number of Persons Employed	
Andaman & Nicobar (U T)	-	-	-	-	-
Andhra Pradesh	54268	36107	90375	40.0	5.8
Assam	272	107034	107305	99.7	6.9
Bihar	5669	10119	15788	64.1	1.0
Chandigarh (U T)	4711	3783	8493	44.5	0.5
Chhattisgarh	3175	1160	4335	26.8	0.3
Dadra & Nagar Haveli (U T)	-	11832	11832	100.0	0.8
Daman & Diu	-	13142	13142	100.0	0.8
Delhi	22525	-	22525	-	1.4
Goa	34814	9353	44167	21.2	2.8
Gujarat	41683	54827	96509	56.8	6.2
Haryana	20413	94902	115314	82.3	7.4
Himachal Pradesh	-	17748	17748	100.0	1.1
Jammu & Kashmir	-	1479	1479	100.0	0.1
Jharkhand	2827	4157	6983	59.5	0.4
Karnataka	154441	41146	195587	21.0	12.5
Kerala	8677	30193	38870	77.7	2.5
Madhya Pradesh	123	60466	60589	99.8	3.9
Maharashtra	252605	60751	313356	19.4	20.0
Meghalaya	-	-	-	-	-
Mizoram	-	-	-	-	-
Nagaland	-	-	-	-	-
Orissa	6946	10288	17234	59.7	1.1
Pondicherry	13439	-	13439	-	0.9
Punjab	958	18348	19306	95.0	1.2
Rajasthan	9741	26114	35855	72.8	2.3
Sikkim	-	-	-	-	-
Tamil Nadu	59736	38866	98601	39.4	6.3
Tripura	-	-	-	-	-
Uttar Pradesh	28399	31301	59700	52.4	3.8
Uttarakhand	-	18704	18704	100.0	1.2
West Bengal	46791	90890	137681	66.0	8.8
Total	772212	792707	1564919	50.7	100.0



Table 6.36

**Sectoral Sales, Exports and Export Intensity of Top 25 Sectors of Market Capitalisation
(Manufacturing Sector)**

S. No.	NIC 3-Digit	NIC Activity	Variables	Value in Rs crore			Share of FDI Firms (%)	Export Intensity (Export POB/Sales Turnover (%))		
				FDI	Domestic	Total		FDI	Domestic	Total
1	242	Manufacture of other chemical products	Sales Turnovers	41167	70478	111645	36.9			
			Export_FOB	6072	20731	26803	22.7	14.7	29.4	24.0
			Import_Raw Mat and Finished Goods	4909	9420	14328	34.3	123.7	220.1	187.1
			Import_Capital Goods	287	817	1104	26.0	5.5	8.0	7.2
			Net Forex Earning	863	9614	10477	8.2			
2	272	Manufacture of basic precious and non-ferrous metals	Sales Turnovers	14265	44337	58602	24.3			
			Export_FOB	7165	9884	17049	42.0	50.2	22.3	29.1
			Import_Raw Mat and Finished Goods	11737	13653	25390	46.2	61.0	72.4	67.1
			Import_Capital Goods	4	1039	1043	0.4	0.0	7.1	3.9
			Net Forex Earning	-4856	-2954	-7810	62.2			
3	312	Manufacture of electricity distribution and control apparatus	Sales Turnovers	7465	3197	10662	70.0			
			Export_FOB	534	240	774	69.0	7.2	7.5	7.3
			Import_Raw Mat and Finished Goods	1635	326	1961	83.4	32.7	73.5	39.5
			Import_Capital Goods	32	62	94	33.9	1.9	16.0	4.6
			Net Forex Earning	-1138	-156	-1294	88.0			
4	341	Manufacture of motor vehicles	Sales Turnovers	30836	66605	97442	31.6			
			Export_FOB	1530	6831	8361	18.3	5.0	10.3	8.6
			Import_Raw Mat and Finished Goods	1602	5764	7366	21.7	95.5	118.5	113.5
			Import_Capital Goods	1013	2680	3693	27.4	38.7	31.7	33.4
			Net Forex Earning	-1721	-2637	-4358	39.5			
5	269	Manufacture of non-metallic mineral products n.e.c.	Sales Turnovers	9006	51322	60328	14.9			
			Export_FOB	591	1541	2132	27.7	6.6	3.0	3.5
			Import_Raw Mat and Finished Goods	606	2449	3055	19.8	97.5	62.9	69.8
			Import_Capital Goods	66	1361	1427	4.6	9.8	35.7	31.8
			Net Forex Earning	-137	-2529	-2666	5.1			
6	331	Manufacture of medical appliances and instruments and appliances for measuring, finished goods	Sales Turnovers	9061	817	9879	91.7			
			Export_FOB	255	93	348	73.2	2.8	11.4	3.5
			Import_Raw Mat and Finished Goods	2237	128	2365	94.6	11.4	72.9	14.7
			Import_Capital Goods	32	4	36	89.7	1.4	2.8	1.5
			Net Forex Earning	-221	-28	-250	88.6			
7	343	Manufacture of parts and accessories for motor vehicles and their engines	Sales Turnovers	12670	16056	28726	44.1			
			Export_FOB	1451	1339	2790	52.0	11.5	8.3	9.7
			Import_Raw Mat and Finished Goods	2142	1261	3403	63.0	67.7	106.2	82.0
			Import_Capital Goods	470	342	812	57.9	18.0	21.3	19.3
			Net Forex Earning	-1264	125	-1139	110.9			
8	152	Manufacture of dairy products	Sales Turnovers	9102	107	9209	98.8			
			Export_FOB	414	101	515	80.3	4.5	94.9	5.6
			Import_Raw Mat and Finished Good	182	2	184	98.9	226.9	4890.8	279.3
			Import_Capital Goods	59	0	59	100.0	24.3	0.0	24.1
			Net Forex Earning	-7	96	88	-8.4			
9	291	Manufacture of general purpose machinery	Sales Turnovers	11720	24690	36410	32.2			
			Export_FOB	1862	2164	4026	46.2	15.9	8.8	11.1
			Import_Raw Mat and Finished Goods	2462	2484	4945	49.8	75.6	87.1	81.4
			Import_Capital Goods	144	435	578	24.9	5.5	14.9	10.5
			Net Forex Earning	-816	-1167	-1983	41.1			



S. No.	NIC 3-Digit	NIC Activity	Variables	Value in Rs crore			Share of FDI Firms (%)	Export Intensity (Export POB/Sales Turnover (%))		
				FDI	Domestic	Total		FDI	Domestic	Total
10	271	Manufacture of Basic Iron & Steel	Sales Turnovers	34635	169513	204148	17.0	19.8	12.3	13.6
			Export_FOB	6862	20804	27666	24.8	92.4	78.8	81.8
			Import_Raw Mat and Finished Goods	7425	26402	33827	22.0			
			Import_Capital Goods	430	3347	3777	11.4	5.5	11.3	10.0
			Net Forex Earning	-1268	-11938	-13207	9.6			
11	359	Manufacture of transport equipment n.e.c.	Sales Turnovers	12039	7176	19214	62.7			
			Export_FOB	243	577	819	29.6	2.0	8.0	4.3
			Import_Raw Mat and Finished Goods	508	277	784	64.7	47.8	208.5	104.5
			Import_Capital Goods	66	62	128	51.6	11.5	18.3	14.0
			Net Forex Earning	-663	205	-458	144.8			
12	452	Building of complete constructions or parts thereof; civil engineering	Sales Turnovers	5981	39098	45079	13.3			
			Export_FOB	115	2923	3038	3.8	1.9	7.5	6.7
			Import_Raw Mat and Finished Goods	195	2623	2819	6.9	59.1	111.4	107.8
			Import_Capital Goods	205	384	590	34.8	51.2	12.8	17.3
			Net Forex Earning	-75	2340	2266	-3.3			
13	921	Motion picture, radio, television and other entertainment activities	Sales Turnovers	1328	1999	3327	39.9			
			Export_FOB	165	7	172	95.7	12.4	0.4	5.2
			Import_Raw Mat and Finished Goods	0	308	308	0.1	49863.6	2.4	55.8
			Import_Capital Goods	11	48	59	18.5	97.1	13.6	16.2
			Net Forex Earning	155	-322	-167	-93.3			
14	131	Mining of iron ores	Sales Turnovers	3552	4425	7976	44.5			
			Export_FOB	2851	1454	4305	66.2	80.3	32.9	54.0
			Import_Raw Mat and Finished Goods	187	499	686	27.3	1524.5	291.2	627.3
			Import_Capital Goods	20	1	21	96.6	9.6	0.1	2.9
			Net Forex Earning	2592	890	3482	74.4			
15	232	Manufacture of refined petroleum products	Sales Turnovers	35332	700688	736020	4.8			
			Export_FOB	2	114670	114672	0.0	0.0	16.4	15.6
			Import_Raw Mat and Finished Goods	20237	309182	329419	6.1	0.0	37.1	34.8
			Import_Capital Goods	6	13963	13969	0.0	0.0	4.3	4.1
			Net Forex Earning	-20309	-224566	-244875	8.3			
16	319	Manufacture of other electrical equipment n.e.c.	Sales Turnovers	4527	3917	8445	53.6			
			Export_FOB	836	803	1638	51.0	18.5	20.5	19.4
			Import_Raw Mat and Finished Goods	890	485	1374	64.7	93.9	165.6	119.2
			Import_Capital Goods	105	37	142	73.8	10.5	7.1	9.4
			Net Forex Earning	-215	157	-58	368.5			
17	241	Manufacture of basic chemicals	Sales Turnovers	6900	94898	101798	6.8			
			Export_FOB	1057	11014	12071	8.8	15.3	11.6	11.9
			Import_Raw Mat and Finished Goods	1466	21968	23434	6.3	72.1	50.1	51.5
			Import_Capital Goods	76	460	536	14.1	4.9	2.1	2.2
			Net Forex Earning	-556	-11516	-12072	4.6			
18	292	Manufacture of special purpose machinery	Sales Turnovers	2376	16880	19255	12.3			
			Export_FOB	622	1567	2189	28.4	26.2	9.3	11.4
			Import_Raw Mat and Finished Goods	684	1148	1832	37.3	91.0	136.5	119.5
			Import_Capital Goods	59	368	427	13.7	7.9	24.3	18.9
			Net Forex Earning	-136	117	-19	699.2			
19	11	Growing of crops; market gardening; horticulture	Sales Turnovers	848	2836	3684	23.0			
			Export_FOB	116	318	435	26.8	13.7	11.2	11.8
			Import_Raw Mat and Finished Goods	2	84	85	2.0	6932.7	380.4	509.5
			Import_Capital Goods	2	16	17	9.3	48.9	15.9	16.9
			Net Forex Earning	106	288	394	26.9			



S. No.	NIC No. 3-Digit	NIC Activity	Variables	Value in Rs crore			Share of FDI Firms [%]	Export Intensity (Export POB/Sales Turnover (%))		
				FDI	Domestic	Total		FDI	Domestic	Total
				889	645	1534	58.0	1.1	46.7	20.3
20	192	Manufacture of footwear	Sales Turnovers	889	645	1534	58.0	1.1	46.7	20.3
			Export_FOB	9	301	311	3.0	1.1	46.7	20.3
			Import_Raw Mat and Finished Goods	55	72	128	43.3	17.0	416.6	243.4
			Import_Capital Goods	3	10	12	21.0	4.4	11.7	8.7
			Net Forex Earning	-54	213	159	-34.2			
21	160	Manufacture of tobacco products	Sales Turnovers	2598	21891	24489	10.6			
			Export_FOB	176	1721	1898	9.3	6.8	7.9	7.7
			Import_Raw Mat and Finished Goods	24	634	657	3.6	737.4	271.7	288.6
			Import_Capital Goods	57	455	512	11.1	70.5	41.8	43.8
			Net Forex Earning	79	1118	1197	6.6			
22	171	Spinning, weaving and finishing of textiles	Sales Turnovers	5009	50445	55453	9.0			
			Export_FOB	1288	13304	14592	8.8	25.7	26.4	26.3
			Import_Raw Mat and Finished Goods	775	6153	6928	11.2	166.2	216.2	210.6
			Import_Capital Goods	54	2461	2515	2.1	6.5	28.6	26.6
			Net Forex Earning	377	4123	4500	8.4			
23	293	Manufacture of domestic appliances, n.e.c.	Sales Turnovers	2013	14588	16601	12.1			
			Export_FOB	187	631	818	22.9	9.3	4.3	4.9
			Import_Raw Mat and Finished Goods	356	1100	1456	24.5	52.6	57.3	56.2
			Import_Capital Goods	28	61	89	31.4	7.3	5.3	5.8
			Net Forex Earning	-193	-683	-876	22.0			
24	722	Software publishing, consultancy and supply	Sales Turnovers	1967	39602	41570	4.7			
			Export_FOB	635	1388	2023	31.4	32.3	3.5	4.9
			Import_Raw Mat and Finished Goods	1	678	679	0.1	113333.9	204.6	297.9
			Import_Capital Goods	17	771	789	2.2	96.9	53.2	53.7
			Net Forex Earning	1291	19053	20344	6.3			
25	323	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	Sales Turnovers	3902	2973	6875	56.8			
			Export_FOB	33	99	132	25.0	0.8	3.3	1.9
			Import_Raw Mat and Finished Goods	228	1399	1628	14.0	14.5	7.1	8.1
			Import_Capital Goods	27	8	35	77.7	10.7	0.6	2.1
			Net Forex Earning	-78	-1311	-1390	5.6			
		Total Top 25	Sales Turnovers	269189.5	1449180.1	1718369.5	15.7			
			Export_FOB	35069.8	214505.5	249575.4	14.1	13.0	14.8	14.5
			Import_Raw Mat and Finished Goods	60543.3	408497.9	469041.2	12.9	57.9	52.5	53.2
			Import_Capital Goods	3270.8	29193.3	32464.1	10.1	5.1	6.7	6.5
			Net Forex Earning	-28243.2	-221469.9	-249713.1	11.3			
		Total	Sales Turnovers	299387	1967114	2266501	13.2			
			Export_FOB	37830	269099	306929	12.3	12.6	13.7	13.5
			Import_Raw Mat and Finished Goods	66001	474586	540587	12.2	57.3	56.7	56.8
			Import_Capital Goods	3861	41250	45110	8.6	5.5	8.0	7.7
			Net Forex Earning	-31071	-248379	-279449	11.1			
		Share of Top 25 in Total	Sales Turnovers	89.9	73.7	75.8				
			Export_FOB	92.7	79.7	81.3				
			Import_Raw Mat and Finished Goods	91.7	86.1	86.8				
			Import_Capital Goods	84.7	70.8	72.0				
			Net Forex Earning							



Table 6.37

Sector-wise Labour Intensity of Top 25 Sectors Based on Market Capitalisation (Manufacturing Sector)

S. No.	NIC 3-Digit	NIC Activity	Variables	Sectoral Total of FDI Firms	Sectoral Total of FDI and Domestic Firms	Share of FDI Firms in Total of Corresponding Firms (%)	Ratio of Employee Cost to Net Fixed Capital (%)	Ratio of Output to Net Fixed Capital (%)		
				FDI Firms	Domestic Firms			FDI	Domestic	Total
1 242	Other chemical products	Output	39047	68811	107857	14.0	0.30	0.19	0.22	4.44
		Net fixed capital	8797	25694	34492	11.2				2.68
		Employee Cost	2597	4941	7538	17.7				3.13
2 272	Basic precious and non-ferrous metals	Output	13534	40755	54289	4.8	0.04	0.09	0.09	2.29
		Net fixed capital	1992	21670	23661	2.5				
		Employee Cost	89	2051	2141	0.6				
3 312	Electricity distribution and control apparatus	Output	7976	3081	11057	2.9	0.87	0.28	0.57	15.26
		Net fixed capital	523	566	1088	0.7				5.45
		Employee Cost	457	159	615	3.1				10.16
4 341	Motor vehicles	Output	26927	59330	86257	9.6	0.20	0.28	0.25	5.56
		Net fixed capital	4841	10843	15684	6.1				5.50
		Employee Cost	988	3000	3988	6.7				
5 269	Non-metallic mineral products n.e.c.	Output	8022	46508	54530	2.9	0.10	0.09	0.09	2.13
		Net fixed capital	3773	27684	31458	4.8				1.68
		Employee Cost	392	2543	2935	2.7				1.73
6 331	Medical appliances and instruments and Output appliances for measuring, checking, Net fixed capital testing, navigating and other purposes	Employee Cost	9277	867	10144	3.3	1.08	0.57	0.94	16.73
		except optical instruments	554	201	756	0.7				4.31
7 343	Parts and accessories for motor vehicles and their engines	Output	11235	14459	25694	4.0	0.41	0.21	0.27	4.37
		Net fixed capital	2571	5870	8441	3.3				2.46
		Employee Cost	1043	1226	2269	7.1				3.04
8 152	Dairy products	Output	8754	101	8855	3.1	0.45	0.05	0.44	6.66
		Net fixed capital	1314	51	1365	1.7				6.49
		Employee Cost	597	2	600	4.1				
9 291	General purpose machinery	Output	11094	23956	35050	4.0	0.58	0.44	0.48	7.79
		Net fixed capital	1425	4386	5810	1.8				6.03
		Employee Cost	830	1944	2775	5.6				
10 271	Basic Iron & Steel	Output	32578	156247	188825	11.7	0.03	0.19	0.15	1.37
		Net fixed capital	23673	60615	84308	30.1				2.24
		Employee Cost	686	11763	12449	4.7				
11 359	Transport equipment n.e.c.	Output	10321	6483	16804	3.7	0.28	0.24	0.25	8.93
		Net fixed capital	1156	2015	3171	1.5				3.22
		Employee Cost	321	482	804	2.2				5.30
12 452	Building of complete constructions or parts thereof; civil engineering	Output	6132	41585	47717	2.2	0.43	0.30	0.32	4.95
		Net fixed capital	1238	7405	8642	1.6				5.52
		Employee Cost	534	2258	2792	3.6				
13 921	Motion picture, radio, television and other entertainment activities	Output	1328	2198	3526	0.5	0.51	0.24	0.28	8.89
		Net fixed capital	149	1027	1176	0.2				3.00
		Employee Cost	75	248	324	0.5				



S. No.	NIC 3-Digit Activity	Variables	Sectoral Total of FDI Firms	Sectoral Total of FDI and Domestic Firms	Share of FDI Firms in Total of Corresponding Variables (%)	Ratio of Employee Cost to Net Fixed Capital (%)	Ratio of Output to Net Fixed Capital (%)				
			FDI	Domestic	Total	FDI	Domestic	Total	FDI	Domestic	Total
14 131	Mining of iron ores	Output	3631	4197	7829	1.3	0.13	0.11	0.12	9.12	3.18
		Net Fixed capital	398	1321	1719	0.5					4.55
		Employee Cost	53	148	201	0.4					
15 232	Refined petroleum products	Output	30625	648216	678840	11.0	0.07	0.06	0.06	9.66	5.15
		Net Fixed capital	3169	125938	129108	4.0					5.26
		Employee Cost	228	7523	7751	1.5					
16 319	Other electrical equipment n.e.c.	Output	4212	3592	7804	1.5	0.24	0.28	0.26	3.15	3.27
		Net Fixed capital	1338	1099	2437	1.7					3.20
		Employee Cost	326	312	638	2.2					
17 241	Basic chemicals	Output	6904	91072	97976	2.5	0.11	0.10	0.10	2.30	2.41
		Net Fixed capital	3000	37718	40718	3.8					2.41
		Employee Cost	343	3921	4264	2.3					
18 292	Special purpose machinery	Output	2542	16543	19085	0.9	0.46	0.25	0.28	4.91	3.99
		Net Fixed capital	517	4146	4664	0.7					4.09
		Employee Cost	240	1052	1293	1.6					
19 11	Growing of crops; market gardening; horticulture	Output	857	2824	3681	0.3	0.35	0.45	0.41	0.98	2.56
		Net Fixed capital	870	1103	1974	1.1					1.86
		Employee Cost	307	494	801	2.1					
20 192	Footwear	Output	896	631	1528	0.3	1.75	0.18	0.63	8.63	2.40
		Net Fixed capital	104	263	367	0.1					4.17
		Employee Cost	181	48	229	1.2					
21 160	Tobacco products	Output	1248	14343	15591	0.4	0.48	0.12	0.13	4.98	2.27
		Net Fixed capital	251	6307	6558	0.3					2.38
		Employee Cost	120	762	882	0.8					
22 171	Spinning, weaving and finishing of textiles	Output	4941	51940	56880	1.8	0.06	0.11	0.10	1.37	1.57
		Net Fixed capital	3608	33086	36694	4.6					1.55
		Employee Cost	224	3592	3816	1.5					
23 293	Domestic appliances, n.e.c.	Output	1972	14261	16233	0.7	0.39	0.06	0.08	6.10	2.46
		Net Fixed capital	323	5790	6113	0.4					2.66
		Employee Cost	126	357	483	0.9					
24 722	Software publishing, consultancy and supply	Output	1966	39664	41630	0.7	2.91	2.23	2.26	5.53	5.18
		Net Fixed capital	355	7651	8007	0.5					5.20
		Employee Cost	1035	17054	18089	7.0					
25 323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	Output	3905	2906	6811	1.4	0.68	0.24	0.45	9.62	6.50
		Net Fixed capital	406	447	853	0.5					7.99
		Employee Cost	275	106	381	1.9					
Total Top 25		Output	249974	1354568	1604492	89.4	0.19	0.17	0.17	3.77	3.45
		Net Fixed capital	66336	392896	459262	84.2					3.49
		Employee Cost	12665	66104	78769	86.1					
		Output	279575	1871775	2151350	100.0	0.19	0.15	0.16	3.55	2.92
		Net Fixed capital	78799	640547	719346	100.0					
		Employee Cost	14701	98789	113490	100.0					
		Output	894	72.4	74.6						
		Net Fixed capital	84.2	61.3	63.8						
		Employee Cost	86.1	66.9	69.4						
		Share of Top 25 in Total									



Table 6.38

Distribution of Net Fixed Capital in Large and Small Cities in FDI-Enabled Manufacturing Sectors*

S. No.	NIC 3-Digit	NIC Activity	Large cities (Class-1 & Class-2)		Small Cities (Class-3)		All Cities (Class-1 & Class-2)		Small Cities (Class-3)		All Cities	
			(Rs crore)	(Rs crore)	(Rs crore)	(Number of Plants)	(Number of Plants)	(Number of Plants)	(Large cities (Class-1 & Class-2))	(Large cities (Class-1 & Class-2))	(Large cities (Class-1 & Class-2))	(Net Fixed Capital per Plant)
1 11	Growing of crops; market gardening; horticulture	54.2	816.2	870.4	47	22	69	1.2	37.1	12.6		
2 131	Mining of iron ores	99.5	298.6	398.1	2	2	4	49.8	147.3	99.5		
3 152	Dairy products	192.1	1045.8	1237.8	9	9	18	21.3	116.2	68.8		
4 160	Tobacco products	250.7		250.7	4	0	4	62.7		62.7		
5 171	Spinning, weaving and finishing of textiles.	1172.9	2435.3	3608.2	12	16	28	97.7	152.2	128.9		
6 192	Footwear	52.0	52.0	103.9	3	3	6	17.3	17.3	17.3		
7 232	Refined petroleum products	958.8	1032.7	1991.5	2	9	11	479.4	114.7	181.0		
8 241	Manufacture of basic chemicals	323.1		323.1	52	28	80	6.2	0.0	4.0		
9 242	Other Chemical products	14452.0	9240.9	23692.9	107	87	194	135.1	106.2	122.1		
10 269	Non-metallic mineral products n.e.c.	1662.7	1337.6	3000.3	13	23	36	127.9	58.2	83.3		
11 271	Basic Iron & Steel	1195.8	1374.7	2570.6	22	25	47	54.4	55.0	54.7		
12 272	Basic precious and non-ferrous metals	3862.3	4935.0	8797.3	9	6	15	429.1	822.5	586.5		
13 291	General purpose machinery	2326.3	2514.5	4840.8	40	17	57	58.2	147.9	84.9		
14 292	Special purpose machinery	207.2	310.2	517.4	21	16	37	9.9	19.4	14.0		
15 293	Domestic appliances, n.e.c.	323.1		323.1	3	0	3	107.7		107.7		
16 312	Electricity distribution and control apparatus	478.5	44.1	522.6	21	2	23	22.8	22.1	22.1		
17 319	Electrical equipment n.e.c.	362.7	43.0	405.7	31	26	57	11.7	1.7	7.1		
18 323	Television and radio receivers, sound or video recording 187.0 or reproducing apparatus, and associated goods			9	2	11	20.8	0.0	0.0	0.0		
19 331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	511.1	43.3	554.4	16	2	18	31.9	21.6	30.8		
20 341	Motor vehicles	1013.2	2759.9	3773.2	7	5	12	144.7	552.0	314.4		
21 343	Parts and accessories for motor vehicles and their engines	988.3	436.3	1424.6	27	24	51	36.6	18.2	27.9		
22 359	Transport equipment n.e.c.			1156.3	1156.3	0	2	2				
23 452	Building of complete constructions or parts thereof; civil engineering	614.4	700.0	1314.4	9	3	12	68.3	233.3	109.5		
24 722	Software publishing, consultancy and supply	241.4	114.0	355.5	28	2	30	8.6	57.0	57.0		
25 921	Motion picture, radio, television and other entertainment activities	149.4		149.4	4	0	4	37.4		37.4		
Total Top 25		31678.8	30690.2	62367.0	498	331	829	63.6	92.7	75.2		
Total		39530.6	39268.2	78798.8	689	482	1171	57.4	81.5	67.3		

* Based on Top 25 Market Capitalisation Sectors.



**Table 6.39
Distribution of Market Capitalisation in Large and Small Cities in FDI-Enabled Manufacturing Sector***

S. No.	NIC 3-Digit	NIC Activity	Large cities (Class-1 & Class-2)		Small Cities (Class-3)		All Cities (Class-1 & Class-2)		Small Cities (Class-3)		All Cities	
			(Rs crore)	(Rs crore)	(Rs crore)	(Number of Plants)	(Rs crore)	(Number of Plants)	(Rs crore)	(Number of Plants)	(Rs crore)	(Market Capitalization per Plant)
1 11	Growing of crops; market gardening; horticulture	35.1	2063.2	2098.3	47	22	69	0.7	93.8	30.4	4620.4	3080.3
2 131	Mining of iron ores	3080.3	9240.8	12321.1	2	2	4	1540.1	4620.4	3080.3	1333.6	1154.4
3 152	Dairy products	8776.5	12002.8	20779.3	9	9	18	975.2	1333.6	456.8	36.5	35.6
4 160	Tobacco products	1827.1	1827.1	1827.1	4	0	4	456.8	307.6	307.6	6	307.6
5 171	Spinning, weaving and finishing of textiles	412.6	583.8	996.4	12	16	28	34.4	34.4	34.4	11	1412.9
6 192	Footwear	922.8	922.8	1845.6	3	3	6	307.6	307.6	307.6	6	307.6
7 232	Refined petroleum products	2825.7	5811.1	8536.8	2	9	11	645.7	645.7	645.7	11	785.2
8 241	Manufacture of basic chemicals	2512.6	1377.5	3890.1	52	28	80	48.3	49.2	48.6	80	48.6
9 242	Other Chemical products	53844.3	53672.1	107536.5	107	87	194	503.4	616.9	554.3	194	554.3
10 269	Non-metallic mineral products n.e.c.	7067.2	18524.3	25591.5	13	23	36	543.6	805.4	710.9	23	710.9
11 271	Basic Iron & Steel	3390.5	14246.5	17637.1	22	25	47	154.1	569.9	375.3	47	375.3
12 272	Basic precious and non-ferrous metals	2147.9	30380.7	51828.6	9	6	15	2383.1	5063.4	3455.2	15	3455.2
13 291	General purpose machinery	14633.2	5029.4	19662.7	40	17	57	365.8	295.8	345.0	17	345.0
14 292	Special purpose machinery	1436.3	788.0	2224.4	21	16	37	68.4	49.3	60.1	16	60.1
15 293	Domestic appliances, n.e.c.	603.7	603.7	603.7	3	0	3	201.2	201.2	201.2	0	201.2
16 312	Electricity distribution and control apparatus	39923.6	3614.2	43537.9	21	2	23	1901.1	1807.1	1893.0	2	1893.0
17 319	Electrical equipment n.e.c.	2652.8	4078.7	6731.6	31	26	57	85.6	156.9	118.1	57	118.1
18 323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	116.3	56.0	9	2	11	12.9	28.0	0.0	0.0	28.0	0.0
19 331	Medical appliances and instruments and apparatus, and associated goods recording or reproducing apparatus, and associated goods	23032.9	2077.3	25110.2	16	2	18	1439.6	1038.7	1395.0	18	1395.0
20 341	Motor vehicles	14070.8	14923.6	28994.4	7	5	12	2010.1	2984.7	2416.2	51	2416.2
21 343	Parts and accessories for motor vehicles and their engines	19587.3	3113.6	22701.0	27	24	51	725.5	122.7	445.1	51	445.1
22 359	Transport equipment n.e.c.	13783.3	13783.3	13783.3	0	2	2	6891.6	6891.6	6891.6	2	6891.6
23 452	Building of complete constructions or parts thereof; civil engineering	2906.2	10753.8	13660.0	9	3	12	322.9	3584.6	1138.3	12	1138.3
24 722	Software publishing, consultancy and supply	495.5	77.7	573.2	28	2	30	17.7	38.8	19.1	4	19.1
25 921	Motion picture, radio, television and other entertainment activities	12531.3	12531.3	12531.3	4	0	4	3132.8	3132.8	3132.8	0	3132.8
	Total Top 25	238152.6	207121.4	445274.0	498	331	829	478.2	625.7	537.1	1171	537.1
	Total	26240.5	224531.6	487022.1	689	482	1171	381.0	465.8	415.9	0	415.9

* Based on Top 25 Market Capitalisation Sectors.



**Table 6.40
Distribution of Value-Added in Large and Small Cities in FDI-Enabled Manufacturing Sectors***

S. No.	NIC 3-Digit	NIC Activity	Large cities (Class-1 & Class-2)		Small Cities (Class-3)		All Cities (Class-1 & Class-2)		Large cities (Class-1 & Class-2)		Small Cities (Class-3)		All Cities		
			(Rs crore)	(Number of Plants)	(Rs crore)	(Number of Plants)	(Rs crore)	(Number of Plants)	(Rs crore)	(Number of Plants)	(Rs crore)	(Number of Plants)	(Rs crore)	(Number of Plants)	
1 11	Growing of crops; market gardening; horticulture	24.9	329.3	354.2	47	22	69	0.5	15.0	5.1	278.5	835.4	556.9		
2 131	Mining of iron ores	586.9	1670.7	2227.7	2	2	4	278.5	835.4	556.9	278.5	835.4	556.9		
3 152	Dairy products	799.9	1028.9	1828.8	9	9	18	88.9	114.3	101.6	88.9	114.3	101.6		
4 160	Tobacco products	344.6	344.6	344.6	4	0	4	86.1	86.1	86.1	86.1	86.1	86.1		
5 171	Spinning, weaving and finishing of textiles	121.7	324.6	446.3	12	16	28	10.1	20.3	15.9	10.1	20.3	15.9		
6 192	Footwear	122.6	122.6	245.2	3	3	6	40.9	40.9	40.9	40.9	40.9	40.9		
7 232	Refined petroleum products	1159.8	1435.3	2595.1	2	9	11	579.9	159.5	235.9	579.9	159.5	235.9		
8 241	Basic chemicals	412.2	120.6	532.8	52	28	80	7.9	4.3	6.7	7.9	4.3	6.7		
9 242	Other chemical products	4154.2	3621.2	7775.3	107	87	194	38.8	41.6	40.1	38.8	41.6	40.1		
10 269	Non-metallic mineral products n.e.c.	740.3	2028.1	2788.4	13	23	36	56.9	88.2	76.9	56.9	88.2	76.9		
11 271	Basic Iron & Steel	3287.5	2525.5	5812.9	22	25	47	149.4	101.0	123.7	149.4	101.0	123.7		
12 272	Basic precious and non-ferrous metals	4371.6	540.5	978.0	9	6	15	48.6	90.1	65.2	48.6	90.1	65.2		
13 291	General purpose machinery	1862.2	596.0	2458.1	4.0	17	57	46.6	35.1	43.1	46.6	35.1	43.1		
14 292	Special purpose machinery	291.2	404.8	696.0	21	16	37	13.9	25.3	18.8	13.9	25.3	18.8		
15 293	Domestic appliances, n.e.c.	212.8	212.8	212.8	3	0	3	70.9	70.9	70.9	70.9	70.9	70.9		
16 312	Electricity distribution and control apparatus	148.8	131.0	1549.9	21	2	23	67.6	65.5	67.4	67.6	65.5	67.4		
17 319	Other electrical equipment n.e.c.	293.7	759.7	1053.4	31	26	57	9.5	29.2	18.5	9.5	29.2	18.5		
18 323	Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	487.8	64.8	552.6	9	2	11	54.2	32.4	50.2	54.2	32.4	50.2		
19 331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	1245.8	89.9	1335.7	16	2	18	77.9	45.0	74.2	77.9	45.0	74.2		
20 341	Motor vehicles	1919.6	2150.8	4070.3	7	5	12	274.2	430.2	339.2	274.2	430.2	339.2		
21 343	Parts and accessories for motor vehicles and their engines	1691.7	747.1	2438.8	27	24	51	62.7	31.1	47.8	62.7	31.1	47.8		
22 359	Transport equipment n.e.c.	1651.0	1651.0	0	2	2	2	825.5	825.5	825.5	825.5	825.5	825.5		
23 452	Building of complete constructions or parts thereof: civil engineering	228.7	888.8	1117.5	9	3	12	25.4	29.6.3	93.1	25.4	29.6.3	93.1		
24 722	Software publishing, consultancy and supply	987.6	400.1	1387.8	28	2	30	35.3	200.1	46.3	35.3	200.1	46.3		
25 921	Motion picture, radio, television and other entertainment activities	501.2	501.2	501.2	4	0	4	125.3	125.3	125.3	125.3	125.3	125.3		
Total Top 25			23303.3	21631.2	44934.4	498	331	829	46.8	65.4	54.2	46.8	65.4	54.2	
Total			26281.1	23931.1	50212.2	689	482	1171	38.1	49.6	42.9	38.1	49.6	42.9	

* Based on Top 25 Market Capitalisation Sectors.



Table 6.41

Distribution of Employee Cost in Large and Small Cities in FDI-Enabled Manufacturing Sectors*

S. No.	NIC 3-Digit	NIC Activity	Large cities (Class-1 & Class-2)		Small Cities (Class-3)		All Cities		Large cities (Class-1 & Class-2)		Small Cities (Class-3)		All Cities	
			(Rs crore)	(Rs crore)	(Rs crore)	(Rs crore)	(Number of Plants)	(Number of Plants)	(Number of Plants)	(Number of Plants)	(Employee Cost per Plant)			
1 11		Growing of crops; market gardening; horticulture	20.8	285.7	306.6	47	22	69	0.4	13.0	4.4			
2 131		Mining of iron ores	13.2	39.6	52.8	2	2	4	6.6	19.8	13.2			
3 152		Dairy products	247.0	350.3	597.3	9	9	18	27.4	38.9	33.2			
4 160		Tobacco products	119.7		119.7	4	0	4	29.9		29.9			
5 171		Spinning, weaving and finishing of textiles.	53.8	170.6	224.3	12	16	28	4.5	10.7	8.0			
6 192		Footwear	90.7	90.7	181.5	3	3	6	30.2	30.2	30.2			
7 232		Refined petroleum products	85.2	142.5	227.7	2	9	11	42.6	15.8	20.7			
8 241		Basic chemicals	189.9	153.1	343.0	52	28	80	3.7	5.5	4.3			
9 242		Other chemical products	1334.4	1262.5	2598.9	107	87	194	12.5	14.5	13.4			
10 269		Non-metallic mineral products n.e.c.	105.9	285.8	391.7	13	23	36	8.1	12.4	10.9			
11 271		Basic Iron & Steel	351.4	334.5	685.9	22	25	47	16.0	13.4	14.6			
12 272		Basic precious and non-ferrous metals	50.2	39.1	89.2	9	6	15	5.6	6.5	5.9			
13 291		General purpose machinery	663.9	166.3	830.2	40	17	57	16.6	9.8	14.6			
14 292		Special purpose machinery	129.4	110.9	240.3	21	16	37	6.2	6.9	6.5			
15 293		Domestic appliances, n.e.c.	125.9		125.9	3	0	3	42.0		42.0			
16 312		Electricity distribution and control apparatus	418.0	38.7	456.6	21	2	23	19.9	19.3	19.9			
17 319		Other electrical equipment n.e.c.	111.0	215.0	322.6	31	26	57	3.6	8.3	5.7			
18 323		Television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	239.4	35.2	274.6	9	2	11	26.6	17.6	25.0			
19 331		Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	561.0	36.8	597.8	16	2	18	35.1	18.4	33.2			
20 341		Motor vehicles	446.3	541.9	988.1	7	5	12	63.8	108.4	82.3			
21 343		Parts and accessories for motor vehicles and their engines	670.8	372.1	1042.9	27	24	51	24.8	15.5	20.4			
22 359		Transport equipment n.e.c.		321.2	321.2	0	2	2		160.6				
23 452		Building of complete constructions or parts thereof; civil engineering	127.0	407.1	534.2	9	3	12	14.1	135.7	44.5			
24 722		Software publishing, consultancy and supply	762.0	273.2	1035.2	28	2	30	27.2	136.6	34.5			
25 921		Motion picture, radio, television and other entertainment activities	75.5		75.5	4	0	4	18.9		18.9			
Total Top 25			6992.3	5672.6	12664.9	498	331	829	14.0	17.1	15.3			
Total			8087.7	6613.4	14701.2	689	482	1171	11.7	13.7	12.6			

* Based on Top 25 Market Capitalisation-Based FDI Firms.



**Table 6.42
Distribution of Output in Large and Small Cities in FDI-Enabled Manufacturing Sectors***

S. No.	NIC Activity	Large cities (Class-1 & Class-2)	Small Cities (Class-3)	All Cities (Class-1 & Class-2)	Large cities (Class-1 & Class-2)	Small Cities (Class-3)	All Cities	Large cities (Class-1 & Class-2)	Small Cities (Class-3)	All Cities
(Rs crore)	(Number of Plants)	(Output per Plant)								
1 11	Growing of crops; market gardening; horticulture	60.6	796.2	856.9	47	22	69	1.3	36.2	12.4
2 131	Mining of iron ores	907.8	2723.5	3631.4	2	2	4	453.9	1361.8	907.8
3 152	Dairy products	4461.2	4297.8	8754.0	9	9	18	495.7	477.0	486.3
4 160	Tobacco products	1248.5		1248.5	4	0	4	312.1		312.1
5 171	Spinning, weaving and finishing of textiles.	1653.0	3287.9	4940.9	12	16	28	137.8	205.5	176.5
6 192	Footwear	448.2	448.2	896.5	3	3	6	149.4	149.4	149.4
7 232	Refined petroleum products	14658.2	15966.3	30624.5	2	9	11	7329.1	1774.0	2784.0
8 241	Basic chemicals	4465.6	2418.2	6903.8	52	28	80	86.3	86.4	86.3
9 242	Other chemical products	19291.2	19755.4	39046.7	107	87	194	180.3	227.4	201.3
10 269	Non-metallic mineral products n.e.c.	2144.3	5877.4	8021.7	13	23	36	164.9	255.5	222.8
11 271	Basic Iron & Steel	16067.9	16507.7	32577.5	22	25	47	730.4	660.3	693.1
12 272	Basic precious and non-ferrous metals	5605.1	7928.9	13534.0	9	6	15	622.8	1321.5	902.3
13 291	General purpose machinery	8146.2	2948.0	11094.2	40	17	57	203.7	173.4	194.6
14 292	Special purpose machinery	1136.5	1405.3	2541.8	21	16	37	54.1	87.8	68.7
15 293	Domestic appliances, n.e.c.	1972.2		1972.2	3	0	3	657.4		657.4
16 312	Electricity distribution and control apparatus	7316.1	659.5	7975.6	21	2	23	348.4	329.7	346.8
17 319	Other electrical equipment n.e.c.	1290.8	2921.4	4212.3	31	26	57	41.6	112.4	73.9
18 323	Television and radio receivers, sound or video recording	3424.3	480.5	3904.8	9	2	11	380.5	240.2	355.0
19 331	Medical appliances and instruments and associated goods or reproducing apparatus, and associated goods measuring, checking, testing, navigating and other purposes except optical instruments	8550.3	727.1	9277.4	16	2	18	534.4	363.5	515.4
20 341	Motor vehicles	12678.2	14248.8	26927.0	7	5	12	1811.2	2849.8	2433.9
21 343	Parts and accessories for motor vehicles and their engines	6805.5	4429.6	11235.0	27	24	51	252.1	184.6	220.3
22 359	Transport equipment n.e.c.			10321.1	0	2	2		5160.6	5160.6
23 452	Building of complete constructions or parts thereof; civil engineering	1120.9	5010.8	6131.8	9	3	12	124.5	1670.3	511.0
24 722	Software publishing, consultancy and supply	1390.3	575.9	1966.2	28	2	30	49.7	287.9	65.5
25 921	Motion picture, radio, television and other entertainment activities	1328.3		1328.3	4	0	4	332.1		332.1
Total Top 25		126193.3	123730.4	249923.7	498	331	829	253.4	373.8	301.5
Total		141783.0	137791.8	279574.8	689	482	1171	205.8	285.9	238.7

* Based on Top 25 Market Capitalisation Sectors.



Table 6.43
Distribution of Employment of FDI Firms in FDI-Enabled Manufacturing Sectors *

S. No.	NIC Activity 3-Digit	Large cities (Class-1 & Class-2)	Small Cities (Class-3)	All Cities (Class-1 & Class-2)	Large cities (Class-1 & Class-3)	Small Cities (Class-3)	All Cities	Large cities (Class-1 & Class-2)	Small Cities (Class-3)	All Cities	(Number of Plants)		(Employee per Plant)	
											(Rs crore)	(Number of Plants)	(Rs crore)	(Number of Plants)
1 11	Growing of crops; market gardening; horticulture	14326.5	197557.6	211954.1	47	22	69	306.3	8979.9	3071.8				
2 131	Mining of iron ores	4158.4	12475.2	16633.6	2	2	4	2079.2	6237.6	4158.4				
3 152	Dairy products	22016.1	31220.3	53236.4	9	9	18	2446.2	3468.9	2957.6				
4 160	Tobacco products	48623.4	4823.4	4823.4	4	0	4	12155.9		12155.9				
5 171	Spinning, weaving and finishing of textiles.	7992.9	25359.8	33332.6	12	16	28	666.1	1585.0	1191.2				
6 192	Footwear	17005.9	17005.9	34011.7	3	3	6	5668.6	5668.6	5668.6				
7 232	Refined petroleum products	2970.3	4988.5	7938.8	2	9	11	1485.2	552.1	721.7				
8 241	Basic chemicals	10050.5	8104.2	18154.8	52	28	80	193.3	289.4	226.9				
9 242	Other chemical products	12736.0	120496.1	247852.0	107	87	194	1190.2	1385.0	1277.6				
10 269	Non-metallic mineral products n.e.c.	16429.0	44324.5	60753.5	13	23	36	1263.8	1927.2	1687.6				
11 271	Basic Iron & Steel	19597.1	18652.4	38249.5	22	25	47	890.8	746.1	813.8				
12 272	Basic precious and non-ferrous metals	3088.7	2404.6	54933.3	9	6	15	343.2	400.8	366.2				
13 291	General purpose machinery	47671.2	11940.7	59611.9	40	17	57	1191.8	702.4	1045.8				
14 292	Special purpose machinery	10051.7	8622.4	18688.1	21	16	37	479.3	538.9	505.1				
15 293	Domestic appliances, n.e.c.	11663.0	11663.0	11663.0	3	0	3	3887.7		3887.7				
16 312	Electricity distribution and control apparatus	30702.0	2839.6	33541.7	21	2	23	1462.0	1419.8	1458.3				
17 319	Other electrical equipment n.e.c.	13172.0	25506.1	38678.1	31	26	57	424.9	981.0	678.6				
18 323	Television and radio receivers, sound or video recording apparatus, and recording or reproducing apparatus, and associated goods	2346.9	18304.3	9	2	11	1773.0	1173.4	1664.0					
19 331	Medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	38170.5	2505.9	40676.4	16	2	18	2385.7	1253.0	2259.8				
20 341	Motor vehicles	16847.1	20454.8	37301.9	7	5	12	2406.7	4091.0	3108.5				
21 343	Parts and accessories for motor vehicles and their engines	56062.0	31097.1	87159.1	27	24	51	2076.4	1295.7	1709.0				
22 359	Transport equipment n.e.c..	25247.8	25247.8	0	2	2					12623.9	12623.9		
23 452	Building of complete constructions or parts thereof; civil engineering	14123.4	45262.1	59385.5	9	3	12	1569.3	15087.4	4948.8				
24 722	Software publishing, consultancy and supply	63708.2	22841.7	86550.0	28	2	30	2275.3	11420.9	2885.0				
25 921	Motion picture, radio, television and other entertainment activities	7216.8		7216.8	4	0	4	1804.2		1804.2				
	Total Top 25		619044.1	681234.0	1300278.1	498	331	829	1243.1	2058.1	1568.5			
	Total		772212.1	792707.4	1564920.0	689	482	1171	1120.8	1644.6	1336.4			

* Based on Top 25 Market Capitalisation Sectors.



Table 6.44

NIC Sector-wise and City-wise Distribution of Fixed Capital, Market Capitalisation and Equities in FDI-Enabled Service Sectors

NIC 3-Digits	NIC Activity	Variables	Large Cities (Class 1 & Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	Total (Rs cr)	Share of Small Cities in Total (%)
101	Mining and agglomeration of hard coal	Net Fixed Capital	5.3		5.3	0.0
		Market Capitalisation	407.0		407.0	0.0
		Total Equity	111.3		111.3	0.0
		Foreign Equity	68.3		68.3	0.0
		Domestic Equity	0.0		0.0	0.0
112	Service activities incidental to oil and gas extraction excluding surveying	Net Fixed Capital	600.8		600.8	0.0
		Market Capitalisation	12795.1		12795.1	0.0
		Total Equity	138.1		138.1	0.0
		Foreign Equity	63.2		63.2	0.0
		Domestic Equity	2.9		2.9	0.0
452	Building of complete constructions or parts thereof; civil engineering	Net Fixed Capital	266.1		266.1	0.0
		Market Capitalisation	9444.1		9444.1	0.0
		Total Equity	231.3		231.3	0.0
		Foreign Equity	115.4		115.4	0.0
		Domestic Equity	54.4		54.4	0.0
453	Building Installation	Net Fixed Capital	9.0	2.2	11.2	20.0
		Market Capitalisation	28.2	7.1	35.3	20.0
		Total Equity	8.4	2.1	10.5	20.0
		Foreign Equity	3.8	0.9	4.7	20.0
		Domestic Equity	0.4	0.1	0.5	20.0
512	Wholesale of Agricultural Raw Materials, Live animals, Food beverages and tobacco	Net Fixed Capital	1428.6		1428.6	0.0
		Market Capitalisation	713.4		713.4	0.0
		Total Equity	54.2		54.2	0.0
		Foreign Equity	13.5		13.5	0.0
		Domestic Equity	11.6		11.6	0.0
514	Wholesale of non-agricultural intermediate products, waste and scrap	Net Fixed Capital	177.8	0.9	178.7	0.5
		Market Capitalisation	281.6	74.1	355.7	20.8
		Total Equity	38.5	1.1	39.5	2.7
		Foreign Equity	21.0	0.7	21.7	3.3
		Domestic Equity	5.9	0.0	5.9	0.0
515	Wholesale of machinery, equipment and supplies	Net Fixed Capital	29.9	2.3	32.2	7.1
		Market Capitalisation	181.3	13.9	195.3	7.1
		Total Equity	20.9	1.6	22.5	7.1
		Foreign Equity	10.7	0.8	11.5	7.1
		Domestic Equity	4.3	0.3	4.7	7.1
519	Other wholesale	Net Fixed Capital	15.5		15.5	0.0
		Market Capitalisation	237.2		237.2	0.0
		Total Equity	16.4		16.4	0.0
		Foreign Equity	4.6		4.6	0.0
		Domestic Equity	3.2		3.2	0.0
551	Hotels; camping sites and other provision of short-stay accommodation	Net Fixed Capital	41.5	14.3	55.8	25.7
		Market Capitalisation	1359.2	469.1	1828.3	25.7
		Total Equity	12.0	4.1	16.1	25.7
		Foreign Equity	9.0	3.1	12.0	25.7
		Domestic Equity	0.0	0.0	0.0	0.0
601	Other land transport	Net Fixed Capital	6.8		6.8	0.0
		Market Capitalisation	0.0		0.0	0.0
		Total Equity	3.7		3.7	0.0
		Foreign Equity	0.6		0.6	0.0
		Domestic Equity	1.4		1.4	0.0
611	Sea and coastal water transport	Net Fixed Capital	2475.1	101.7	2576.8	3.9
		Market Capitalisation	6417.4	70.6	6488.0	1.1
		Total Equity	466.3	18.2	484.5	3.7
		Foreign Equity	129.6	1.9	131.5	1.4
		Domestic Equity	100.0	10.3	110.2	9.3
621	Scheduled air transport	Net Fixed Capital	8718.8	5365.4	14084.2	38.1
		Market Capitalisation	2973.3	1829.7	4803.0	38.1
		Total Equity	53.4	32.9	86.3	38.1
		Foreign Equity	42.7	26.3	69.1	38.1
		Domestic Equity	0.0	0.0	0.0	38.1



NIC 3-Digits	NIC Activity	Variables	Large Cities (Class 1 & Class-2) (Rs cr)	Small Cities (Class-3) (Rs cr)	Total (Rs cr)	Share of Small Cities in Total (%)
630	Supporting and auxiliary transport activities; activities of travel agencies	Net Fixed Capital	2841.8		2841.8	0.0
		Market Capitalisation	23219.4		23219.4	0.0
		Total Equity	400.7		400.7	0.0
		Foreign Equity	60.5		60.5	0.0
		Domestic Equity	265.2		265.2	0.0
641	Post and courier activities	Net Fixed Capital	160.2		160.2	0.0
		Market Capitalisation	1767.2		1767.2	0.0
		Total Equity	23.8		23.8	0.0
		Foreign Equity	19.3		19.3	0.0
		Domestic Equity	0.0		0.0	
642	Telecommunications [Production of radio and television programmes]	Net Fixed Capital	19138.2		19138.2	0.0
		Market Capitalisation	159978.9		159978.9	0.0
		Total Equity	1972.1		1972.1	0.0
		Foreign Equity	431.7		431.7	0.0
		Domestic Equity	874.5		874.5	0.0
651	Monetary Intermediation	Net Fixed Capital	574.8	397.8	972.6	40.9
		Market Capitalisation	4366.8	3116.4	7483.3	41.6
		Total Equity	409.2	187.6	596.8	31.4
		Foreign Equity	111.1	59.5	170.7	34.9
		Domestic Equity	2.6	0.2	2.8	8.5
659	Other financial intermediation.	Net Fixed Capital	155.7	21.5	177.2	12.1
		Market Capitalisation	2793.6	177.0	2970.6	6.0
		Total Equity	230.0	30.9	260.9	11.8
		Foreign Equity	88.1	13.0	101.1	12.8
		Domestic Equity	69.2	7.4	76.6	9.7
671	Activities auxiliary to financial intermediation, except insurance and pension funding	Net Fixed Capital	123.2		123.2	0.0
		Market Capitalisation	958.3		958.3	0.0
		Total Equity	43.4		43.4	0.0
		Foreign Equity	25.8		25.8	0.0
		Domestic Equity	8.8		8.8	0.0
722	Software publishing, consultancy and supply	Net Fixed Capital	2123.6	379.3	2502.9	15.2
		Market Capitalisation	47126.3	8476.9	55603.3	15.2
		Total Equity	845.3	94.8	940.1	10.1
		Foreign Equity	359.3	29.0	388.3	7.5
		Domestic Equity	150.8	29.9	180.6	16.5
723	Data processing.	Net Fixed Capital	25.2	14.7	39.9	36.8
		Market Capitalisation	213.3	64.1	277.4	23.1
		Total Equity	21.0	5.1	26.1	19.4
		Foreign Equity	9.2	1.4	10.6	13.1
		Domestic Equity	1.3	0.7	2.0	37.0
749	Business activities n.e.c.	Net Fixed Capital	268.5	37.2	305.7	12.2
		Market Capitalisation	3676.7	168.1	3844.8	4.4
		Total Equity	117.0	23.0	140.0	16.5
		Foreign Equity	28.0	4.8	32.8	14.7
		Domestic Equity	20.4	4.2	24.6	17.0
921	Motion picture, radio, television and other entertainment activities	Net Fixed Capital	321.0	315.8	636.8	49.6
		Market Capitalisation	1059.8	1059.8	2119.6	50.0
		Total Equity	47.1	21.4	68.5	31.3
		Foreign Equity	15.4	2.6	18.0	14.5
		Domestic Equity	9.8	9.8	19.6	50.0
930	Other service activities	Net Fixed Capital	352.8		352.8	0.0
		Market Capitalisation	88.3		88.3	0.0
		Total Equity	14.0		14.0	0.0
		Foreign Equity	3.8		3.8	0.0
		Domestic Equity	6.7		6.7	0.0
Total		Net Fixed Capital	39860.2	6653.2	46513.3	14.3
		Market Capitalisation	280086.3	15526.8	295613.1	5.3
		Total Equity	5277.9	422.7	5700.6	7.4
		Foreign Equity	1634.7	144.1	1778.9	8.1
		Domestic Equity	1593.4	62.9	1656.3	3.8



Table 6.45

NIC Sector-wise and City-wise Distribution of Output, Value-Added and Employee Cost in FDI-Enabled Service Sector

NIC 3-Digits	NIC Activity	Variables	Large Cities (Class 1 & Class-2)	Small Cities (Class 3)	Total	Share of Cities in Total	Ratio of Employment Cost to Output	Ratio of Value-Added Output to (Depth of Orientation)	Share of Value-Added Cost to Value-Added
							(%)	(Employment Value-Added)	
101	Mining and agglomeration of hard coal	Output	178.2		178.2	0.0	32.7	35.3	92.6
		Value Added	62.8		62.8				
		Employee Cost	58.2		58.2				
111	Extraction of crude petroleum and natural gas	Output	0.0	0.0	0.0				
		Value Added	0.0	0.0	0.0				
		Employee Cost	0.0	0.0	0.0				
112	Service activities incidental to oil and gas extraction excluding surveying	Output	741.4		741.4	0.0	6.0	54.2	11.1
		Value Added	402.0		402.0				
		Employee Cost	44.5		44.5				
452	Building of complete constructions or parts thereof; civil engineering	Output	2411.4		2411.4	0.0	5.2	20.8	25.0
		Value Added	501.2		501.2				
		Employee Cost	125.2		125.2				
453	Building Installation	Output	53.2	13.3	66.5	20.0	1.8	22.0	8.1
		Value Added	11.7	2.9	14.6				
		Employee Cost	0.9	0.2	1.2				
512	Wholesale of Agricultural Raw Materials, Live animals, Food beverages and tobacco	Output	649.6		649.6	0.0	45.0	54.9	82.0
		Value Added	356.9		356.9				
		Employee Cost	292.5		292.5				
514	Wholesale of non-agricultural intermediate products, waste and scrap	Output	291.0	34.8	325.8	10.7	9.7	24.4	39.6
		Value Added	66.6	12.9	79.5				
		Employee Cost	27.7	3.7	31.5				
515	Wholesale of machinery, equipment and supplies	Output	268.1	20.6	288.7	7.1	11.7	51.1	22.9
		Value Added	137.0	10.5	147.6				
		Employee Cost	31.3	2.4	33.7				
519	Other wholesale	Output	7.3		7.3	0.0	20.8	49.7	41.9
		Value Added	3.6		3.6				
		Employee Cost	1.5		1.5				
551	Hotels; camping sites and other provision of short-stay accommodation	Output	177.1	61.1	238.2	25.7	26.4	55.3	47.6
		Value Added	98.0	33.8	131.8				
		Employee Cost	46.7	16.1	62.8				
601	Other land transport	Output	17.9		17.9	0.0	1.0	12.1	8.3
		Value Added	2.2		2.2				
		Employee Cost	0.2		0.2				
611	Sea and coastal water transport	Output	993.4	47.5	1040.9	4.6	5.1	29.4	17.2
		Value Added	276.6	29.9	306.5				
		Employee Cost	47.2	5.7	52.8				
621	Scheduled air transport	Output	5479.9	3372.2	8852.2	38.1	13.2	14.9	88.8
		Value Added	815.6	501.9	1317.5				
		Employee Cost	724.3	445.7	1170.1				
630	Supporting and auxiliary transport activities; activities of travel agencies	Output	818.2		818.2	0.0	2.9	68.2	4.2
		Value Added	557.7		557.7				
		Employee Cost	23.5		23.5				
641	Post and courier activities	Output	808.7		808.7	0.0	14.0	29.9	47.0
		Value Added	241.4		241.4				
		Employee Cost	113.5		113.5				
642	Telecommunications [Production of radio and television programmes]	Output	26088.5		26088.5	0.0	5.2	45.5	11.5
		Value Added	11863.9		11863.9				
		Employee Cost	1367.1		1367.1				
651	Monetary Intermediation	Output	2394.7	1780.1	4174.8	42.6	12.5	78.0	16.0
		Value Added	1822.4	1432.7	3255.1				
		Employee Cost	288.2	233.2	521.4				
659	Other financial intermediation.	Output	1229.3	60.7	1289.9	4.7	9.4	58.7	16.0
		Value Added	721.1	35.8	757.0				
		Employee Cost	112.5	8.3	120.9				
671	Activities auxiliary to financial intermediation, except insurance and pension funding	Output	1474.2		1474.2	0.0	23.4	77.3	30.3
		Value Added	1138.8		1138.8				
		Employee Cost	344.8		344.8				



NIC 3-Digits	NIC Activity	Variables	Large Cities	Small Citi	Total	Share of Small Cities in Total	Ratio of Employment Output	Ratio of Value Added (Depth of Orientation)	Share of Value Employment Cost to Output
			(Class 1 & Class-2)	(Class-3)		(%)	(Employment Value-Added)	(Cost to Output)	(Cost to Value-Added)
722	Software publishing, consultancy and supply	Output	19925.2	1814.9	21740.1	8.3	28.5	43.6	65.3
		Value Added	8378.4	1097.2	9475.6				
		Employee Cost	5494.5	695.3	6189.8				
723	Data processing.	Output	103.5	58.3	161.8	36.1	55.5	71.6	77.6
		Value Added	73.8	42.1	115.9				
		Employee Cost	57.1	32.8	89.9				
749	Business activities n.e.c.	Output	481.6	102.5	584.1	17.5	19.5	52.3	37.2
		Value Added	281.8	23.5	305.3				
		Employee Cost	109.8	3.8	113.7				
921	Motion picture, radio, television and other entertainment activities	Output	257.0	208.2	465.1	44.8	6.2	-37.7	-16.5
		Value Added	-82.2	-93.2	-175.3				
		Employee Cost	14.4	14.4	28.9				
930	Other service activities	Output	179.5		179.5	0.0	23.3	48.5	48.1
		Value Added	87.1		87.1				
		Employee Cost	41.9		41.9				
Total		Output	65028.8	7574.2	72603.0	10.4	14.9	42.6	35.0
		Value Added	27818.5	3130.2	30948.7				
		Employee Cost	9367.9	1461.8	10829.7				



Table 6.46

State-wise Distribution of Net Fixed Capital, Total Equity, Foreign Equity, Domestic Equity and Market Capitalisation Across Cities for FDI Firms (Manufacturing Sector)

State	Variables	Large Cities (Class 1 & Class-2)	Smalls Cities (Class-3)	Total	Share of Small Cities in All Cities	State-wise Share in Total of Respective Variables	
						(%)	(%)
Andaman & Nicobar (U T)	Net Fixed capital	-	-	-	-	-	-
	Total Equity	-	-	-	-	-	-
	Foreign Equity	-	-	-	-	-	-
	Domestic Equity	-	-	-	-	-	-
	Market Capitalisation	-	-	-	-	-	-
	Total Output	-	-	-	-	-	-
Andhra Pradesh	Net Fixed capital	6154	2007	8161	24.6	10.4	
	Total Equity	795	365	1160	31.4	10.3	
	Foreign Equity	408	156	564	27.7	11.4	
	Domestic Equity	206	46	252	18.3	13.6	
	Market Capitalisation	6803	11277	18080	62.4	3.7	
	Total Output	9837	6238	16075	38.8	5.7	
Assam	Net Fixed capital	6	767	773	99.2	1.0	
	Total Equity	1	102	103	99.1	0.9	
	Foreign Equity	0	45	45	98.9	0.9	
	Domestic Equity	0	21	21	100.0	1.1	
	Market Capitalisation	0	3389	3389	100.0	0.7	
	Total Output	15	876	891	98.3	0.3	
Bihar	Net Fixed capital	17	259	277	93.7	0.4	
	Total Equity	11	53	64	83.1	0.6	
	Foreign Equity	5	29	34	84.0	0.7	
	Domestic Equity	0	5	5	100.0	0.3	
	Market Capitalisation	308	1768	2075	85.2	0.4	
	Total Output	149	957	1106	86.5	0.4	
Chandigarh (U T)	Net Fixed capital	30	184	214	85.9	0.3	
	Total Equity	15	31	46	67.7	0.4	
	Foreign Equity	6	17	23	73.2	0.5	
	Domestic Equity	0	2	2	100.0	0.1	
	Market Capitalisation	966	283	1249	22.7	0.3	
	Total Output	353	592	945	62.7	0.3	
Chhattisgarh	Net Fixed capital	295	119	414	28.7	0.5	
	Total Equity	39	14	53	26.2	0.5	
	Foreign Equity	15	7	22	32.6	0.4	
	Domestic Equity	2	2	4	49.3	0.2	
	Market Capitalisation	2033	236	2269	10.4	0.5	
	Total Output	562	238	800	29.7	0.3	
Dadra & Nagar Haveli (U T)	Net Fixed capital	-	1352	1352	100.0	1.7	
	Total Equity	-	165	165	100.0	1.5	
	Foreign Equity	-	80	80	100.0	1.6	
	Domestic Equity	-	26	26	100.0	1.4	
	Market Capitalisation	-	28261	28261	100.0	5.8	
	Total Output	-	7711	7711	100.0	2.8	
Daman & Diu	Net Fixed capital	-	337	337	100.0	0.4	
	Total Equity	-	57	57	100.0	0.5	
	Foreign Equity	-	32	32	100.0	0.7	
	Domestic Equity	-	1	1	100.0	0.1	
	Market Capitalisation	-	8880	8880	100.0	1.8	
	Total Output	-	2646	2646	100.0	0.9	
Delhi	Net Fixed capital	3082	-	3082	-	3.9	
	Total Equity	128	-	128	-	1.1	
	Foreign Equity	62	-	62	-	1.3	
	Domestic Equity	10	-	10	-	0.5	
	Market Capitalisation	17538	-	17538	-	3.6	
	Total Output	11381	-	11381	-	4.1	



State	Variables	Large Cities (Class 1 & Class-2)	Smalls Cities (Class-3)	Total	Share of Small Cities in All Cities	State-wise Share in Total of Respective Variables
		(Rs cr)	(Rs cr)			
Goa	Net Fixed capital	817	394	1211	32.5	1.5
	Total Equity	152	43	195	22.0	1.7
	Foreign Equity	84	15	99	15.5	2.0
	Domestic Equity	12	5	17	27.4	0.9
	Market Capitalisation	14579	6312	20891	30.2	4.3
	Total Output	6297	1908	8205	23.3	2.9
Gujarat	Net Fixed capital	6309	2676	8985	29.8	11.4
	Total Equity	848	619	1467	42.2	13.0
	Foreign Equity	454	278	733	38.0	14.8
	Domestic Equity	204	96	300	32.1	16.2
	Market Capitalisation	17173	13981	31154	44.9	6.4
	Total Output	12128	9634	21762	44.3	7.8
Haryana	Net Fixed capital	396	5970	6366	93.8	8.1
	Total Equity	104	431	535	80.5	4.7
	Foreign Equity	70	189	259	72.9	5.2
	Domestic Equity	5	70	75	92.7	4.1
	Market Capitalisation	6076	38611	44686	86.4	9.2
	Total Output	2930	28712	31641	90.7	11.3
Himachal Pradesh	Net Fixed capital	-	854	854	100.0	1.1
	Total Equity	-	106	106	100.0	0.9
	Foreign Equity	-	38	38	100.0	0.8
	Domestic Equity	-	20	20	100.0	1.1
	Market Capitalisation	-	9856	9856	100.0	2.0
	Total Output	-	2857	2857	100.0	1.0
Jammu & Kashmir	Net Fixed capital	-	124	124	100.0	0.2
	Total Equity	-	27	27	100.0	0.2
	Foreign Equity	-	13	13	100.0	0.3
	Domestic Equity	-	2	2	100.0	0.1
	Market Capitalisation	-	374	374	100.0	0.1
	Total Output	-	375	375	100.0	0.1
Jharkhand	Net Fixed capital	105	223	328	68.0	0.4
	Total Equity	73	14	87	16.1	0.8
	Foreign Equity	58	4	62	7.0	1.3
	Domestic Equity	0	2	2	100.0	0.1
	Market Capitalisation	1108	496	1603	30.9	0.3
	Total Output	470	403	872	46.1	0.3
Karnataka	Net Fixed capital	3152	1501	4652	32.3	5.9
	Total Equity	536	232	768	30.2	6.8
	Foreign Equity	296	101	397	25.5	8.0
	Domestic Equity	62	24	86	27.5	4.6
	Market Capitalisation	47426	7963	55389	14.4	11.4
	Total Output	16292	6166	22458	27.5	8.0
Kerala	Net Fixed capital	124	337	461	73.2	0.6
	Total Equity	16	83	100	83.6	0.9
	Foreign Equity	7	29	36	79.4	0.7
	Domestic Equity	2	15	17	85.9	0.9
	Market Capitalisation	2102	1583	3685	42.9	0.8
	Total Output	701	963	1664	57.9	0.6
Madhya Pradesh	Net Fixed capital	12	3117	3128	99.6	4.0
	Total Equity	2	359	361	99.5	3.2
	Foreign Equity	1	133	134	99.4	2.7
	Domestic Equity	0	73	73	100.0	3.9
	Market Capitalisation	1	18003	18004	100.0	3.7
	Total Output	88	12317	12405	99.3	4.4
Maharashtra	Net Fixed capital	11775	7822	19597	39.9	24.9
	Total Equity	1821	1221	3042	40.2	27.0
	Foreign Equity	727	430	1157	37.2	23.4
	Domestic Equity	273	154	427	36.1	23.1
	Market Capitalisation	100304	22498	122802	18.3	25.2
	Total Output	43552	14032	57584	24.4	20.



State	Variables	Large Cities (Class 1 & Class-2)	Smalls Cities (Class-3)	Total	Share of	State-wise Share in Total of Respective Variables
					(%)	
		(Rs cr)	(Rs cr)	(Rs cr)	(%)	
Meghalaya	Net Fixed capital	-	-	-	-	-
	Total Equity	-	-	-	-	-
	Foreign Equity	-	-	-	-	-
	Domestic Equity	-	-	-	-	-
	Market Capitalisation	-	-	-	-	-
	Total Output	-	-	-	-	-
Mizoram	Net Fixed capital	-	-	-	-	-
	Total Equity	-	-	-	-	-
	Foreign Equity	-	-	-	-	-
	Domestic Equity	-	-	-	-	-
	Market Capitalisation	-	-	-	-	-
	Total Output	-	-	-	-	-
Nagaland	Net Fixed capital	-	-	-	-	-
	Total Equity	-	-	-	-	-
	Foreign Equity	-	-	-	-	-
	Domestic Equity	-	-	-	-	-
	Market Capitalisation	-	-	-	-	-
	Total Output	-	-	-	-	-
Orissa	Net Fixed capital	29	1781	1810	98.4	2.3
	Total Equity	61	185	246	75.2	2.2
	Foreign Equity	8	74	82	90.3	1.7
	Domestic Equity	0	55	56	99.2	3.0
	Market Capitalisation	259	5030	5289	95.1	1.1
	Total Output	332	3882	4214	92.1	1.5
Pondicherry	Net Fixed capital	347	-	347	-	0.4
	Total Equity	83	-	83	-	0.7
	Foreign Equity	51	-	51	-	1.0
	Domestic Equity	3	-	3	-	0.2
	Market Capitalisation	4847	-	4847	-	1.0
	Total Output	2204	-	2204	-	0.8
Punjab	Net Fixed capital	74	825	900	91.8	1.1
	Total Equity	9	110	119	92.3	1.1
	Foreign Equity	3	52	55	95.3	1.1
	Domestic Equity	3	3	6	55.3	0.3
	Market Capitalisation	603	8678	9281	93.5	1.9
	Total Output	137	3099	3236	95.8	1.2
Rajasthan	Net Fixed capital	133	1853	1986	93.3	2.5
	Total Equity	16	142	159	89.7	1.4
	Foreign Equity	9	62	71	87.6	1.4
	Domestic Equity	2	20	23	89.9	1.2
	Market Capitalisation	3416	3819	7235	52.8	1.5
	Total Output	1217	3469	4686	74.0	1.7
Sikkim	Net Fixed capital	-	-	-	-	-
	Total Equity	-	-	-	-	-
	Foreign Equity	-	-	-	-	-
	Domestic Equity	-	-	-	-	-
	Market Capitalisation	-	-	-	-	-
	Total Output	-	-	-	-	-
Tamil Nadu	Net Fixed capital	4901	3996	8897	44.9	11.3
	Total Equity	727	343	1070	32.1	9.5
	Foreign Equity	286	97	383	25.4	7.8
	Domestic Equity	196	105	302	34.9	16.3
	Market Capitalisation	14879	11705	26585	44.0	5.5
	Total Output	24139	20436	44575	45.8	15.9
Tripura	Net Fixed capital	-	-	-	-	-
	Total Equity	-	-	-	-	-
	Foreign Equity	-	-	-	-	-
	Domestic Equity	-	-	-	-	-
	Market Capitalisation	-	-	-	-	-
	Total Output	-	-	-	-	-



State	Variables	Large Cities (Class 1 & Class-2)	Smalls Cities (Class-3)	Total	Share of Small Cities in All Cities	State-wise Share in Total of Respective Variables
		(Rs cr)	(Rs cr)		(Rs cr)	(%)
Uttar Pradesh	Net Fixed capital	344	715	1059	67.5	1.3
	Total Equity	114	284	398	71.3	3.5
	Foreign Equity	52	150	202	74.1	4.1
	Domestic Equity	16	30	46	64.7	2.5
	Market Capitalisation	7720	8874	16594	53.5	3.4
	Total Output	2436	3903	6339	61.6	2.3
Uttarakhand	Net Fixed capital	-	874	874	100.0	1.1
	Total Equity	-	111	111	100.0	1.0
	Foreign Equity	-	56	56	100.0	1.1
	Domestic Equity	-	9	9	100.0	0.5
	Market Capitalisation	-	7140	7140	100.0	1.5
	Total Output	-	3148	3148	100.0	1.1
West Bengal	Net Fixed capital	1429	1182	2611	45.3	3.3
	Total Equity	336	287	623	46.1	5.5
	Foreign Equity	160	91	250	36.2	5.1
	Domestic Equity	32	35	66	52.2	3.6
	Market Capitalisation	14349	5515	19864	27.8	4.1
	Total Output	6562	3230	9792	33.0	3.5
Total	Net Fixed capital	39531	39268	78799	49.8	100.0
	Total Equity	5887	5384	11272	47.8	100.0
	Foreign Equity	2762	2179	4941	44.1	100.0
	Domestic Equity	1030	823	1853	44.4	100.0
	Market Capitalisation	262491	224532	487022	46.1	100.0
	Total Output	141783	137792	279575	49.3	100.0

Table 6.47

Number of Sectors by Level of Agglomeration (Manufacturing Sector)

Level of Agglomeration	Number of 3-Digit NIC Sectors (Industry Employment-Based)	Number of 3-Digit NIC Sectors (Industry Output-Based)
Highly Agglomerated	41	37
Moderately Agglomerated	18	22
Dispersed	34	33
Total	93	92



Table 6.48

Agglomeration of Industry Based on Ellison and Glaeser Index (Employment-Based) Sorted by Employment of FDI-Enabled Manufacturing Plants (Manufacturing Sector)

S. No	Rank of FDI Employment	Rank of EG	NIC 3-Digit	NIC Activity	Level of Agglomeration	EG Index	Number of Plants in the Industry	% of FDI Plants in the Industry	Number of Firms Operating in the Industry	Total Firms in the Industry	FDI Output	Firms' Output	Total Employment in FDI	Employment in FDI	Share of Sectors' in Total FDI Employment	
1	2	11	11	Growing of crops; market gardening, horticulture	Highly Ag	0.285	267	69	25.8	58	6	3681	857	553527	211954	13.54
2	3	33	343	Manufacture of parts and accessories for motor vehicles and their engines	Highly Ag	0.076	305	56	18.4	96	20	25694	11235	189620	87159	5.57
3	4	18	722	Software publishing, consultancy and supply	Highly Ag	0.171	174	30	17.2	65	8	41630	1966	1512448	86550	5.53
4	6	35	291	Manufacture of general purpose machine	Highly Ag	0.070	278	57	20.5	109	25	35050	11094	199240	59612	3.81
5	10	27	331	Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	Highly Ag	0.105	51	18	35.3	22	5	10144	9277	48503	40676	2.60
6	11	39	319	Manufacture of other electrical equipment n.e.c.	Highly Ag	0.053	117	57	48.7	28	11	7804	4212	75701	38678	2.47
7	17	9	621	Scheduled air transport	Highly Ag	0.388	4	4	100	1	1	1295	1295	26839	26839	1.72
8	18	20	359	Manufacture of transport equipment n.e.c.	Highly Ag	0.146	51	2	3.9	15	1	16804	10321	63167	25248	1.61
9	21	38	292	Manufacture of special purpose machinery	Highly Ag	0.057	235	37	15.7	91	15	19085	2542	100535	18688	1.19
10	24	17	131	Mining of iron ores	Highly Ag	0.189	14	4	28.6	5	1	7829	3631	63276	16634	1.06
11	7	52	452	Total of Highly Agglomerated Sectors			1496	334	22.33	490	93	169016	56431	2832856	612038	39.11
12	14	50	192	Building of complete constructions or parts thereof; civil engineering	Moderately	0.033	141	12	8.5	46	3	47717	6132	310411	59385	3.79
13	16	56	171	Manufacture of footwear	Moderately	0.037	31	6	19.4	10	1	1528	896	42939	34012	2.17
14	19	53	551	Weaving, manufacturing of man-made fibre and man-made mixture fabrics	Moderately	0.028	888	28	3.2	350	15	56880	4941	567403	33353	2.13
15	22	46	323	Hotels; camping sites and other provision of short-stay accommodation	Moderately	0.033	245	29	11.8	50	5	7254	885	233615	23839	1.52
16	23	54	241	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	Moderately	0.045	52	11	21.2	14	4	6811	3905	25388	18304	1.17
17	1	63	242	Total of Moderately Agglomerated Sectors	Manufacture of basic chemicals	0.032	661	80	12.1	257	20	97976	6904	225694	18155	1.16
				Manufacture of other chemical products	Dispersed	0.019	972	194	20	307	48	107857	39047	719402	247852	15.84



S. No	Rank of FDI Employment	Rank of EG	NIC 3-Digit	NIC Activity	Level of Agglomeration	EG Index	Number of Plants in the Industry	Number of FDI Plants in the Industry	% of FDI Plants	Number of Firms Operating in the Industry	Total Output	FDI Firms' Output	Total Employment in FDI	Employment in FDI	Share of Sectors' in Total FDI Employment	
18	5	60	269	Manufacture of non-metallic mineral products n.e.c.	Dispersed	0.020	343	32	9.3	105	12	54530	8022	455246	60753	3.88
19	8	75	152	Manufacture of dairy products	Dispersed	0.000	20	18	90	5	4	8855	8754	53445	53236	3.40
20	9	61	160	Manufacture of tobacco products	Dispersed	0.020	52	4	7.7	8	2	15591	1248	358325	48623	3.11
21	12	64	271	Manufacture of basic iron & Steel	Dispersed	0.017	405	47	11.6	186	18	188825	32578	694211	38249	2.44
22	13	79	341	Manufacture of motor vehicles	Dispersed	-0.011	51	12	23.5	11	3	86257	26927	150546	37302	2.38
23	15	78	312	Manufacture of electricity distribution and control apparatus	Dispersed	-0.011	63	23	36.5	14	2	11057	7976	45202	33542	2.14
24	20	62	519	Other wholesale	Dispersed	0.019	71	20	28.2	32	4	15007	2219	37054	22115	1.41
25	25	70	314	Manufacture of accumulators, primary cells and primary batteries	Dispersed	0.012	45	14	31.1	9	4	5816	3799	27860	16024	1.02
Total of Dispersed Sectors				2022	364	18.00	677	97	493794	130569	2541290	557697	35.64			
Top 25 Sectors				5536	864		1894	238	880976	210663	67779396	1356782				
All Sectors				9580	1170		3410	350	2151250	279575	124693950	1564920	100.00			
Share of Top 25 Sectors (%)				57.8	73.8		55.5	68.0	41.0	75.4	53.4	86.7				



Table 6.49

Share of Industry Employment in States Based on Ellison and Glaeser Index of Agglomeration (Employment-Based) Sorted by Employment of FDI-Enabled Manufacturing Plants

S. No.	Rank of FDI Employment	Rank of EG	NIC 3-Digit	NIC Activity	Level of Agglomeration	EG Index	State-1	State-2	State-3	State-4	State-5	Employment Share of First State
1	2	11	11	Growing of crops; market gardening; horticulture	Highly Ag	0.285	Assam	West Bengal	Tamil Nadu	Kerala	Karnataka	47.3
2	3	33	343	Manufacture of parts and accessories for motor vehicles and their engines	Highly Ag	0.076	Haryana	Karnataka	Maharashtra	Tamil Nadu	Uttar Pradesh	29.3
3	4	18	722	Software publishing, consultancy and supply	Highly Ag	0.171	Karnataka	Maharashtra	Tamil Nadu	Andhra Pradesh	Pondicherry	48.6
4	6	35	291	Manufacture of general purpose machinery	Highly Ag	0.070	Maharashtra	Karnataka	Gujarat	Tamil Nadu	Jharkhand	42.6
5	10	27	331	Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	Highly Ag	0.105	Maharashtra	Karnataka	Gujarat	Haryana	Andhra Pradesh	54.4
6	11	39	319	Manufacture of other electrical equipment n.e.c.	Highly Ag	0.053	Uttar Pradesh	Maharashtra	Tamil Nadu	Haryana	Karnataka	19.2
7	17	9	621	Scheduled air transport	Highly Ag	0.388	West Bengal	Orissa	Karnataka	Tamil Nadu	Himachal Pradesh	75.0
8	18	20	359	Manufacture of transport equipment n.e.c.	Highly Ag	0.146	Haryana	Karnataka	Tamil Nadu	Uttar Pradesh	Gujarat	44.3
9	21	38	292	Manufacture of special purpose machinery	Highly Ag	0.057	Tamil Nadu	Haryana	Maharashtra	Chandigarh (UT)	Gujarat	22.7
10	24	17	131	Mining of iron ores	Highly Ag	0.189	Karnataka	Orissa	Goa	Andhra Pradesh	Maharashtra	59.4
11	7	52	452	Building of complete constructions or parts thereof; civil engineering	Moderately	0.033	Madhya Pradesh	Gujarat	Tamil Nadu	Maharashtra	Pondicherry	22.0
12	14	50	192	Manufacture of footwear	Moderately	0.037	Karnataka	Bihar	Haryana	West Bengal	Uttar Pradesh	26.0
13	16	56	171	Weaving; manufacturing of man-made fibre and man-made mixture fabrics	Moderately	0.028	Maharashtra	Gujarat	Punjab	Tamil Nadu	Tamil Nadu	16.0
14	19	53	551	Hotels; camping sites and other provision of short-stay accommodation	Moderately	0.033	Maharashtra	Delhi	Andhra Pradesh	Rajasthan	Tamil Nadu	14.0
15	22	46	323	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	Moderately	0.045	Maharashtra	West Bengal	Uttar Pradesh	Chandigarh (UT)	Gujarat	36.0
16	23	54	241	Manufacture of basic chemicals	Moderately	0.032	Gujarat	Maharashtra	Tamil Nadu	Uttar Pradesh	Andhra Pradesh	27.0
17	1	63	242	Manufacture of other chemical products	Dispersed	0.019	Maharashtra	Gujarat	Andhra Pradesh	Himachal Pradesh	Goa	25.0
18	5	60	269	Manufacture of non-metallic mineral products n.e.c.	Dispersed	0.020	Tamil Nadu	Andhra Pradesh	Gujarat	Maharashtra	Rajasthan	12.0
19	8	75	152	Manufacture of dairy products	Dispersed	0.000	Haryana	Punjab	Maharashtra	Goa	Tamil Nadu	14.0
20	9	61	160	Manufacture of tobacco products	Dispersed	0.020	Andhra Pradesh	Maharashtra	Tamil Nadu	Uttar Pradesh	West Bengal	24.0
21	12	64	271	Manufacture of Basic Iron & Steel	Dispersed	0.017	Rajasthan	Orissa	Maharashtra	Karnataka	West Bengal	16.0
22	13	79	341	Manufacture of motor vehicles	Dispersed	-0.011	Maharashtra	Karnataka	Tamil Nadu	Uttarakhand	Uttar Pradesh	26.0



S. No.	Rank of FDI Employment	Rank of EG	NIC 3-Digit	NIC Activity	Level of Agglomeration	EG Index	State-1	State-2	State-3	State-4	State-5	Employment Share of First State
23	15	78	312	Manufacture of electricity distribution and control apparatus	Dispersed	-0.011	Maharashtra	Karnataka	Gujarat	Haryana	West Bengal	19.0
24	20	62	519	Other wholesale	Dispersed	0.019	Karnataka	Maharashtra	Gujarat	Haryana	Tamil Nadu	32.9
25	25	70	314	Manufacture of accumulators, primary cells and primary batteries	Dispersed	0.012	Andhra Pradesh	Tamil Nadu	West Bengal	Maharashtra	Gujarat	19.7
				Top 25 Sectors								
				All Sectors								
				Share of Top 25 Sectors [%]								



Table 6.50

Agglomeration of Industry Based on Ellison and Glaeser Index (Output-Based) Sorted by Output of FDI-Enabled Manufacturing Plants

S. No	Rank of FDI Employment	Rank of EG	NIC 3-Digit	NIC Activity	Level of Agglomeration	EG Index	Number of Plants in the Industry	Number of FDI Plants	% of FDI Plants	Number of Firms Operating in the Industry	Total Employment in the Industry	Employment in FDI	Total Output in FDI	Output in FDI	Share of Sectors' in Total Output		
1	6	30	343	Manufacture of parts and accessories for motor vehicles and their engines	Highly Ag	0.082	305	56	18.4	96	20	189620	87159	25694	11235	4.0	
2	7	35	291	Manufacture of general purpose machinery	Highly Ag	0.063	278	57	20.5	109	25	199240	59412	35050	11094	4.0	
3	8	11	359	Manufacture of transport equipment n.e.c.	Highly Ag	0.313	51	2	3.9	15	1	63167	25248	16804	10321	3.7	
4	9	27	331	Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes except optical instruments	Highly Ag	0.100	51	18	35.3	22	5	48503	40676	10144	9277	3.3	
5	19	26	131	Mining of iron ores	Highly Ag	0.102	14	4	28.6	5	1	63276	16634	7829	3631	1.3	
6	23	20	722	Software publishing, consultancy and supply	Highly Ag	0.175	174	30	17.2	65	8	1512448	86550	41630	1966	0.7	
Total of Highly Agglomerated Sectors						873	167	19.1	312	602076254	315879	137150	47525	17.0			
7	5	39	272	Manufacture of basic precious and moderately non-ferrous metals	Moderately	0.048	138	15	10.9	55	6	131799	5493	54289	13534	4.8	
8	11	51	269	Manufacture of non-metallic mineral products n.e.c.	Moderately	0.030	343	32	9.3	105	12	455246	60753	54530	8022	2.9	
9	16	50	319	Manufacture of other electrical equipment n.e.c.	Moderately	0.031	117	57	48.7	28	11	75701	38678	7804	4212		
1.5	10	17	45	323	Manufacture of television and radio receivers, sound or video recording apparatus, and reproducing apparatus, and associated goods	Moderately	0.043	52	11	21.2	14	4	25388	18304	6811	3905	1.4
11	20	38	292	Manufacture of special purpose machinery	Moderately	0.050	235	37	15.7	91	15	100535	18688	19085	2542	0.9	
12	21	52	519	Other wholesale	Moderately	0.023	71	20	28.2	32	4	37054	22115	15007	2219	0.8	
13	22	59	293	Manufacture of domestic appliances, n.e.c.	Moderately	0.020	63	4	6.3	20	2	44700	11663	16233	1972	0.7	
14	24	41	313	Manufacture of insulated wire and cable	Moderately	0.045	99	10	10.1	36	2	33935	4732	8599	1843	0.7	
Total of Moderately Agglomerated Sectors						1118	186	16.6	381	56	904359	180427	182357	38248	13.7		
15	1	63	242	Manufacture of other chemical products	Dispersed	0.017	972	194	20.0	307	48	719402	247852	107857	39047	14.0	
16	2	71	271	Manufacture of Basic Iron & Steel	Dispersed	0.007	405	47	11.6	186	18	694211	38249	188825	32578	11.7	
17	3	76	232	Manufacture of refined petroleum products	Dispersed	-0.012	107	11	10.3	33	3	270279	7939	678840	30625	11.0	
18	4	81	341	Manufacture of motor vehicles	Dispersed	-0.027	51	12	23.5	11	3	150546	37302	86257	26927	9.6	
19	10	77	152	Manufacture of dairy products	Dispersed	-0.015	20	18	90.0	5	4	53445	53236	8855	8754	3.1	



S. No	Rank of FDI Employment	Rank of EG Employment	NIC 3-Digit	NIC Activity	Level of Agglomeration	EG Index	Number of Plants in the Industry	Number of FDI Plants in the Industry	% of FDI Plants of Firms Operating in the Industry	Number of Firms in the Operating Industry	Total Employment in FDI	Total Output in FDI	Output in FDI	Share of Sectors' in Total Output		
20	12	74	312	Manufacture of electricity distribution and control apparatus	Dispersed	-0.007	63	23	36.5	14	2	45202	33542	11057	7976	2.9
21	13	69	241	Manufacture of basic chemicals	Dispersed	0.012	668	80	12.0	257	20	225694	18155	97976	6904	2.5
22	14	66	452	Building of complete constructions or parts thereof; civil engineering	Dispersed	0.015	141	12	8.5	46	3	310411	59385	47717	6132	2.2
23	15	65	171	Spinning, weaving and finishing of textiles	Dispersed	0.015	888	28	3.2	350	15	567403	33353	56880	4941	1.8
24	18	70	314	Manufacture of accumulators, primary cells and primary batteries	Dispersed	0.008	45	14	31.1	9	4	27860	16024	5816	3799	1.4
25	25	83	701	Real estate activities with own or leased property	Dispersed	-0.050	21	1	4.8	11	1	35398	15728	8661	1835	0.7
Total of Dispersed Sectors					3381	440	13.0	1229	121	3099850	560765	1298742	162516	60.6		
Top 25 Sectors					5372	793	1922	2376080443.06	1057070.311	618248.67	255290.08					
All Sectors					9585	1168	3409	34912693933.35	1544902.538	2151249.641	279574.83	100.0				
Share of Top 25 Sectors [%]					56.0	67.9	56.4	67.9	47.9	67.5	75.2	91.3				



Table 6.51

Share of Industry Output in States Based on Ellison and Glaeser Index of Agglomeration (Output-Based) Sorted by FDI Output (Manufacturing Sector)

S. No.	Rank of FDI Employment	Rank of EG	NIC 3-Digit	NIC Activity	Level of Agglomeration Index	EG State-1	State-2	State-3	State-4	State-5	Share of First State in Sectors' Output
1	6	30	343	Manufacture of parts and accessories for motor vehicles and their engines	Highly Ag	0.082	Haryana	Maharashtra	Karnataka	Tamil Nadu	Uttar Pradesh 29.3
2	7	35	291	Manufacture of general purpose machinery	Highly Ag	0.063	Maharashtra	Karnataka	Gujarat	Tamil Nadu	Andhra Pradesh 42.6
3	8	11	359	Manufacture of transport equipment n.e.c.	Highly Ag	0.313	Haryana	Karnataka	Himachal Pradesh	Tamil Nadu	Uttar Pradesh 64.8
4	9	27	331	Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating, and other purposes except optical instruments	Highly Ag	0.100	Maharashtra	Karnataka	Gujarat	Haryana	Andhra Pradesh 54.4
5	19	26	131	Mining of iron ores	Highly Ag	0.102	Karnataka	Goa	Orissa	Andhra Pradesh	Gujarat 32.9
6	23	20	722	Software publishing, consultancy and supply	Highly Ag	0.175	Karnataka	Maharashtra	Tamil Nadu	Andhra Pradesh	Haryana 48.6
7	5	39	272	Manufacture of basic precious and non-ferrous metals	Moderately	0.048	Maharashtra	Orissa	Dadra & Nagar Haveli (UT)	Rajasthan	Jharkhand 21.8
8	11	51	269	Manufacture of non-metallic mineral products n.e.c.	Moderately	0.030	Gujarat	Rajasthan	Tamil Nadu	Andhra Pradesh	Maharashtra 13.3
9	16	50	319	Manufacture of other electrical equipment n.e.c.	Moderately	0.031	Maharashtra	Uttar Pradesh	Tamil Nadu	Haryana	Karnataka 17.2
10	17	45	323	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	Moderately	0.043	Maharashtra	Uttar Pradesh	West Bengal	Uttarakhand	Delhi 39.0
11	20	38	292	Manufacture of special purpose machinery	Moderately	0.050	Tamil Nadu	Gujarat	Haryana	Maharashtra	West Bengal 28.4
12	21	52	519	Other wholesale	Moderately	0.023	Karnataka	Maharashtra	Gujarat	Tamil Nadu	Andhra Pradesh 61.1
13	22	59	293	Manufacture of domestic appliances, n.e.c.	Moderately	0.020	Maharashtra	Gujarat	Uttar Pradesh	Andhra Pradesh	Uttarakhand 40.4
14	24	41	313	Manufacture of insulated wire and cable	Moderately	0.045	Maharashtra	Dadra & Nagar Haveli (UT)	Goa	Madhya Pradesh	Delhi 22.5
15	1	63	242	Manufacture of other chemical products	Dispersed	0.017	Maharashtra	Gujarat	Andhra Pradesh	Himachal	Goa 22.3
16	2	71	271	Manufacture of Basic Iron & Steel	Dispersed	0.007	Maharashtra	Andhra Pradesh	Gujarat	Orissa	Chhattisgarh 21.4
17	3	76	232	Manufacture of refined petroleum products	Dispersed	-0.012	Maharashtra	Gujarat	West Bengal	Tamil Nadu	Uttar Pradesh 19.0
18	4	81	341	Manufacture of motor vehicles	Dispersed	-0.027	Maharashtra	Tamil Nadu	Haryana	Delhi	Uttar Pradesh 18.0
19	10	77	152	Manufacture of dairy products	Dispersed	-0.015	Maharashtra	Uttarakhand	Goa	Haryana	16.0
20	12	74	312	Manufacture of electricity distribution and control apparatus	Dispersed	-0.007	Maharashtra	Karnataka	Gujarat	Haryana	Uttarakhand 19.0
21	13	69	241	Manufacture of basic chemicals	Dispersed	0.012	Gujarat	Maharashtra	Andhra Pradesh	Tamil Nadu	Uttar Pradesh 23.9
22	14	66	452	Buitlding of complete constructions or parts thereof; civil engineering	Dispersed	0.015	Madhya Pradesh	Gujarat	Maharashtra	Tamil Nadu	West Bengal 18.7



S. No.	Rank of FDI Employment	Rank of EG	NIC 3-Digit	NIC Activity	Level of Agglomeration	EG Index	State-1	State-2	State-3	State-4	State-5	Share of First State in Sectors' Output
23	15	65	171	Spinning, weaving and finishing of textiles	Dispersed	0.015	Maharashtra	Gujarat	Punjab	Tamil Nadu	Madhya Pradesh	17.3
24	18	70	314	Manufacture of accumulators, primary cells and primary batteries	Dispersed	0.008	Andhra Pradesh	Maharashtra	Tamil Nadu	West Bengal	Gujarat	19.7
25	25	83	701	Real estate activities with own or leased property	Dispersed	-0.050	Haryana	Karnataka	Maharashtra	Gujarat	Tamil Nadu	63.0
				Top 25 Sectors								
				All Sectors								



Table 6.52

Class-wise Number of Plants and Cities Used in Model (Manufacturing Sector)

Class	Number of Plants	Number of Cities
1	434	21
2	85	20
3	721	245
Total	1,240	286

Table 6.53

State-wise Distribution of FDI Plants and Matched Domestic Plants Used in Model Sample (Manufacturing Sector)

State	FDI Plants	Domestic Plants	Total Matched Plants in FDI Locations	% of FDI Plants in FDI Locations	States' Share in Total Number of FDI Plants
Andhra Pradesh	76	636	712	10.7	6.1
Assam	66	68	134	49.3	5.3
Bihar	4	20	24	16.7	0.3
Chandigarh (UT)	1	12	13	7.7	0.1
Chhattisgarh	4	50	54	7.4	0.3
Dadra & Nagar Haveli (UT)	30	234	264	11.4	2.4
Daman & Diu	11	109	120	9.2	0.9
Delhi	9	132	141	6.4	0.7
Goa	26	64	90	28.9	2.1
Gujarat	138	1471	1609	8.6	11.1
Haryana	82	398	480	17.1	6.6
Himachal Pradesh	15	145	160	9.4	1.2
Jammu & Kashmir	6	12	18	33.3	0.5
Jharkhand	11	41	52	21.2	0.9
Karnataka	103	489	592	17.4	8.3
Kerala	20	113	133	15.0	1.6
Madhya Pradesh	18	253	271	6.6	1.5
Maharashtra	250	2052	2302	10.9	20.2
Orissa	11	23	34	32.4	0.9
Pondicherry	16	86	102	15.7	1.3
Punjab	15	228	243	6.2	1.2
Rajasthan	26	326	352	7.4	2.1
Tamil Nadu	143	1026	1169	12.2	11.5
Uttar Pradesh	54	556	610	8.9	4.4
Uttarakhand	17	115	132	12.9	1.4
West Bengal	88	384	472	18.6	7.1
Total	1240	9043	10283	12.1	100.0



Table 6.54

Distribution of Plants in Model Sample: By Region and Class (Manufacturing Sector)

Region	Number of Plants				
	Cities			Total	Class- 3's Share in Total
	Class-1	Class-2	Class-3		
North	29	17	171	217	78.8
South	144	38	176	358	49.2
East	44	9	131	184	71.2
West	217	21	243	481	50.5
Total	434	85	721	1,240	58.1



Table 6.55

Logistic Regression* for FDI Firms (Manufacturing Sector)

Variable	Base	Region and Distance Interaction
Operational SEZ in State	0.52998	0.68604
	0.000	0.002
Share of FDI Plants in city	15.47513	17.3818
	0.000	0.000
Airport Location in City	-5.87678	-10.46097
	0.000	0.000
Deficit to Available Electricity Ratio	-4.65494	-18.72967
	0.000	0.001
Export Intensity	2.50378	4.36208
	0.000	0.000
Number of Union	-0.00027	-0.00016
	0.000	0.086
Per Capita NSDP_0405		0.00015
		0.056
South Region		2.19235
		0.164
East Region		0.63045
		0.628
West Region		-0.06221
		0.949
South RegionXPCY		
East RegionXPCY		
West RegionXPCY		
distancefrom class 1city 25-100km		7.57104
		0.000
distancefrom class 1city 100-500km		7.24386
		0.000
distancefrom class 1city →500km		5.45951
		0.002
[25-100km]XPCY		
[100-500km]XPCY		
[→500km]XPCY		
South region X (100-500km)		-7.46808
		0.000
East Region X (100-500km)		-5.10453
		0.000
East Region X (→500km)		5.68981
		0.064
West Region X (100-500km)		1.91698
		0.259
Constant	0.10449	-5.28721
	0.775	0.001
Number of Observations	1140	1110
Initial Log Likelihood	-778.00	-754.00
Log Likelihood	-289.00	-103.00
chi2	976.72	1300.00
df_m	6	17
r2_p	0.628	0.863



Annex 1

Unmatched Cities- Only FDI Plants Located

S. No.	City	State	Class	Population	Total Plants
1	Ghatkeshar	Andhra Pradesh	3	88935	1
2	Pedavegi	Andhra Pradesh	3	81355	1
3	Shreeramnagar	Andhra Pradesh	3	19520	1
4	Bokel	Assam	3		1
5	Borahi	Assam	3		1
6	Daisajan	Assam	3		1
7	Dehing	Assam	3	17844	1
8	Dikom	Assam	3		1
9	Dirok	Assam	3		1
10	Hattialli	Assam	3		1
11	Koliamari	Assam	3		1
12	Muttack	Assam	3		1
13	Nalani	Assam	3		1
14	Nokhroy	Assam	3		1
15	Panitola	Assam	3		2
16	Singlijam	Assam	3		1
17	Umrangshu	Assam	3	9131	1
18	Nalanda	Bihar	3	353629	1
19	Paharpur	Bihar	3	5753	1
20	Anjar	Gujarat	3	68343	1
21	Bakrol	Gujarat	3		1
22	Himmatnagar	Gujarat	3	56464	1
23	Karannagar	Gujarat	3		1
24	Karjisan	Gujarat	3		1
25	Ognaj	Gujarat	3		1
26	Ranavav	Gujarat	3	24199	1
27	Sarigam	Gujarat	3	472	1
28	Bahalgarh	Haryana	3		1
29	Sohna	Haryana	3	27570	1
30	Giridih	Jharkhand	3	98989	1
31	Tatanagar	Jharkhand	3		1
32	Karwar	Karnataka	3	62973	1
33	Shahabad	Karnataka	3	57541	1
34	Mulanthuruthy	Kerala	3		1
35	Airoli	Maharashtra	3		1
36	Nerul	Maharashtra	3	14739	1
37	Vasind	Maharashtra	3	15881	1
38	Wada	Maharashtra	3	14286	1
39	Srisim	Orissa	3		1
40	Moga	Punjab	3	125573	1
41	Nabha	Punjab	3	62000	1
42	Chopanki	Rajasthan	3		1
43	Denkanikotta	Tamil Nadu	3	19328	1
44	Mathurathakkam	Tamil Nadu	3		1
45	Hamirpur (U P)	Uttar Pradesh	3	32046	1
46	Khalilabad	Uttar Pradesh	3	39559	1
47	Orai	Uttar Pradesh	3	139318	1
48	Batanagar	West Bengal	3		1
49	Bishnupur	West Bengal	3	66477	1
50	Sahaganj	West Bengal	3		1



Annex 2

Matched Cities- Number of FDI and Domestic Plants

S. No.	City	State	Class	Population	Total Plants in Matched Cities	FDI Plants in Matched Cities	Domestic Plants in Matched Cities
1	Bellary	Andhra Pradesh	3	316766	14	3	11
2	Bonthapally	Andhra Pradesh	3	41945	2	1	1
3	Chittoor	Andhra Pradesh	3	152654	26	2	24
4	Cuddapah	Andhra Pradesh	3	126505	6	1	5
5	Dowleswaram	Andhra Pradesh	3	103357	4	1	3
6	Guntur	Andhra Pradesh	2	514461	29	1	28
7	Hyderabad	Andhra Pradesh	1	3612427	207	23	184
8	Kakinada	Andhra Pradesh	3	296329	17	1	16
9	Karim Nagar	Andhra Pradesh	3	205653	9	1	8
10	Khammam	Andhra Pradesh	3	159544	18	1	17
11	Krishna	Andhra Pradesh	3		24	1	23
12	Medak	Andhra Pradesh	3	41945	161	19	142
13	Nalgonda	Andhra Pradesh	3	110286	54	3	51
14	Nellore	Andhra Pradesh	3	378428	37	4	33
15	Patancheru	Andhra Pradesh	3	40273	6	1	5
16	Quthbullapur	Andhra Pradesh	3	231108	12	2	10
17	Samirpet	Andhra Pradesh	3	85291	11	1	10
18	Tirupati	Andhra Pradesh	3	228202	4	2	2
19	Visakhapatnam	Andhra Pradesh	2	982904	63	6	57
20	Vizianagaram	Andhra Pradesh	3	174651	19	3	16
21	Darrang	Assam	3	74828	7	4	3
22	Dibrugarh	Assam	3	121893	22	10	12
23	Doom Dooma	Assam	3	19806	8	7	1
24	Guwahati	Assam	2	809895	9	1	8
25	Jorhat	Assam	3	67588	9	1	8
26	Karimganj	Assam	3	52613	4	1	3
27	Moran	Assam	3	6826	7	6	1
28	Nagaon	Assam	3	107667	4	3	1
29	Sibsagar	Assam	3	53584	9	2	7
30	Sonitpur	Assam	3	175794	9	1	8
31	Tingri	Assam	3	523	7	6	1
32	Tinsukia	Assam	3	85563	23	12	11
33	Durgapur	Bihar	3	493405	18	2	16
34	Hathidah	Bihar	3		2	1	1
35	Patna	Bihar	1	1366444	15	1	14
36	Chandigarh	Chandigarh (U T)	2	808515	14	1	13
37	Mohali	Chandigarh (U T)	3	15841	28	3	25
38	Bhilai	Chhattisgarh	3	87585	5	1	4
39	Durg	Chhattisgarh	3	232517	7	1	6
40	Raipur	Chhattisgarh	2	605747	35	2	33
41	Dadra & Nagar Haveli	Dadra & Nagar Haveli (U T)	3	50463	242	30	212
42	Daman & Diu	Daman & Diu	3	57348	110	11	99
43	New Delhi	Delhi	1	12905780	154	14	140
44	Goa	Goa	2	670577	135	26	109
45	Ahmedabad	Gujarat	1	3520085	262	26	236
46	Ahmednagar	Gujarat	3	347549	37	3	34



S. No.	City	State	Class	Population	Total Plants	FDI Plants in Matched Cities	Domestic Plants in Matched Cities
					in Matched Cities	Cities	Cities
47	Amreli	Gujarat	3	90230	4	1	3
48	Anand	Gujarat	3	130685	8	1	7
49	Ankleshwar	Gujarat	3	83887	63	9	54
50	Bharuch	Gujarat	3	148531	118	12	106
51	Chhatral	Gujarat	3	1680	4	1	3
52	Gandhidham	Gujarat	3	151693	10	2	8
53	Gandhinagar	Gujarat	3	195985	57	5	52
54	Halol	Gujarat	3	41115	7	3	4
55	Indrora	Gujarat	3		2	1	1
56	Jamnagar	Gujarat	3	443518	48	1	47
57	Junagadh	Gujarat	3	168515	13	3	10
58	Kachchh Bhuj	Gujarat	3	98528	56	1	55
59	Kandla	Gujarat	3	14695	4	1	3
60	Karamsad	Gujarat	3	28955	3	1	2
61	Kheda	Gujarat	3	24136	15	2	13
62	Kutch Bhachau	Gujarat	3	25389	5	1	4
63	Mehsana	Gujarat	3	99880	102	5	97
64	Padra	Gujarat	3	35923	2	1	1
65	Panchmahal	Gujarat	3	253362	41	7	34
66	Panoli	Gujarat	3	83887	4	1	3
67	Rajkot	Gujarat	2	967476	34	3	31
68	Sabarkantha	Gujarat	3	225129	12	1	11
69	Surat	Gujarat	1	2433835	93	11	82
70	Surendranagar	Gujarat	3	156161	8	1	7
71	Umbergaon	Gujarat	3	24953	5	1	4
72	VAPI	Gujarat	3	95250	39	6	33
73	Vadodara	Gujarat	1	1306227	193	16	177
74	Valsad	Gujarat	3	69569	97	8	89
75	Ballabgarh	Haryana	3		5	2	3
76	Bawal	Haryana	3	12144	3	1	2
77	Bhiwadi	Haryana	3	33877	19	2	17
78	Dharuhera	Haryana	3	18892	6	1	5
79	Faridabad	Haryana	1	1055938	130	14	116
80	Gurgaon	Haryana	3	172955	184	44	140
81	Hisar	Haryana	3	256689	15	2	13
82	Jhajjar	Haryana	3	39002	3	1	2
83	Jind	Haryana	3	135855	4	3	1
84	Mahendragarh	Haryana	3	24323	6	1	5
85	Manesar	Haryana	3	190065	2	1	1
86	Panipat	Haryana	3	346989	13	1	12
87	Rewari	Haryana	3	105138	38	8	30
88	Sonepat	Haryana	3	214974	36	1	35
89	Baddi	Himachal Pradesh	3	22601	18	3	15
90	Nalagarh	Himachal Pradesh	3	9443	6	2	4
91	Parwanoo	Himachal Pradesh	3	8609	15	1	14
92	Shimla	Himachal Pradesh	3	142555	6	2	4
93	Solan	Himachal Pradesh	3	34206	108	9	99
94	Baribrahmana	Jammu & Kashmir	3	33581	4	1	3
95	Jammu	Jammu & Kashmir	3	398750	13	3	10



S. No.	City	State	Class	Population	Total Plants in Matched Cities	FDI Plants in Matched Cities	Domestic Plants in Matched Cities
96	Jammu Tawi	Jammu & Kashmir	3	33581	3	2	1
97	Dhanbad	Jharkhand	3	199258	16	1	15
98	Gamharia	Jharkhand	3	6792	2	1	1
99	Jamshedpur	Jharkhand	2	573096	27	6	21
100	Lohardaga	Jharkhand	3	46196	3	1	2
101	Bangalore	Karnataka	1	4301326	387	69	318
102	Cuddalore	Karnataka	3	158634	21	2	19
103	Dakshina Kannada	Karnataka	3	399565	11	1	10
104	Doddaballapur	Karnataka	3	71606	3	1	2
105	Hassan	Karnataka	3	116574	6	1	5
106	Hoskote	Karnataka	3	36323	6	3	3
107	Hosur	Karnataka	3	84394	52	12	40
108	Hubli-Dharwad	Karnataka	2	786195	18	2	16
109	Kolar	Karnataka	3	113907	11	2	9
110	Mandy	Karnataka	3	131179	9	1	8
111	Mangalore	Karnataka	3	399565	15	2	13
112	Mysore	Karnataka	2	755379	63	12	51
113	Nanjangud	Karnataka	3	48232	2	1	1
114	Nelamangala	Karnataka	3	25287	4	1	3
115	Tumkur	Karnataka	3	248929	15	3	12
116	Alappuzha	Kerala	3	177029	8	1	7
117	Aluva	Kerala	3	24110	6	2	4
118	Cherthala	Kerala	3	45105	3	1	2
119	Idukki	Kerala	3	11347	6	2	4
120	Kochi	Kerala	2	595575	63	5	58
121	Palakkad	Kerala	3	130767	32	5	27
122	Pathanamthitta	Kerala	3	38009	6	1	5
123	Trichur	Kerala	3	317526	13	1	12
124	Wynad	Kerala	3	29612	8	2	6
125	Bhind	Madhya Pradesh	3	153752	25	2	23
126	Chhindwara	Madhya Pradesh	3	122247	11	1	10
127	Damoh	Madhya Pradesh	3	112185	4	2	2
128	Dewas	Madhya Pradesh	3	231672	34	1	33
129	Dhar	Madhya Pradesh	3	75374	77	5	72
130	Hoshangabad	Madhya Pradesh	3	97424	4	1	3
131	Indore	Madhya Pradesh	1	1474968	42	1	41
132	Khajuraho	Madhya Pradesh	3	19286	4	1	3
133	Lonavala	Madhya Pradesh	3	55652	3	1	2
134	Morena	Madhya Pradesh	3	150959	2	1	1
135	Raisen	Madhya Pradesh	3	35702	19	2	17
136	Rewa	Madhya Pradesh	3	183274	4	1	3
137	Sidhi	Madhya Pradesh	3	45700	8	1	7
138	Aurangabad	Maharashtra	2	873311	102	9	93
139	Bhandara	Maharashtra	3	85213	6	2	4
140	Bhiwandi	Maharashtra	2	598741	6	2	4
141	Buldhana	Maharashtra	3	62972	3	1	2
142	Chandrapur	Maharashtra	3	289450	18	2	16
143	Chiplun	Maharashtra	3	46229	3	1	2
144	Jalgaon	Maharashtra	3	400349	29	2	27



S. No.	City	State	Class	Population	Total Plants	FDI Plants in Matched Cities	Domestic Plants in Matched Cities
					in Matched Cities		
145	Kalyan-Dombivli	Maharashtra	1	1193512	5	1	4
146	Khopoli	Maharashtra	3	58664	5	1	4
147	Kolhapur	Maharashtra	3	493167	31	5	26
148	Mumbai	Maharashtra	1	3338031	447	42	405
149	Murbad	Maharashtra	3	15821	3	2	1
150	Nagpur	Maharashtra	1	2052066	112	14	98
151	Nanded	Maharashtra	3	430733	8	2	6
152	Nashik	Maharashtra	1	1077236	135	16	119
153	Navi Mumbai	Maharashtra	2	704002	76	4	72
154	Patalganga	Maharashtra	3		3	2	1
155	Pune	Maharashtra	1	2538473	352	59	293
156	Raigad	Maharashtra	3	81855	200	26	174
157	Ratnagiri	Maharashtra	3	70383	37	4	33
158	Satara	Maharashtra	3	108048	25	2	23
159	Sinnar	Maharashtra	3	31630	3	1	2
160	Solapur	Maharashtra	2	872478	27	3	24
161	Taloja	Maharashtra	3	10839	14	6	8
162	Tarapur	Maharashtra	3	7014	11	1	10
163	Thane	Maharashtra	1	1262551	390	34	356
164	Bhadrak	Orissa	3	92515	4	2	2
165	Bhubaneswar	Orissa	2	648032	9	1	8
166	Bolangir	Orissa	3	154323	2	1	1
167	Cuttack	Orissa	2	534654	15	1	14
168	Gopalpur-on-Sea	Orissa	3	6663	3	1	2
169	Jajpur	Orissa	3	32239	10	4	6
170	Khurda	Orissa	3	39054	6	1	5
171	Rourkela	Orissa	3	421680	4	1	3
172	Sundergarh	Orissa	3	38421	12	1	11
173	Pondicherry	Pondicherry	2	506794	117	16	101
174	Bathinda	Punjab	3	217256	6	1	5
175	Ludhiana	Punjab	1	1398467	90	2	88
176	Nawan Shahar Dist	Punjab	3	30999	8	1	7
177	Patiala	Punjab	3	303151	46	3	43
178	Rajpura	Punjab	3	82956	7	1	6
179	Ropar	Punjab	3	49159	15	2	13
180	Alwar	Rajasthan	3	260593	104	9	95
181	Banswara	Rajasthan	3	85665	9	2	7
182	Bhilwara	Rajasthan	3	280128	26	2	24
183	Jaipur	Rajasthan	1	1870771	85	4	81
184	Jaisalmer	Rajasthan	3	57537	15	2	13
185	Pali	Rajasthan	3	187641	5	1	4
186	Sikar	Rajasthan	3	185323	7	1	6
187	Udaipur	Rajasthan	3	389438	44	6	38
188	Chengalpattu	Tamil Nadu	3	62582	98	13	85
189	Chennai	Tamil Nadu	1	4343645	344	56	288
190	Coimbatore	Tamil Nadu	2	930882	190	7	183
191	Dharmapuri	Tamil Nadu	3	64496	29	5	24
192	Erode	Tamil Nadu	3	150541	22	1	21



S. No.	City	State	Class	Population	Total Plants in Matched Cities	FDI Plants in Matched Cities	Domestic Plants in Matched Cities
193	Kancheepuram	Tamil Nadu	3	153140	66	9	57
194	Krishnagiri	Tamil Nadu	3	64587	5	1	4
195	Madurai	Tamil Nadu	2	928869	23	5	18
196	Mayiladuthurai	Tamil Nadu	3	84505	2	1	1
197	Nagapattinam	Tamil Nadu	3	93148	2	1	1
198	Nellikuppam	Tamil Nadu	3	44222	2	1	1
199	Nilgiris	Tamil Nadu	3	11044	17	1	16
200	Periyar	Tamil Nadu	3	9614	15	1	14
201	Pudukkottai	Tamil Nadu	3	126824	10	1	9
202	Salem	Tamil Nadu	2	696760	31	2	29
203	South Arcot	Tamil Nadu	3	49953	8	1	7
204	Sriperumbudur	Tamil Nadu	3	16156	9	2	7
205	Thiruvallur	Tamil Nadu	3	45732	27	4	23
206	Tirunelveli	Tamil Nadu	3	411831	49	8	41
207	Tirupur	Tamil Nadu	3	344543	24	1	23
208	Tiruvannamalai	Tamil Nadu	3	130567	4	1	3
209	Tuticorin	Tamil Nadu	3	216054	13	3	10
210	Vellore	Tamil Nadu	3	177230	7	3	4
211	Villupuram	Tamil Nadu	3	95455	5	1	4
212	Agra	Uttar Pradesh	1	1275134	23	2	21
213	Allahabad	Uttar Pradesh	2	975393	14	1	13
214	Bareilly	Uttar Pradesh	2	718395	19	1	18
215	Bulandshahr	Uttar Pradesh	3	176425	24	2	22
216	Etah	Uttar Pradesh	3	107110	3	2	1
217	Gajraula	Uttar Pradesh	3	39790	6	1	5
218	Ghaziabad	Uttar Pradesh	2	968256	159	11	148
219	Jhansi	Uttar Pradesh	3	417724	5	1	4
220	Kanpur	Uttar Pradesh	1	2551337	59	2	57
221	Meerut	Uttar Pradesh	1	1068772	28	3	25
222	Moradabad	Uttar Pradesh	2	641583	15	1	14
223	Noida	Uttar Pradesh	3	305058	178	22	156
224	Rampur	Uttar Pradesh	3	281494	17	1	16
225	Sahibabad	Uttar Pradesh	3	100121	7	1	6
226	Dehradun	Uttarakhand	3	480349	30	1	29
227	Haridwar	Uttarakhand	3	175340	46	6	40
228	Khatima	Uttarakhand	3	14335	3	2	1
229	Nainital	Uttarakhand	3	39911	12	1	11
230	Pantnagar	Uttarakhand	3		4	1	3
231	Rudrapur	Uttarakhand	3	88676	37	6	31
232	Burdwan	West Bengal	3	285602	30	3	27
233	Darjeeling	West Bengal	3	107197	32	11	21
234	Haldia	West Bengal	3	170673	7	2	5
235	Hooghly	West Bengal	3	170206	46	5	41
236	Howrah	West Bengal	1	1007532	63	9	54
237	Jalpaiguri	West Bengal	3	100348	54	13	41
238	Kalyani	West Bengal	3	82135	2	1	1
239	Kolkata	West Bengal	1	4572876	255	37	218
240	Maldah	West Bengal	3	62959	2	1	1
241	Medinipur	West Bengal	3	149769	16	2	14



S. No.	City	State	Class	Population	Total Plants	FDI Plants in Matched Cities	Domestic Plants in Matched Cities
					in Matched Cities	Cities	Matched Cities
242	Nadia	West Bengal	3	139110	11	2	9
243	Rajarhat Gopalpur	West Bengal	3	271811	3	2	1
244	Shamnagar	West Bengal	3		3	1	2



Annex 3

Classification of Companies According to NIC Codes and Activities (values in Rs. crore)

S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
1	11	35	Assam Company	18	465	30	11	0	8	151	Assam	Dibrugarh	3	6
												Doom Dooma	3	1
												Jorhat	3	1
												Moran	3	4
												Nagaon	3	3
												Tinsukia	3	3
2	11	36	Apeejay Tea	8	228	6	4	34741	50	98	Assam	Darrang	3	1
												Tinsukia	3	7
3	11	201	Goodricke Group	17	124	22	16	67271	113	237	Assam	Darrang	3	2
												West Bengal	3	3
												Darjeeling	3	3
4	11	233	Harr. Malayalam	10	235	18	4	47988	83	202	Karnataka	Bangalore	1	1
												Karnataka	3	1
												Hosur	3	1
												Kerala	3	2
												Kerala	2	1
												Kochi	3	1
												Pathanamthitta	3	1
												Kerala	3	2
												Wynad	1	1
												Maharashtra	3	1
												Pune	3	1
												Tamil Nadu	3	1
5	11	605	Warren Tea	14	216	11	6	48915	80	132	Assam	Doom Dooma	3	6
												Assam	3	1
												Moran	3	2
												Panitola	3	2
												Tingri	3	5
6	11	750	Moran Tea Co	2	71	2	2	13039	20	37	Assam	Moran	3	1
												Sibsagar	3	1
7	12	6146	Bio Whitegold	1	0	5	4	0	0	0	Tamil Nadu	Salem	2	1
8	50	3754	Sharat Inds.	1	39	22	4	809	5	28	Andhra Pradesh	Nellore	3	1
9	112	4822	Selan Expl. Tech	5	12	14	4	599	23	35	Gujarat	Bakrol	3	1
												Gujarat	3	1
												Karjisan	3	1
												Ognaj	3	1
												Jharkhand	3	1
10	131	502	Sesa Goa	4	478	39	20	16634	2228	3631	Andhra Pradesh	Bellary	3	1
												Goa	2	2
												Orissa	3	1
11	141	3072	Global Stone (I)	1	26	12	4	416	0	8	Karnataka	Tumkur	3	1
12	141	3428	Divyashakti Gran	2	25	10	2	293	6	32	Andhra Pradesh	Medak	3	2
13	141	3956	Inlac Granston	1	15	7	1	0	0	0	Tamil Nadu	Denkanikotta	3	1
14	141	14853	Kachchh Minerals	1	1	5	1	16	0	1	Gujarat	Kutch Bhachau	3	1
15	151	2146	Agro Tech Foods	3	15	24	12	4199	44	1025	Maharashtra	Raigad	3	1
												Rajasthan	1	1
												Uttar Pradesh	2	1
16	151	3299	Tarai Foods	1	13	14	5	35	1	2	Uttarakhand	Ghaziabad	3	1
17	151	4965	Integ. Proteins	1	3	4	0	2	0	0	Gujarat	Rudrapur	3	1
18	151	14352	South East Agro	1	8	5	1	8	0	1	Karnataka	Jamnagar	2	1
19	152	93	Britannia Inds.	5	420	24	12	7613	303	2571	Delhi	New Delhi	1	1
												Maharashtra	1	1
												Tamil Nadu	1	1
												Uttarakhand	3	1
												Rudrapur	1	1
20	152	175	Nestle India	7	1077	96	60	23427	883	3572	Goa	Goa	2	2
												Haryana	3	1
												Karnataka	2	1
												Punjab	3	1
												Tamil Nadu	3	1
												Uttarakhand	3	1
21	152	231	GlaxoSmith C H L	3	416	42	18	13368	374	1301	Andhra Pradesh	Dowleswaram	3	1
												Haryana	3	1
												Bahalgarh	3	1
												Punjab	3	1
22	152	244	Cadbury India	3	502	33	31	8828	269	1311	Madhya Pradesh	Nabha	3	1
												Maharashtra	1	1
												Pune	3	1
												Thane	1	1
23	154	1225	Dharani Sugars	2	169	25	5	1266	2	209	Tamil Nadu	Tirunelveli	3	1
												Tamil Nadu	3	1
24	154	3161	Lotte India	1	121	4	3	2511	14	153	Tamil Nadu	Tiruvannamalai	3	1
												Nellikuppam	3	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
25	155	506	Shaw Wallace	6	23	48	21	977	5	136	Andhra Pradesh	Hyderabad	1	1
											Maharashtra	Satara	3	1
											Tamil Nadu	Chengalpattu	3	1
											Tamil Nadu	Chennai	1	1
											West Bengal	Hooghly	3	1
											West Bengal	Medinipur	3	1
26	155	23220	United Breweries	12	577	22	8	8171	246	1371	Andhra Pradesh	Hyderabad	1	1
											Goa	Goa	2	1
											Karnataka	Mangalore	3	1
											Karnataka	Nelamangala	3	1
											Kerala	Cherthala	3	1
											Kerala	Palakkad	3	1
											Maharashtra	Nerul	3	1
											Maharashtra	Taloja	3	1
											Orissa	Khurda	3	1
											Punjab	Ludhiana	1	1
											Rajasthan	Chopanki	3	1
											West Bengal	Kalyani	3	1
27	160	598	VST Inds.	1	219	15	5	16783	125	339	Andhra Pradesh	Hyderabad	1	1
28	160	657	Godfrey Phillips	3	215	10	4	31840	220	910	Andhra Pradesh	Guntur	2	1
											Maharashtra	Mumbai	1	1
											Uttar Pradesh	Ghaziabad	2	1
29	171	700	RSWM Ltd	7	1253	23	5	15189	188	1206	Karnataka	Bangalore	1	1
											Rajasthan	Banswara	3	2
											Rajasthan	Bhilwara	3	2
											Rajasthan	Sikar	3	1
											Rajasthan	Udaipur	3	1
30	171	1198	Niwas Spinning	2	84	14	1	48	1	15	Maharashtra	Solapur	2	2
31	171	1220	Indo Rama Synth.	2	2978	152	44	7381	112	2597	Madhya Pradesh	Dhar	3	1
											Maharashtra	Nagpur	1	1
32	171	1483	Uniproducts (I)	2	118	9	6	1311	22	122	Haryana	Rewari	3	1
											Uttar Pradesh	Noida	3	1
33	171	1949	Uniworth	3	213	34	7	1279	22	124	Chattisgarh	Raipur	2	1
											Maharashtra	Nagpur	1	1
											West Bengal	Maldah	3	1
34	171	1960	Indo Count Inds.	1	366	30	12	3084	15	300	Maharashtra	Kolhapur	3	1
35	171	2492	Black Rose Indus	1	3	2	1	52	2	32	Maharashtra	Kolhapur	3	1
36	171	2760	Voith Paper	1	49	4	3	1050	21	45	Haryana	Faridabad	1	1
37	171	3025	Sanrhea Tech.	1	7	3	0	83	1	8	Gujarat	Mehsana	3	1
38	171	3052	Hanil Era Text	2	212	41	6	366	7	80	Maharashtra	Mumbai	1	1
											Maharashtra	Raigad	3	1
39	171	3715	Krishna Filament	2	106	8	2	0	0	0	Maharashtra	Nashik	1	1
											Maharashtra	Thane	1	1
40	171	4733	Arex Inds.	1	35	4	1	357	8	16	Gujarat	Chhatral	3	1
41	171	6555	Ginni Intl.	1	253	21	8	1667	24	212	Rajasthan	Alwar	3	1
42	171	22035	Rainbow Denim	1	185	18	6	1175	12	119	Chandigarh (UT)	Mohali	3	1
43	171	22419	Aunde Faze Three	1	48	11	5	312	13	66	Dadra & Nagar haveli (UT)	Dadra & Nagar haveli	3	1
44	181	3930	Zodiac Cloth. Co	10	38	8	3	6930	54	233	Gujarat	Kandla	3	1
											Gujarat	Umbergaon	3	1
											Gujarat	Valsad	3	3
											Karnataka	Bangalore	1	4
											Maharashtra	Mumbai	1	1
45	181	12521	Page Industries	3	42	11	5	5494	66	205	Karnataka	Bangalore	1	3
46	181	13654	GIVO	1	48	58	28	959	3	20	Haryana	Gurgaon	3	1
47	181	27481	Sarju Intl	1	3	8	3	115	1	13	Tamil Nadu	Tirupur	3	1
48	181	27614	House of Pearl	7	0	20	6	169	-2	15	Haryana	Gurgaon	3	6
											Tamil Nadu	Chennai	1	1
49	182	7799	Avanti Leathers	3	3	2	0	86	-2	0	Andhra Pradesh	Chittoor	3	1
											Tamil Nadu	Chengalpattu	3	1
											Tamil Nadu	Chennai	1	1
50	192	60	Bata India	6	254	64	33	34012	245	896	Bihar	Hathidah	3	1
											Bihar	Patna	1	1
											Haryana	Faridabad	1	1
											Karnataka	Bangalore	1	1
											Karnataka	Hosur	3	1
											West Bengal	Batanagar	3	1
51	202	853	India Gypsum	3	240	28	11	2019	33	180	Haryana	Jind	3	1
											Maharashtra	Thane	1	1
											Tamil Nadu	Thiruvallur	3	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City	
52	202	4678	Indo-Germa Prods	1	2	5	1	31	0	2	Tamil Nadu	Chennai	1	1	
53	210	453	Pudumjee Pulp	1	125	8	1	1514	34	222	Maharashtra	Pune	1	1	
54	210	503	Seshasayee Paper	1	436	11	2	3780	114	497	Tamil Nadu	Erode	3	1	
55	210	1106	Paper Products	11	374	13	7	7116	94	583	Andhra Pradesh	Hyderabad	1	2	
											Dadra & Nagar Haveli (U T)	Dadra & Nagar Haveli	3		
2															
											Maharashtra	Nagpur	1	2	
											Maharashtra	Thane	1	2	
											Tamil Nadu	Chennai	1	1	
											Uttarakhand	Rudrapur	3	1	
											West Bengal	Nadia	3	1	
56	210	1463	Vapi Paper Mills	2	17	2	0	109	1	15	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	1	
											Gujarat	VAPI	3	1	
57	210	3703	Global Boards	1	173	12	11	269	-8	7	Maharashtra	Raigad	3	1	
58	210	4374	Rama Newsprint	1	694	58	11	1430	69	364	Gujarat	Surat	1	1	
59	210	4591	S I Paper Mills	1	68	8	1	833	26	122	Karnataka	Nanjangud	3	1	
60	221	18868	Macmillan India	10	52	17	10	3172	77	155	Karnataka	Bangalore	1	6	
											Tamil Nadu	Chennai	1	3	
											Uttar Pradesh	Noida	3	1	
61	232	292	Castrol India	6	213	124	88	2961	414	1959	Bihar	Paharpur	3	1	
											Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	1	
											Haryana	Ballabgarh	3	1	
											Karnataka	Hoskote	3	1	
											Maharashtra	Raigad	3	1	
											Tamil Nadu	Chennai	1	1	
62	232	843	Rama Petrochem	3	38	10	3	24	-1	2	Gujarat	Junagadh	3	1	
											Maharashtra	Raigad	3	1	
											Punjab	Patiala	3	1	
63	232	2339	Chennai Petroleu	2	5023	149	23	4954	2181	28664	Tamil Nadu	Chennai	1	1	
											Tamil Nadu	Nagapattinam	3	1	
64	241	119	Clariant Chemica	6	333	27	17	3670	110	858	Karnataka	Cuddalore	3	1	
											Maharashtra	Raigad	3	1	
											Maharashtra	Thane	1	3	
											Tamil Nadu	Kancheepuram	3	1	
65	241	140	Dharamsi Morarji	5	186	21	4	1185	9	258	Gujarat	Amreli	3	1	
											Gujarat	Vadodara	1	1	
											Maharashtra	Raigad	3	1	
											Maharashtra	Thane	1	1	
											Rajasthan	Udaipur	3	1	
66	241	284	BOC India	25	627	49	36	1335	72	312	Andhra Pradesh	Hyderabad	1	1	
											Andhra Pradesh	Medak	3	1	
											Andhra Pradesh	Visakhapatnam	2	1	
											Delhi	New Delhi	1	1	
											Gujarat	Ahmedabad	1	1	
											Haryana	Faridabad	1	1	
											Jharkhand	Jamshedpur	2	3	
											Karnataka	Bangalore	1	1	
											Maharashtra	Navi Mumbai	2	1	
											Maharashtra	Pune	1	1	
											Maharashtra	Taloja	3	3	
											Maharashtra	Thane	1	2	
											Tamil Nadu	Chennai	1	2	
											Tamil Nadu	Kancheepuram	3	1	
											Tamil Nadu	Pudukkottai	3	1	
											West Bengal	Burdwan	3	1	
											West Bengal	Howrah	1	1	
											West Bengal	Kolkata	1	2	
67	241	409	Natt. Peroxide	2	175	6	1	336	33	110	Madhya Pradesh	Dewas	3	1	
											Maharashtra	Kalyan-Dombivli	1	1	
68	241	525	S P I C	7	2581	108	20	5108	-38	1495	Karnataka	Cuddalore	3	1	
											Karnataka	Hosur	3	1	
											Tamil Nadu	Chengalpattu	3	2	
											Tamil Nadu	Chennai	1	1	
											Tamil Nadu	Coimbatore	2	1	
											Tamil Nadu	Tuticorin	3	1	
69	241	581	Cabot India	1	105	9	8	499	26	225	Maharashtra	Thane	1	1	



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
70	241	631	Albright & Wil.	2	54	3	2	492	3	127	Maharashtra	Raigad	3	1
											Maharashtra	Thane	1	1
71	241	1216	Chemfab Alkalies	4	135	5	3	390	35	100	Pondicherry	Pondicherry	2	2
											Tamil Nadu	Chennai	1	1
											Tamil Nadu	Villupuram	3	1
72	241	1231	Elantas Beck	3	39	8	7	458	37	171	Gujarat	Ankleshwar	3	1
											Maharashtra	Pune	1	1
											Maharashtra	Ratnagiri	3	1
73	241	1473	Rama Phosphates	3	110	6	2	370	17	264	Madhya Pradesh	Indore	1	1
											Maharashtra	Pune	1	1
											Rajasthan	Udaipur	3	1
74	241	2394	Resonance Speci.	1	30	12	2	50	4	20	Maharashtra	Thane	1	1
75	241	2406	Insilco	2	105	63	46	394	-5	66	Maharashtra	Patalganga	3	1
											Uttar Pradesh	Gajraula	3	1
76	241	2596	Jaysynth Dyestuf	2	3	1	0	44	3	78	Maharashtra	Raigad	3	2
77	241	2850	J F Labs.	1	1	20	6	0	0	0	Maharashtra	Pune	1	1
78	241	3140	Bodal Chemicals	7	105	10	1	229	33	429	Gujarat	Ahmedabad	1	4
											Gujarat	Ankleshwar	3	1
											Gujarat	Padra	3	1
											Gujarat	Panoli	3	1
79	241	3727	MTZ Industries	4	20	23	4	119	-3	10	Maharashtra	Bhiwandi	2	1
											Maharashtra	Raigad	3	2
											Maharashtra	Thane	1	1
80	241	4846	H K Finechem	1	31	10	3	101	5	34	Gujarat	Ahmedabad	1	1
81	241	5704	Madras Fert.	1	874	162	42	2053	17	1159	Tamil Nadu	Chennai	1	1
82	241	12849	Rain Calcining	2	515	129	26	369	126	711	Andhra Pradesh	Visakhapatnam	2	2
83	241	18758	Ciba India	1	104	13	8	953	49	475	Goa	Goa	2	1
84	242	39	Astrazeneca Phar	1	62	5	4	4700	141	295	Karnataka	Bangalore	1	1
85	242	59	BASF India	2	326	28	15	7600	182	915	Karnataka	Dakshina Kannada	3	1
											Maharashtra	Navi Mumbai	2	1
86	242	62	Bayer CropScien.	3	333	40	27	13834	134	1174	Gujarat	Ankleshwar	3	1
											Gujarat	Himmatnagar	3	1
											Maharashtra	Thane	1	1
87	242	90	Abbott India	2	66	14	9	3139	114	654	Goa	Goa	3	1
											Maharashtra	Pune	1	1
88	242	114	Cipla	6	2125	155	33	21752	875	4039	Goa	Goa	3	1
											Himachal Pradesh	Solan	3	1
											Karnataka	Bangalore	1	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Pune	1	1
											Maharashtra	Raigad	3	1
89	242	117	DIC India	8	85	7	5	2162	48	396	Delhi	New Delhi	1	1
											Gujarat	Ahmedabad	1	1
											Karnataka	Bangalore	1	2
											Maharashtra	Mumbai	1	1
											Tamil Nadu	Chennai	1	1
											Uttar Pradesh	Noida	3	1
											West Bengal	Kolkata	1	1
90	242	118	Colgate Palmoliv	3	319	14	7	10182	335	1476	Himachal Pradesh	Baddi	3	1
											Maharashtra	Aurangabad	2	1
											Maharashtra	Mumbai	1	1
91	242	127	Wyeth	4	69	23	12	3805	145	323	Goa	Goa	2	1
											Gujarat	Valsad	3	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Nashik	1	1
92	242	149	Merck	2	96	17	9	2798	96	314	Goa	Goa	2	1
											Maharashtra	Raigad	3	1
93	242	178	Fulford (India)	1	4	4	2	2014	49	174	Maharashtra	Mumbai	1	1
94	242	195	Glaxosmithkline	2	229	85	43	14132	618	1554	Maharashtra	Nashik	1	1
											Maharashtra	Thane	1	1
95	242	200	Kansai Nerolac	7	418	27	18	6418	254	1398	Gujarat	Ahmedabad	1	1
											Haryana	Rewari	3	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Ratnagiri	3	1
											Maharashtra	Thane	1	1
											Tamil Nadu	Chennai	1	1
											Uttar Pradesh	Kanpur	1	1
96	242	216	Guj. Themis Bio.	1	35	12	4	142	3	15	Gujarat	VAPI	3	1
97	242	243	Novartis India	1	18	16	8	5548	157	549	Maharashtra	Raigad	3	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity Capital	FDI	No. of Employees	Value of Added Output	State	City	Class of City	No. of Plants in the City	
98	242	255	Hind. Unilever	46	2348	218	113	74076	2590	13845	Andhra Pradesh	Hyderabad	1	1
											Assam	Tinsukia	3	1
											Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	1
											Daman & Diu	Daman & Diu	3	6
											Goa	Goa	2	1
											Gujarat	Gandhidham	3	2
											Himachal Pradesh	Nalagarh	3	1
											Himachal Pradesh	Solan	3	1
											Karnataka	Bangalore	1	1
											Karnataka	Hosur	3	1
											Karnataka	Hubli-Dharwad	2	1
											Karnataka	Mangalore	3	1
											Karnataka	Mysore	2	1
											Kerala	Kochi	2	2
											Madhya Pradesh	Chhindwara	3	1
											Maharashtra	Airoli	3	1
											Maharashtra	Buldhana	3	1
											Maharashtra	Chiplun	3	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Pune	1	1
											Maharashtra	Sinnar	3	1
											Pondicherry	Pondicherry	2	3
											Punjab	Rajpura	3	1
											Tamil Nadu	Chennai	1	1
											Uttar Pradesh	Etah	3	2
											Uttar Pradesh	Hamirpur (UP)	3	1
											Uttar Pradesh	Khalilabad	3	1
											Uttar Pradesh	Orai	3	1
											Uttarakhand	Haridwar	3	1
											West Bengal	Haldia	3	1
											West Bengal	Jalpaiguri	3	1
											West Bengal	Kolkata	1	5
99	242	256	Aventis Pharma	3	249	23	12	9623	243	882	Goa	Goa	2	1
											Gujarat	Ankleshwar	3	1
											Maharashtra	Mumbai	1	1
100	242	265	Gulf Oil Corpn.	11	2068	15	7	6057	95	760	Andhra Pradesh	Hyderabad	1	1
											Andhra Pradesh	Karim Nagar	3	1
											Andhra Pradesh	Visakhapatnam	2	1
											Bihar	Nalanda	3	1
											Jharkhand	Dhanbad	3	1
											Madhya Pradesh	Sidhi	3	1
											Maharashtra	Bhiwandi	2	1
											Maharashtra	Nagpur	1	1
											Orissa	Rourkela	3	1
											Rajasthan	Udaipur	3	1
											Tamil Nadu	Periyar	3	1
101	242	266	ICI (India)	9	273	38	21	4567	124	1028	Andhra Pradesh	Hyderabad	1	1
											Chandigarh (UT)	Mohali	3	1
											Gujarat	Valsad	3	1
											Jharkhand	Giridih	3	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Thane	1	1
											Tamil Nadu	Chennai	1	1
											Uttar Pradesh	Kanpur	1	1
											West Bengal	Hooghly	3	1
102	242	288	Gillette India	4	241	33	13	4801	349	723	Haryana	Bhiwadi	3	1
											Haryana	Gurgaon	3	1
											Himachal Pradesh	Baddi	3	1
											Karnataka	Mysore	2	1
103	242	434	Pfizer	2	93	30	12	9421	216	705	Chandigarh (UT)	Chandigarh	2	1
											Maharashtra	Mumbai	1	1
104	242	436	PHIL Corp.	4	19	12	2	49	-4	0	Goa	Goa	2	3
											Karnataka	Karwar	3	1
105	242	475	Reckitt Benck.	5	169	26	13	5312	280	1322	Karnataka	Mysore	2	1
											Tamil Nadu	Dharmapuri	3	1
											West Bengal	Burdwan	3	1
											West Bengal	Kolkata	1	2



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
106	242	480	P & G Hygiene	4	148	32	22	3310	70	541	Andhra Pradesh	Medak	3	1
											Goa	Goa	2	2
											Madhya Pradesh	Raisen	3	1
107	242	505	Shalimar Paints	3	48	4	1	1460	36	301	Maharashtra	Nashik	1	1
											Uttar Pradesh	Bulandshahr	3	1
											West Bengal	Howrah	1	1
108	242	1165	Monsanto India	4	145	9	6	3456	109	368	Andhra Pradesh	Bellary	3	1
											Andhra Pradesh	Pedavegi	3	1
											Andhra Pradesh	Samirpet	3	1
											Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	1
109	242	1183	Haryana Leather	2	13	5	1	122	3	21	Haryana	Jind	3	2
110	242	1206	NLC Nalco	3	52	5	5	1088	17	149	Jharkhand	Jamshedpur	2	1
											Maharashtra	Pune	1	1
											West Bengal	Hooghly	3	1
111	242	1526	Kerala Chemicals	2	122	8	4	842	22	142	Kerala	Kochi	2	1
											Kerala	Trichur	3	1
112	242	2159	India Gelatine	1	82	9	2	169	3	59	Gujarat	VAPI	3	1
113	242	2249	Rayban Sun Optic	1	18	24	17	639	27	88	Rajasthan	Alwar	3	1
114	242	2393	Wanbury	4	84	13	3	1469	29	147	Maharashtra	Navi Mumbai	2	1
											Maharashtra	Patalganga	3	1
											Maharashtra	Tarapur	3	1
											Maharashtra	Thane	1	1
115	242	2957	Micro Inks	6	442	25	18	4346	176	1154	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	2
											Daman & Diu	Daman & Diu	3	1
											Gujarat	VAPI	3	3
116	242	3317	Foseco India	5	29	6	4	877	41	152	Jammu & Kashmir	Jammu Tawi	3	1
											Jharkhand	Jamshedpur	2	1
											Maharashtra	Pune	1	1
											Pondicherry	Pondicherry	2	1
											West Bengal	Kolkata	1	1
117	242	3444	Sabero Organics	1	104	29	3	888	34	195	Gujarat	Sarigam	3	1
118	242	3882	Bharat Parenter.	2	8	5	1	86	2	35	Gujarat	Panchmahal	3	1
											Gujarat	Vadodara	1	1
119	242	4151	Akzo Nobel Chem.	1	18	5	5	183	17	50	Maharashtra	Raigad	3	1
120	242	4164	Hester Pharma.	1	41	5	1	262	20	35	Gujarat	Mehsana	3	1
121	242	4316	Vista Pharma.	1	8	11	2	24	0	1	Andhra Pradesh	Nalgonda	3	1
122	242	4596	Matrix Labs.	11	485	31	22	6716	-178	1024	Andhra Pradesh	Hyderabad	1	2
											Andhra Pradesh	Medak	3	5
											Andhra Pradesh	Quthbullapur	3	2
											Andhra Pradesh	Vizianagaram	3	1
											Maharashtra	Nashik	1	1
123	242	4726	Phyto Chem (I)	1	3	4	0	74	3	12	Andhra Pradesh	Bonthapally	3	1
124	242	4855	Kerala Ayurveda	2	10	11	6	612	2	18	Kerala	Aluva	3	2
125	242	4895	Themis Medicare	3	81	8	1	1183	33	221	Andhra Pradesh	Hyderabad	1	1
											Gujarat	Valsad	3	1
											Uttarakhand	Haridwar	3	1
126	242	5576	Epsom Properties	1	0	5	2	1	0	1	Tamil Nadu	Chennai	1	1
127	242	8020	KDL Biotech	1	133	17	6	1081	-3	168	Maharashtra	Raigad	3	1
128	242	8033	Syngenta India	1	222	16	13	5896	226	1210	Goa	Goa	2	1
129	242	12504	Henkel India	3	121	116	59	754	46	390	Tamil Nadu	Chennai	1	1
											West Bengal	Kolkata	1	2
130	242	19443	S S Organics	1	19	10	2	143	-5	15	Andhra Pradesh	Medak	3	1
131	242	23287	Ascu Arch Timber	2	1	1	0	38	1	7	Jammu & Kashmir	Jammu	3	1
											West Bengal	Kolkata	1	1
132	251	145	Dunlop India	2	1718	72	34	76	2	120	Tamil Nadu	Chennai	1	1
											West Bengal	Sahaganj	3	1
133	251	199	Goodyear India	1	244	23	17	3942	111	895	Haryana	Faridabad	1	1
134	251	268	Indag Rubber	2	24	5	2	333	14	77	Himachal Pradesh	Solan	3	1
											Rajasthan	Alwar	3	1
135	251	387	Modi Rubber	3	74	25	14	101	-24	0	Uttar Pradesh	Ghaziabad	2	1
											Uttar Pradesh	Meerut	1	2
136	251	1279	Falcon Tyres	1	166	6	4	2521	43	450	Karnataka	Mysore	2	1
137	251	4184	Rubfila Intl.	1	53	32	8	180	-6	24	Kerala	Palakkad	3	1
138	251	5185	Cupid	1	24	8	1	121	5	24	Maharashtra	Nashik	1	1
139	252	101	Caprihans India	2	69	13	7	1356	15	126	Maharashtra	Nashik	1	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity Capital	FDI	No. of Employees	Value of Added Output	State	City	Class of City	No. of Plants in the City	
140	252	1023	Venlon Ent	2	134	11	8	293	0	65	Karnataka	Mysore	2	1
											Rajasthan	Jaisalmer	3	1
141	252	1056	Polyplex Corpn	2	215	17	7	1814	29	189	Haryana	Gurgaon	3	1
											Uttarakhand	Khatima	3	1
142	252	1058	Ester Inds.	1	381	28	15	2030	52	322	Uttarakhand	Khatima	3	1
143	252	1377	Balmer Lawr.Vanl	3	82	16	8	1154	11	110	Maharashtra	Mumbai	1	2
											Tamil Nadu	Kancheepuram	3	1
144	252	3207	Royal Cush. Vin.	2	175	12	3	668	5	67	Gujarat	Panchamahal	3	1
											Gujarat	Vadodara	1	1
145	252	3218	Multibase India	1	10	13	9	176	6	30	Daman & Diu	Daman & Diu	3	1
146	252	3908	Dutron Polymers	2	11	6	1	110	3	30	Gujarat	Ahmedabad	1	1
											Gujarat	Kheda	3	1
147	252	5016	Vinyoflex	2	5	4	1	22	1	23	Gujarat	Rajkot	2	2
148	252	5297	Infra Inds.	4	8	6	1	98	2	8	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	1
											Karnataka	Hubli-Dharwad	2	1
											Maharashtra	Raigad	3	1
											Tamil Nadu	Mathurathakkam	3	1
149	252	27655	Astral Poly	2	48	11	3	690	26	140	Gujarat	Gandhinagar	3	1
											Himachal Pradesh	Solan	3	1
150	259	1034	Morganite Crucib	1	15	3	2	420	6	20	Maharashtra	Aurangabad	2	1
151	261	167	FGP	1	0	12	3	0	-1	0	Maharashtra	Thane	1	1
152	261	1024	Asahi India Glas	5	1679	16	4	8847	224	1089	Haryana	Rewari	3	1
											Maharashtra	Raigad	3	2
											Tamil Nadu	Kancheepuram	3	1
											Uttarakhand	Haridwar	3	1
153	261	2808	Guj. Borosil	1	99	34	6	809	14	82	Gujarat	Bharuch	3	1
154	261	6000	U P Twiga Fibre	2	160	8	8	860	22	82	Maharashtra	Thane	1	1
											Uttar Pradesh	Bulandshahr	3	1
155	269	209	Grindwel Norton	5	191	28	14	8175	126	456	Andhra Pradesh	Chittoor	3	1
											Andhra Pradesh	Tirupati	3	1
											Karnataka	Bangalore	1	1
											Maharashtra	Nagpur	1	1
											Uttar Pradesh	Moradabad	2	1
156	269	218	Ambuja Cem.	11	4597	304	139	30241	2211	5730	Chhattisgarh	Raipur	2	1
											Gujarat	Junagadh	3	2
											Gujarat	Surat	1	1
											Himachal Pradesh	Solan	3	1
											Maharashtra	Chandrapur	3	1
											Maharashtra	Raigad	3	1
											Punjab	Bathinda	3	1
											Punjab	Ropar	3	1
											Rajasthan	Pali	3	1
											West Bengal	Howrah	1	1
157	269	396	Mysore Cement	4	659	158	87	10700	172	603	Karnataka	Tumkur	3	1
											Madhya Pradesh	Damoh	3	2
											Uttar Pradesh	Jhansi	3	1
158	269	499	Saurashtra Cem.	1	359	41	26	2369	70	409	Gujarat	Ranavav	3	1
159	269	606	Wendt India	1	25	2	1	1261	21	54	Karnataka	Hosur	3	1
160	269	609	Wheels India	5	485	10	4	7678	176	1145	Haryana	Rewari	3	1
											Maharashtra	Pune	1	1
											Tamil Nadu	Chennai	1	1
											Tamil Nadu	Kancheepuram	3	1
											Uttar Pradesh	Rampur	3	1
161	269	1053	Bell Ceramics	2	230	22	8	2108	13	152	Gujarat	Bharuch	3	1
											Karnataka	Bangalore	1	1
162	269	1730	Unifrax India	1	13	2	1	403	14	34	Gujarat	Surendranagar	3	1
163	269	2176	Vinay Cements	1	47	19	2	431	10	40	Assam	Umrangshu	3	1
164	269	2348	Restile Ceramics	1	53	56	41	603	8	33	Andhra Pradesh	Medak	3	1
165	269	2381	IFCL Refractor	1	59	35	5	1339	43	174	Orissa	Sundergarh	3	1
166	269	3196	Vesuvius India	3	114	20	11	2704	75	319	Andhra Pradesh	Visakhapatnam	2	1
											Gujarat	Mehsana	3	1
											West Bengal	Kolkata	1	1
167	271	169	Ferro Alloys Cor	4	76	19	7	825	168	313	Andhra Pradesh	Vizianagaram	3	1
											Maharashtra	Nagpur	1	1
											Orissa	Bhadrak	3	2
168	271	413	Ispat Inds.	2	12345	1222	279	11022	1418	8164	Maharashtra	Nagpur	1	1
169	271	674	Informed Techn.	1	3	4	3	50	1	3	Maharashtra	Raigad	3	1
											Maharashtra	Nagpur	1	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
170	271	753	National Standar	4	15	8	0	54	0	1	Himachal Pradesh	Baddi	3	1
											Karnataka	Doddaballapur	3	1
											Karnataka	Hoskote	3	1
											Maharashtra	Thane	1	1
171	271	992	Natl. Steel&Agro	1	359	33	4	890	102	2241	Madhya Pradesh	Dhar	3	1
172	271	1060	Essar Steel	2	14512	1140	667	12246	2399	10467	Andhra Pradesh	Visakhapatnam	2	1
											Gujarat	Surat	1	1
173	271	1065	Sunflag Iron	1	712	162	65	2178	143	1000	Maharashtra	Bhandara	3	1
174	271	1369	Man Inds.	2	276	27	4	1334	519	1505	Gujarat	Anjar	3	1
											Madhya Pradesh	Dhar	3	1
175	271	1572	Jai Corp	10	345	18	2	1043	44	312	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	5
											Daman & Diu	Daman & Diu	3	1
											Haryana	Mahendragarh	3	1
											Maharashtra	Nanded	3	2
											Maharashtra	Thane	1	1
176	271	3086	Steelco Gujarat	1	255	43	33	354	7	342	Gujarat	Bharuch	3	1
177	271	3095	Kanishk Steel	4	87	28	4	31	20	417	Tamil Nadu	Coimbatore	2	1
											Tamil Nadu	Thiruvallur	3	2
											Tamil Nadu	Tirunelveli	3	1
178	271	3576	Remi Metals Guj.	2	284	76	28	576	13	354	Gujarat	Bharuch	3	2
179	271	4333	STI Products (I)	1	0	4	1	32	-2	0	Karnataka	Bangalore	1	1
180	271	7802	Bhaskar Shrachi	1	27	9	1	96	-8	154	Bihar	Durgapur	3	1
181	271	24610	Jindal Stainless	7	4065	31	6	5193	782	5839	Andhra Pradesh	Vizianagaram	3	1
											Delhi	New Delhi	1	1
											Haryana	Hisar	3	2
											Haryana	Jhajjar	3	1
											Orissa	Jajpur	3	2
182	271	25144	Facor Alloys	1	37	20	4	1004	78	229	Andhra Pradesh	Shreeramnagar	3	1
183	271	25145	Facor Steels	1	27	21	5	684	18	471	Maharashtra	Nagpur	1	1
184	271	27244	Visa Steel	2	412	110	56	637	111	768	Orissa	Jajpur	3	2
185	272	678	Madras Aluminium	1	497	23	18	1766	91	474	Tamil Nadu	Salem	2	1
186	272	1025	Hoganas India	1	35	5	5	310	19	119	Gujarat	Ahmednagar	3	1
187	272	1047	Sterlite Inds.	10	2663	142	81	3161	843	12790	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	4
											Madhya Pradesh	Lonavala	3	1
											Maharashtra	Aurangabad	2	1
											Maharashtra	Nagpur	1	1
											Maharashtra	Pune	1	2
											Tamil Nadu	Tuticorin	3	1
188	272	1922	Alumeco India	1	19	12	8	188	16	123	Andhra Pradesh	Medak	3	1
189	272	3603	Mardia Samyoung	1	8	8	2	10	0	13	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	1
190	272	20896	Nagpur Power	1	40	13	6	58	9	15	Maharashtra	Nagpur	1	1
191	273	160	Hinduja Foundrie	3	351	16	8	10098	131	465	Andhra Pradesh	Hyderabad	1	1
											Tamil Nadu	Chennai	1	1
											Tamil Nadu	Kancheepuram	3	1
192	273	558	Tayo Rolls	1	96	5	1	2979	36	212	Jharkhand	Gamharia	3	1
193	273	900	Gontermann Peip	2	180	14	3	1703	51	173	Himachal Pradesh	Solan	3	1
											West Bengal	Bishnupur	3	1
194	273	5154	Carnation Inds.	3	13	3	0	451	3	73	West Bengal	Howrah	1	3
195	273	6228	Interfit Techno	1	9	8	1	48	1	5	Tamil Nadu	Coimbatore	2	1
196	273	7907	Beekay Engg.	1	18	5	5	325	11	43	Chattisgarh	Bhilai	3	1
197	289	180	GKW	7	233	60	9	5522	-19	121	Karnataka	Bangalore	1	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Pune	1	1
											Orissa	Bolangir	3	1
											West Bengal	Burdwan	3	1
											West Bengal	Howrah	1	2
198	289	405	ITW India	6	88	14	12	5547	114	416	Andhra Pradesh	Hyderabad	1	4
											Andhra Pradesh	Khammam	3	1
											Andhra Pradesh	Medak	3	1
199	291	37	SKF India	2	630	53	28	8566	374	1576	Karnataka	Bangalore	1	1
											Maharashtra	Pune	1	1
200	291	41	Atlas Copco (I)	4	120	23	19	5187	216	1009	Gujarat	Panchmahal	3	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Nashik	1	1
											Maharashtra	Pune	1	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity Capital	FDI	No. of Employees	Value of Added Output	State	City	Class of City	No. of Plants in the City	
201	291	182	Bosch Rexroth	3	39	5	5	1364	59	271	Gujarat	Ahmedabad	1	1
											Karnataka	Bangalore	1	1
											Maharashtra	Thane	1	1
202	291	295	Ingersoll-Rand	3	53	32	23	2785	81	478	Gujarat	Ahmedabad	1	2
											Karnataka	Bangalore	1	1
203	291	337	Cummins India	4	586	40	20	9900	445	2347	Daman & Diu	Daman & Diu	3	1
											Maharashtra	Pune	1	3
204	291	342	KSB Pumps	5	183	17	7	4457	127	488	Gujarat	Ahmednagar	3	1
											Maharashtra	Nashik	1	1
											Maharashtra	Pune	1	2
205	291	370	MPIL Corporation	4	3	1	0	19	-1	0	Maharashtra	Kolhapur	3	1
											Maharashtra	Pune	1	2
											West Bengal	Kolkata	1	1
206	291	426	OTIS Elevator	3	61	13	12	7586	265	761	Karnataka	Bangalore	1	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Thane	1	1
207	291	446	Fag Bearings	1	352	17	9	3702	182	648	Gujarat	Vadodara	1	1
208	291	824	Disa India	2	22	2	1	588	32	95	Karnataka	Hoskote	3	1
											Karnataka	Tumkur	3	1
209	291	869	Alfa Laval (I)	3	135	18	14	3823	181	709	Maharashtra	Pune	1	2
											Maharashtra	Satara	3	1
210	291	1087	Vickers Systems	2	32	7	6	947	25	159	Maharashtra	Mumbai	1	1
											Maharashtra	Pune	1	1
211	291	1229	Switching Tech.	1	9	2	1	205	2	8	Tamil Nadu	Chennai	1	1
212	291	1966	Integra Hind.	1	2	1	0	75	2	12	Gujarat	Panchmahal	3	1
213	291	2100	Hitachi Home	4	51	23	16	1508	67	454	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	1
											Gujarat	Ahmedabad	1	1
											Gujarat	Karannagar	3	1
											Jammu & Kashmir	Baribrahmana	3	1
214	291	2108	Yuken India	1	29	3	1	1074	28	103	Karnataka	Bangalore	1	1
215	291	2110	Amara Raja Batt	1	266	11	4	2931	200	1139	Andhra Pradesh	Tirupati	3	1
216	291	2226	Timken India	1	177	64	51	2128	87	352	Jharkhand	Jamshedpur	2	1
217	291	2326	Deccan Bearings	2	2	2	1	27	0	5	Gujarat	Panchmahal	3	1
											Gujarat	Rajkot	2	1
218	291	2532	Assam Carbon Pr	3	27	3	1	815	18	45	Andhra Pradesh	Patancheru	3	1
											Assam	Guwahati	2	1
											Maharashtra	Taloja	3	1
219	291	2747	Eimco Elecon(I)	1	83	6	1	380	31	121	Gujarat	Anand	3	1
220	291	3450	Igarashi Motors	1	115	14	8	1131	18	275	Tamil Nadu	Chennai	1	1
221	291	4479	Shilp Gravures	1	51	6	2	338	17	35	Gujarat	Gandhinagar	3	1
222	291	6528	Volga Air Tech.	1	6	8	2	76	1	3	Gujarat	Ahmedabad	1	1
223	291	22910	M & P Fire Sys.	3	0	3	2	0	0	0	Maharashtra	Mumbai	1	1
											Maharashtra	Pune	1	2
224	292	45	Avery India	2	12	10	6	1225	21	73	Haryana	Ballabgarh	3	1
											West Bengal	Kolkata	1	1
225	292	278	Indian CardCloth	2	38	5	3	1013	14	45	Gujarat	Ahmedabad	1	1
226	292	287	Singer India	3	14	16	8	110	-14	50	Jammu & Kashmir	Jammu	3	2
											Uttar Pradesh	Ghaziabad	2	1
227	292	497	Sandvik Asia	5	450	20	19	5066	377	1165	Andhra Pradesh	Medak	3	1
											Gujarat	Mehsana	3	1
											Karnataka	Hosur	3	1
											Maharashtra	Pune	1	1
											Maharashtra	Ratnagiri	3	1
228	292	534	Stovec Inds.	2	11	2	1	249	6	31	Gujarat	Ahmedabad	1	2
229	292	610	Kennametal India	2	174	22	19	4360	129	366	Andhra Pradesh	Medak	3	1
											Karnataka	Bangalore	1	1
230	292	766	UT	8	38	6	1	824	12	104	Haryana	Faridabad	1	1
											Himachal Pradesh	Solan	3	1
											Karnataka	Hosur	3	1
											Karnataka	Kolar	3	1
											Tamil Nadu	Chengalpattu	3	1
											Tamil Nadu	Coimbatore	2	1
											Uttar Pradesh	Sahibabad	3	1
											West Bengal	Kolkata	1	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
231	292	809	Windsor Machines	3	53	13	3	1172	15	110	Gujarat	Ahmedabad	1	1
											Gujarat	Mehsana	3	1
											Maharashtra	Thane	1	1
232	292	888	GMM Pfaudler	2	53	3	1	895	33	156	Gujarat	Ahmedabad	1	1
											Gujarat	Karamsad	3	1
233	292	946	Schlafhorst Engg	2	15	19	11	170	3	12	Gujarat	Panchmahal	3	1
											Gujarat	Vadodara	1	1
234	292	1218	Sulzer India	2	33	3	3	535	30	135	Maharashtra	Mumbai	1	1
											Maharashtra	Pune	1	1
235	292	1988	DE Nora India	1	12	6	3	170	7	20	Goa	Goa	2	1
236	292	2905	Axtel Industries	1	6	8	1	266	6	35	Gujarat	Panchmahal	3	1
237	292	5644	Frick India	1	11	1	0	788	12	53	Haryana	Faridabad	1	1
238	292	22911	M & P Pumps	1	44	9	6	1845	42	187	Maharashtra	Pune	1	1
239	293	328	Whirlpool India	3	643	127	95	11201	197	1891	Haryana	Faridabad	1	1
											Maharashtra	Pune	1	1
											Pondicherry	Pondicherry	2	1
240	293	1788	Panasonic Home	1	21	9	4	462	16	81	Tamil Nadu	Chennai	1	1
241	300	15469	D-Link (India)	1	57	6	2	1617	59	292	Goa	Goa	2	1
242	311	1028	Honda Siel Power	3	105	10	7	1368	52	261	Pondicherry	Pondicherry	2	1
											Uttar Pradesh	Noida	3	1
											Uttarakhand	Rudrapur	3	1
243	311	1211	Wartsila India	1	66	12	12	3121	54	252	Maharashtra	Khopoli	3	1
244	312	159	Areva T&D	10	252	48	35	11246	511	1993	Karnataka	Bangalore	1	1
											Pondicherry	Pondicherry	2	1
											Tamil Nadu	Chennai	1	2
											Uttar Pradesh	Allahabad	2	1
											Uttar Pradesh	Noida	3	1
											West Bengal	Kolkata	1	4
245	312	242	A B B	13	506	42	22	22296	1038	5982	Gujarat	Vadodara	1	3
											Haryana	Faridabad	1	2
											Karnataka	Bangalore	1	2
											Karnataka	Mysore	2	1
											Maharashtra	Mumbai	1	2
											Maharashtra	Nashik	1	2
											Uttarakhand	Haridwar	3	1
246	313	3179	Birla Ericsson	1	101	30	8	501	8	138	Madhya Pradesh	Rewa	3	1
247	313	21331	Sterlite Tech	9	861	32	14	4231	250	1705	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	4
											Maharashtra	Aurangabad	2	3
											Maharashtra	Pune	1	1
											Uttarakhand	Haridwar	3	1
248	314	111	Exide Inds.	9	1063	80	39	13146	622	3240	Gujarat	Ahmednagar	3	1
											Haryana	Bawal	3	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Pune	1	1
											Maharashtra	Taloja	3	1
											Tamil Nadu	Chennai	1	1
											Tamil Nadu	Dharmapuri	3	1
											West Bengal	Haldia	3	1
											West Bengal	Shamnagar	3	1
249	314	344	Panasonic Batt	2	93	8	4	1212	18	165	Gujarat	Vadodara	1	1
											Madhya Pradesh	Dhar	3	1
250	314	667	Nippo Batteries	2	122	4	1	1284	37	258	Andhra Pradesh	Nellore	3	2
251	314	3952	Tudor India	1	33	25	21	382	15	135	Gujarat	Sabarkantha	3	1
252	319	251	HEG	5	893	44	12	4174	330	972	Chattisgarh	Durg	3	1
											Jammu & Kashmir	Jammu Tawi	3	1
											Madhya Pradesh	Hoshangabad	3	1
											Madhya Pradesh	Raisen	3	1
											Rajasthan	Udaipur	3	1
253	319	291	Panasonic Carbon	1	34	5	2	574	8	25	Andhra Pradesh	Nellore	3	1
254	319	782	Lumax Inds.	14	253	9	4	5342	78	516	Delhi	New Delhi	1	1
											Haryana	Faridabad	1	2
											Haryana	Gurgaon	3	2
											Haryana	Rewari	3	1
											Haryana	Sohna	3	1
											Madhya Pradesh	Aurangabad	2	1
											Madhya Pradesh	Pune	1	3
											Tamil Nadu	Chengalpattu	3	1
											Tamil Nadu	Kancheepuram	3	1
											Uttar Pradesh	Noida	3	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity Capital	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
255	319	856	Denso India	1	178	28	18	6030	96	470	Uttar Pradesh	Noida	3	1
256	319	917	Hella India	2	7	3	2	289	1	23	Haryana	Faridabad	1	1
											Punjab	Patiala	3	1
257	319	1147	Esab India	6	102	15	9	2902	104	347	Maharashtra	Nagpur	1	1
											Maharashtra	Thane	1	1
											Tamil Nadu	Chennai	1	1
											Tamil Nadu	Sriperumbudur	3	1
											West Bengal	Kolkata	1	2
258	319	1233	Ruttonsha Intl.	1	5	3	1	178	6	15	Gujarat	Halol	3	1
259	319	1907	India Nipp.Elec.	4	53	8	2	1551	27	119	Haryana	Rewari	3	1
											Pondicherry	Pondicherry	2	1
											Tamil Nadu	Chennai	1	1
											Tamil Nadu	Dharmapuri	3	1
260	319	2712	Phoenix Lamps	6	225	28	19	3251	94	373	Uttar Pradesh	Noida	3	4
											Uttarakhand	Dehradun	3	1
											Uttarakhand	Haridwar	3	1
261	319	2966	Motherson Sumi	12	628	36	13	14077	302	1319	Delhi	New Delhi	1	1
											Haryana	Gurgaon	3	1
											Haryana	Manesar	3	1
											Karnataka	Bangalore	1	1
											Maharashtra	Pune	1	2
											Tamil Nadu	Chennai	1	1
											Uttar Pradesh	Ghaziabad	2	1
											Uttar Pradesh	Noida	3	4
262	319	6106	Remy Elec.	5	8	4	2	310	6	33	Andhra Pradesh	Hyderabad	1	1
											Andhra Pradesh	Medak	3	1
											Pondicherry	Pondicherry	2	1
											Uttar Pradesh	Noida	3	2
263	321	2659	Guj. Poly-Avx	1	23	9	2	65	3	7	Gujarat	Gandhinagar	3	1
264	321	4488	Centum Electron	1	29	7	0	480	20	49	Karnataka	Bangalore	1	1
265	321	4725	Naina Semicond.	2	11	3	1	21	1	6	Delhi	New Delhi	1	1
											Uttarakhand	Nainital	3	1
266	321	5363	Integ. Techno.	1	21	1	0	4	0	0	Haryana	Gurgaon	3	1
267	321	5753	Sandur Laminates	1	71	15	2	0	0	0	Andhra Pradesh	Bellary	3	1
268	321	12453	Xo Infotech	1	0	20	0	1	0	20	Haryana	Gurgaon	3	1
269	321	16521	APW President	2	40	6	2	896	30	140	Karnataka	Bangalore	1	1
											Maharashtra	Pune	1	1
270	322	418	FCI OEN Connect.	3	122	6	4	713	39	204	Karnataka	Bangalore	1	1
											Kerala	Mulanthuruthy	3	1
											Tamil Nadu	Chennai	1	1
271	322	1079	Avaya Global	2	33	14	8	5664	179	814	Gujarat	Gandhinagar	3	1
											Kerala	Palakkad	3	1
272	322	2063	Prec. Electronic	2	27	14	4	226	10	33	Haryana	Faridabad	1	1
											Uttar Pradesh	Noida	3	1
273	322	2116	Krone Comm.	1	19	5	3	444	19	92	Karnataka	Bangalore	1	1
274	323	432	Philips El India	8	646	70	66	16807	508	2871	Chandigarh (UT)	Mohali	3	1
											Gujarat	Vadodara	1	1
											Maharashtra	Pune	1	2
											Maharashtra	Thane	1	1
											West Bengal	Kolkata	1	3
275	323	1709	Trend Electronic	1	254	8	0	535	37	834	Maharashtra	Aurangabad	2	1
276	323	2220	Sharp India	1	76	26	21	716	6	78	Maharashtra	Pune	1	1
277	323	15251	Panasonic AVC	1	48	50	28	246	1	122	Uttar Pradesh	Noida	3	1
278	331	380	Siemens Medical	1	34	2	1	397	14	56	Gujarat	Vadodara	1	1
279	331	514	Siemens	11	703	34	19	27064	998	7981	Andhra Pradesh	Hyderabad	1	1
											Goa	Goa	2	1
											Gujarat	Vadodara	1	1
											Haryana	Gurgaon	3	1
											Karnataka	Bangalore	1	1
											Maharashtra	Aurangabad	2	1
											Maharashtra	Mumbai	1	1
											Maharashtra	Nashik	1	1
											Maharashtra	Pune	1	1
											Maharashtra	Thane	1	2
280	331	1131	Honeywell Auto	1	48	9	7	9313	238	866	Maharashtra	Pune	1	1
281	331	1519	Yokogawa India	3	79	9	8	3857	87	372	Karnataka	Bangalore	1	3
282	331	2898	Invicta Meditek	2	1	6	1	46	-1	2	Tamil Nadu	Chengalpattu	3	2
283	332	2229	Techtran Poly.	1	35	11	2	433	4	25	Andhra Pradesh	Medak	3	1
284	333	913	IST	1	18	6	3	321	6	20	Haryana	Gurgaon	3	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
285	333	3143	Timex Group	4	53	10	8	1065	24	131	Himachal Pradesh	Parwanoo	3	1
											Himachal Pradesh	Solan	3	1
											Uttar Pradesh	Noida	3	2
286	341	31	Ashok Leyland	9	2610	133	51	23177	1405	8020	Andhra Pradesh	Hyderabad	1	1
											Karnataka	Hosur	3	3
											Maharashtra	Bhandara	3	1
											Rajasthan	Alwar	3	1
											Tamil Nadu	Chennai	1	3
287	341	544	Swaraj Mazda	1	38	10	4	1032	75	680	Punjab	Nawan Shahar Dist	3	1
288	341	5496	Maruti Suzuki	2	7071	145	78	13093	2590	18228	Delhi	New Delhi	1	1
											Haryana	Gurgaon	3	1
289	343	197	Federal-Mogul Go	5	561	33	19	11258	172	603	Haryana	Bhiwadi	3	1
											Karnataka	Bangalore	1	1
											Punjab	Patiala	3	1
											Rajasthan	Alwar	3	1
											Uttarakhand	Rudrapur	3	1
290	343	321	Bosch Chassis	4	221	21	17	3659	105	534	Haryana	Gurgaon	3	2
											Maharashtra	Jalgaon	3	1
											Maharashtra	Pune	1	1
291	343	378	Bosch Ltd	5	2237	32	22	39339	1202	4296	Karnataka	Bangalore	1	3
											Maharashtra	Nashik	1	1
											Rajasthan	Jaipur	1	1
292	343	470	Rane Holdings	4	16	14	3	335	-12	0	Karnataka	Mysore	2	1
											Pondicherry	Pondicherry	2	1
											Tamil Nadu	Chengalpattu	3	2
293	343	538	Sundaram Clayton	3	337	9	4	4177	89	444	Karnataka	Hosur	3	1
											Tamil Nadu	Chennai	1	2
294	343	616	Hind.Hardy Spice	1	13	2	0	472	7	33	Maharashtra	Nashik	1	1
295	343	619	Z F Steering	1	93	9	2	949	55	226	Maharashtra	Pune	1	1
296	343	622	Automotive Axles	1	228	15	5	2154	122	613	Karnataka	Mysore	2	1
297	343	941	Munjal Showa	2	219	8	2	2337	61	709	Haryana	Gurgaon	3	2
298	343	991	Banco Products	2	101	14	5	1148	69	301	Gujarat	Bharuch	3	1
											Gujarat	Vadodara	1	1
299	343	1054	Sona Koyo Steer.	3	326	19	4	3924	109	711	Haryana	Gurgaon	3	1
											Haryana	Rewari	3	1
											Tamil Nadu	Sriperumbudur	3	1
300	343	1115	GKN Driveline(I)	3	188	13	12	1871	76	329	Haryana	Dharuhera	3	1
											Haryana	Faridabad	1	1
											Tamil Nadu	Thiruvallur	3	1
301	343	1138	Bharat Seats	1	47	6	1	381	11	199	Haryana	Gurgaon	3	1
302	343	1213	Machino Plastics	1	121	6	1	328	17	87	Haryana	Gurgaon	3	1
303	343	1514	Ucal Fuel Sys.	3	222	14	0	2340	58	300	Haryana	Gurgaon	3	1
											Tamil Nadu	Chennai	1	1
											Tamil Nadu	Kancheepuram	3	1
304	343	1559	Harita Seating	3	74	8	1	1348	31	192	Himachal Pradesh	Solan	3	1
											Maharashtra	Pune	1	1
											Tamil Nadu	Krishnagiri	3	1
305	343	1943	Schrader Duncan	3	5	4	2	623	11	56	Maharashtra	Mumbai	1	1
											Maharashtra	Nashik	1	1
											Maharashtra	Navi Mumbai	2	1
306	343	3624	Automotive Stamp	4	140	10	4	1817	41	299	Gujarat	Halol	3	1
											Maharashtra	Pune	1	2
											Uttarakhand	Rudrapur	3	1
307	343	4447	Fairfield Atlas	2	98	27	23	1021	38	157	Maharashtra	Kolhapur	3	2
308	351	1191	Chokhani Intl.	1	0	33	7	9	0	0	Tamil Nadu	Chennai	1	1
309	359	237	Hero Honda Motor	2	1669	40	10	25248	1651	10321	Haryana	Gurgaon	3	1
											Haryana	Rewari	3	1
310	369	14610	Todays Writing	1	40	13	2	428	29	200	Dadra & Nagar Haveli (UT)	Dadra & Nagar Haveli	3	1
311	402	2255	Guj. Gas Company	14	639	13	8	1764	275	1188	Gujarat	Ahmedabad	1	1
											Gujarat	Ankleshwar	3	2
											Gujarat	Bharuch	3	4
											Gujarat	Surat	1	7
312	402	5516	Shri Shakti LPG	2	115	52	11	16	-1	3	Andhra Pradesh	Kakinada	3	1
											Andhra Pradesh	Nalgonda	3	1
313	452	65	Best & Crompton	5	118	124	81	882	45	90	Karnataka	Bangalore	1	2
											Tamil Nadu	Chennai	1	3
314	452	12220	Punj Lloyd	1	989	61	15	38641	797	4495	Madhya Pradesh	Morena	3	1



S.	NIC No.	Co. 3-Digit	Co. Name Code	Total Number of Plants	Fixed Capital of	Equity Emp- loyees	FDI	No. of Added Employees	Value Output	State	City	Class of City	No. of Plants in the City	
315	452	20944	Alstom Projects	6	345	67	39	19863	276	1547	Bihar	Durgapur	3	1
											Gujarat	Vadodara	1	1
											Karnataka	Shahabad	3	1
											Tamil Nadu	Coimbatore	2	1
											Uttar Pradesh	Ghaziabad	2	2
316	511	9	Aegis Logistics	3	199	20	9	2128	72	380	Gujarat	Valsad	3	1
											Maharashtra	Jalgaon	3	1
											Maharashtra	Mumbai	1	1
317	511	4109	Tai Inds.	2	2	6	1	213	0	45	Tamil Nadu	Chennai	1	1
											West Bengal	Kolkata	1	1
318	512	580	Uni.Brew.(Hold.)	8	188	59	15	2218	14	181	Andhra Pradesh	Ghatkeshar	3	1
											Goa	Goa	2	1
											Karnataka	Bangalore	1	1
											Kerala	Alappuzha	3	1
											Kerala	Palakkad	3	1
											Maharashtra	Raigad	3	1
											Punjab	Ludhiana	1	1
											West Bengal	Nadia	3	1
319	512	1777	D PIL	8	0	7	2	52	1	15	Assam	Tinsukia	3	1
											West Bengal	Darjeeling	3	7
320	514	1825	SMZS Chemicals	2	0	5	2	2	0	0	Maharashtra	Pune	1	1
											Maharashtra	Raigad	3	1
321	515	569	TIL	4	120	10	2	7383	85	725	Maharashtra	Thane	1	1
											Pondicherry	Pondicherry	2	1
											Uttar Pradesh	Ghaziabad	2	1
											West Bengal	Kolkata	1	1
322	515	3375	SBEC Systems	2	0	10	2	9	-1	0	Uttar Pradesh	Ghaziabad	2	1
											Uttar Pradesh	Meerut	1	1
323	515	4397	Ricoh India	3	16	40	29	6103	66	226	Gujarat	Gandhinagar	3	1
											Maharashtra	Mumbai	1	1
											West Bengal	Kolkata	1	1
324	519	273	Kodak India	3	44	10	9	5396	48	1006	Goa	Goa	2	1
											Karnataka	Bangalore	1	1
											Madhya Pradesh	Bhind	3	1
325	519	684	Muller & Phipps	1	0	1	0	427	6	40	Maharashtra	Mumbai	1	1
326	519	1610	Sical Logistics	13	129	40	15	3540	19	561	Andhra Pradesh	Krishna	3	1
											Gujarat	Ahmedabad	1	1
											Karnataka	Hassan	3	1
											Pondicherry	Pondicherry	2	2
											Tamil Nadu	Chennai	1	4
											Tamil Nadu	Kancheepuram	3	1
											Tamil Nadu	South Arcot	3	1
											Tamil Nadu	Tuticorin	3	1
											Tamil Nadu	Vellore	3	1
327	519	2096	3M India	3	78	11	9	12751	178	611	Gujarat	Ahmedabad	1	1
											Karnataka	Bangalore	1	2
328	551	33	Asian Hotels	4	1469	23	11	14214	299	514	Delhi	New Delhi	1	2
											Maharashtra	Mumbai	1	1
											West Bengal	Kolkata	1	1
329	551	929	Mac Charles(I)	1	87	7	5	1436	38	74	Karnataka	Bangalore	1	1
330	551	1095	EIH Assoc.Hotels	22	333	20	4	5208	87	178	Andhra Pradesh	Hyderabad	1	1
											Delhi	New Delhi	1	2
											Gujarat	Ahmedabad	1	1
											Himachal Pradesh	Shimla	3	2
											Kerala	Kochi	2	1
											Madhya Pradesh	Khajuraho	3	1
											Maharashtra	Mumbai	1	2
											Orissa	Bhubaneswar	2	1
											Orissa	Gopalpur-on-Sea	3	1
											Rajasthan	Jaipur	1	2
											Rajasthan	Jaisalmer	3	1
											Rajasthan	Udaipur	3	1
											Tamil Nadu	Chennai	1	2
											Uttar Pradesh	Agra	1	2
											West Bengal	Darjeeling	3	1
											West Bengal	Kolkata	1	1
331	551	1965	Guj. JHM Hotels	1	59	7	6	679	15	32	Gujarat	Surat	1	1
332	551	7601	CHL	1	67	11	7	2301	47	87	Delhi	New Delhi	1	1



S. No.	NIC 3-Digit	Co. Code	Co. Name	Total Number of Plants	Fixed Capital	Equity	FDI	No. of Employees	Value of Added	Output	State	City	Class of City	No. of Plants in the City
333	602	202	GWL Properties	2	13	9	1	17	-2	0	Tamil Nadu	Chengalpattu	3	1
334	611	4760	SEAMEC Ltd	2	6	34	27	721	54	170	Tamil Nadu	Chennai	1	1
335	621	3367	SpiceJet	4	56	241	31	26839	-130	1295	Assam	Dibrugarh	3	1
											Maharashtra	Mumbai	1	1
											Orissa	Cuttack	2	1
											West Bengal	Hooghly	3	1
											West Bengal	Howrah	1	1
											West Bengal	Rajarhat Gopalpur	3	1
336	630	3857	Interlink Petro	1	2	8	1	18	-2	0	Gujarat	Ahmedabad	1	1
337	659	746	Williamson Fin.	3	8	8	2	16	2	2	Assam	Dehing	3	1
											Assam	Dibrugarh	3	1
											Assam	Dirok	3	1
338	659	1775	IPower Soln.	1	0	4	2	36	0	1	Andhra Pradesh	Nalgonda	3	1
339	701	27443	Sobha Developers	1	244	73	63	15728	451	1835	Karnataka	Bangalore	1	1
340	722	262	Zensar Technolgs	1	53	24	5	16201	247	336	Maharashtra	Pune	1	1
341	722	2371	Genesys Intl.	2	0	12	7	1065	30	47	Karnataka	Bangalore	1	1
											Maharashtra	Mumbai	1	1
342	722	3210	Mindteck (India)	5	1	21	14	1372	19	33	Karnataka	Bangalore	1	1
											Maharashtra	Mumbai	1	1
											West Bengal	Kolkata	1	3
343	722	13531	iGate Global Sol	3	60	13	12	37470	564	782	Karnataka	Bangalore	1	1
											Maharashtra	Pune	1	1
											Tamil Nadu	Chennai	1	1
344	722	14927	Kale Consultants	3	70	13	2	3816	58	86	Maharashtra	Mumbai	1	1
											Maharashtra	Pune	1	1
											Tamil Nadu	Chennai	1	1
345	722	15821	Flextronics	14	282	17	16	25819	467	665	Haryana	Gurgaon	3	12
											Karnataka	Bangalore	1	2
346	722	21336	Moschip Semicon.	1	3	43	9	712	0	6	Uttar Pradesh	Noida	3	1
347	722	22293	Powersoft GSL	1	0	12	3	96	3	12	Karnataka	Bangalore	1	1
348	731	14801	Biocon	3	796	50	10	5979	286	889	Karnataka	Bangalore	1	3
349	749	164	Essel Propack	9	430	31	7	5614	107	313	Dadra & Nagar Haveli	Dadra & Nagar Haveli (UT)	3	2
											Goa	Goa	2	2
											Himachal Pradesh	Nalagarh	3	1
											Maharashtra	Murbad	3	2
											Maharashtra	Vasind	3	1
											Maharashtra	Wada	3	1
350	921	3126	Zee Entertainmen	3	132	43	9	5830	467	1042	Delhi	New Delhi	1	1
											Maharashtra	Mumbai	1	1
											Uttar Pradesh	Ghaziabad	2	1
351	921	21361	UTV Software	1	22	25	11	1387	34	286	Maharashtra	Mumbai	1	1
Total				1171	124551	11272	4941	1564920	50212	279575				

Questionnaires



Questionnaire for FDI-Enabled Production Units

National Council of Applied Economic Research

Parisila Bhawan, 11-I.P. Estate, New Delhi-110 002

Phone: 011-23379861-3 Fax: 011-23370164

Manufacturing Firm

How Inclusive is the Impact of FDI on the Indian Economy?

Analysis of Regional, Employment and Growth Effects¹

(Note: Please provide details for any one of your foreign plants, in case your company has more than one plant)

L. Profile of the Company

1. Respondent's Name:
2. Designation:
3. Name of the Company:
4. Organisational Address:
5. Phone: _____ Fax: _____ E-mail: _____
6. Year of establishment:
7. Name of the plant and address:
8. Listing status of the company (Yes/No): BSE/ NSE
9. Type of Industry: Mining/Manufacturing
10. Items or products manufactured by the firm (Mention NIC codes also)

11. Mention type of the company and foreign equity capital holding
 1. Foreign equity > 50% equity (% _____)
 2. Foreign equity: 10-50 % equity (% _____)
 3. Foreign equity: < 10% equity (% _____). Do you plan to increase foreign equity beyond 10% during 2008/09? Yes/No. If yes, how much? _____
 4. Type of ownership : (Associate/Subsidiary)
 5. Foreign equity/ownership by an individual (Yes/No)
 6. Others (specify) _____

¹This study is being conducted by the National Council of Applied Economic Research (NCAER) with support from the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. The information provided by the respondents would be treated as "Highly Confidential" and would not be shared with any other party. The details of responses would be used only for the purpose of research analysis. Your cooperation would be highly appreciated. We shall be extremely thankful to you for your time.



12. Mention which resource category from below does your firm belongs to? Rank them in the order of 1–4 with 1 being most important to 4 being least important.

1. Capital intensive industries
2. Technology intensive industries
3. Labour intensive industries
4. Others (specify _____)

II. Capital

13. Please provide the details on capital employed in rupees

Fixed capital	2005–06	2006–07
Land and building		
Plant and machinery		
Other fixed assets		
Depreciation		
Working capital		
Raw materials & components		
Spares, stores and others		
Fuels and lubricants		
Finished and semi-finished goods		
Cash in hand and bank balances		
Other current assets		
Total current liabilities (loans, cash credit, overdraft, etc.)		

14. Mention the following particulars in Rupees (Provide answers as applicable)

Particulars	2005–06	2006–07
Value of output/Value of Business/contract		
Total sales value		
Domestic sales value		
Value of exports		
Salaries & wages*		
Value of total inputs		
Profit (profit after tax)		
Import of capital goods		

* Inclusive of all benefits/ incentives (CTC).

**15. Mention details of FDI**

Year	FDI (US \$)	Route ^a	Type of investment ^b	Name of the investor/partner (Mention all)	Country	Sector
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
Total						

Note: a: 1-RBI Automatic Route and 2-Government Route (SIA/FIPB).

b: 1-Green field investment, 2-Brown field investment, 3-Joint venture and 4-Others (specify _____)

III. Employment**16. Total number of Indian employees in your plant _____ (Male.....Female.....) as on 31-12-07?**

Please provide the following details

Type of employees	Number of employees	Salary (Rs.) (provide range)*	Residential status of employees (percentage)		
			Rural.....	Urban.....	Semi-urban.....
Blue collar (workers including shop floor supervisors)			Rural.....	Urban.....	Semi-urban.....
White collar (managers, supervisors and clerical staff)			Rural.....	Urban.....	Semi-urban.....
Others (Gate keepers, housekeeping staff, drivers, cooks and any others)			Rural.....	Urban.....	Semi-urban.....

* Inclusive of all benefits/ incentives (CTC).



17. Does the plant have any expatriate employees? Yes/No

If Yes, mention the number of managers / supervisors / workers by their country-wise nationality.

18. Please provide educational background of your employees

Education	No. of blue collar employees		No. of white collar employees		No. of other employees	
	Male	Female	Male	Female	Male	Female
Matriculate						
Senior Secondary						
Graduate						
Post-Graduate						
Ph.D.						
Technical /Professional Degree						

19. Do you provide/sponsor skill development of employees? Yes/No

If yes, please mention total costs of training

Year	Total cost (Rs.)	Remarks
2005–06		
2006–07		
2007–08		

20. What are the facilities that you provide to your employees? Tick whichever is applicable

- 1. Accommodation
- 2. Transportation
- 3. Meals
- 4. General Insurance
- 5. Health / Medical Insurance
- 6. Other Perks (specify _____)

21. From which regions do your employees come from along with their corresponding numbers

- 1. Migrant workers from other states: _____
- 2. Local people/people from nearby villages: _____
- 3. Workers from urban areas: _____
- 4. Outsourced Jobs: _____
- 5. Others (specify): _____

IV. FDI Preference: Country of Origin

22. Are you expecting external infusion of capital during 2008? Yes/No

If yes, mention the name of the country _____

23. Are you aware of the foreign investment promotion treaties (Double Taxation Avoidance Agreement, Bilateral Investment Treaties, Bilateral Investment Promotion Agreements, and Regional Trade Agreements)? Yes/No. If yes, how do you benefit from such treaties

24. Mention advantages of receiving FDI via Mauritius / Cyprus / British Virgin Islands

V. Location Considerations

25. What is the objective of infusing foreign investment in your company

(Please rank them in the order of importance from 1 to 9 in the decreasing order of importance, 1 being most important.)

- | | |
|--------------------------------|--------------------------|
| 1. Domestic market seeking | <input type="checkbox"/> |
| 2. Using of local resources | <input type="checkbox"/> |
| 3. Export oriented | <input type="checkbox"/> |
| 4. Access to technology | <input type="checkbox"/> |
| 5. Access to managerial skills | <input type="checkbox"/> |
| 6. Introducing new products | <input type="checkbox"/> |
| 7. Increased global footage | <input type="checkbox"/> |
| 8. Improving brand image | <input type="checkbox"/> |
| 9. Others (specify) _____ | <input type="checkbox"/> |

26. Which of following factors guided you to locate your existing FDI plant in India

S. No.	Criteria/factors	Tick the factors which guided you	Rank the factors in decreasing order of importance from 1–16. 1 being most important	Remarks
1.	Labour availability			
2.	Population density			
3.	Presence of industrial estates/industrial parks			
4.	Physical infrastructure (roads, airport, port, etc.)			
5.	Presence of SEZ			



S. No.	Criteria/factors	Tick the factors which guided you	Rank the factors in decreasing order of importance from 1–16. 1 being most important	Remarks
6.	Communication/information technology			
7.	Pre-existence of foreign plants			
8.	Government policies & Incentives			
9.	Liberal labour policies vis-a-vis other states			
10.	Location specific incentives			
11.	Near to urban centre			
12.	Near to rural areas			
13.	Near to metropolis			
14.	Proximity to raw materials			
15.	Others_____			
16.	_____			

27. Number of any other plant and their locations (mention all of them)

S. No.	Name of the plant	Location	Whether FDI enabled	Sectors / Items
1.				
2.				
3.				
4.				

VI. Location Incentive Factors

28. Mention the general and sectors specific incentives given by the states/central government for FDI Firms vis-a-vis domestic firms. Tick whichever is applicable:

Incentives	Centre Specific	State Specific
1. Tax holidays		
2. Profit Repatriation		
3. Flexible Labour Laws		
4. Credit Facility		
5. Exemption from sales tax		
6. Capital subsidy		
7. State specific transport subsidy		
8. Any other (specify)		

**29. How did you utilise your profits in (2006–07)?**

Utilisation	Per cent of profits utilised	Remarks (how used? etc.)
Repatriation		
Reinvestment		
Social responsibility		
Dividend distribution		
Retained profits / Earnings		
Others _____		

30. Are you satisfied with the profit repatriation norms of the Government of India? Yes/No. If Yes, tick in the appropriate box.

Very easily transferable	Easily transferable	Transferable	Transferable but with bureaucratic hassles	Not transferable at all

31. Do you fall under dividend balancing requirements? If yes, what are the implications for your firm?

VII. Local Infrastructure**32. Is your plant located in a Special Economic Zone (SEZ)? Yes/No**

If yes, what special benefits given in the SEZ help to improve the performance of your plant? (Tick whichever is applicable?)

1. Duty-free import/domestic procurement of goods for development, operation and maintenance of SEZ units.
2. 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years.
3. Exemption from minimum alternate tax under section 115JB of the Income Tax Act.
4. External commercial borrowing by SEZ units upto US \$ 500 million in a year without any maturity restriction through recognized banking channels.
5. Exemption from Central Sales Tax.



6. Exemption from Service Tax.
 7. Single window clearance for Central and State level approvals.
 8. Exemption from State sales tax and other levies as extended by the respective State Governments.
- 33. Mention the distance from the plant to the closest metro/urban centre in kilometres and average time taken to reach there, means of transport and quality of facility:**
- Distance: _____
- Time taken: _____
- Mode of transport: Road / Rail / Air / Water
- Quality (tick one): 1. Excellent; 2. Good; 3. Average; 4. Below average; 5. Poor
- 34. Are the following facilities available within a radius of 10 km. from your plant? Please tick, if the facility is available and provide names**

1. High School:
2. Senior Secondary School:
3. Degree College:
4. Technical/Vocational Training Centre:
5. Inpatient Care Hospital:
6. Automobile Selling Showroom(s)
 - a) Two-wheeler:
 - b) Four-wheeler:
7. Cinema House:
8. Fire Station:

VIII. Linkages

- 35. Has the location of the plant led to improved infrastructure in the area since its inception (Yes/No)**

If yes, tick the relevant improvements

1. Better roads/ better linkage to nearby towns
2. Electricity supply
3. Health centres/ Hospitals
4. Education centres (Secondary school, Degree college, Vocational Training Institute)
5. Drinking water supply
6. Recreation centres
7. Any other (specify _____)



36. What kind of linkages does your firm/plant have with other firms / industries? Please provide measures of the degree of dependence.

Type of linkage	Dependency (tick in the appropriate box)		
	Weak	Moderate	Strong
Backward Linkage			
Sourcing of raw materials			
Sourcing of labours			
Forward Linkage			
Intermediate Goods			
Finished Goods			
Marketing system			
Distribution networks			
Others _____			

37. Do you have any linkage with your FDI partner located in a different country?
(Yes/No)

If yes, please mention the type and extent of relationship (tick in the appropriate box)

Type of linkage	None	Intermittent	Regular
Inputs (raw materials, etc.)			
Finished products			
Financial resources			
Human resources and skills training			
Technology transfer			
Management practices			
Market access to other countries			
Marketing/distribution network			
Transfer Pricing			
Others _____			



38. Indicate which of the following indirect benefits have accrued to the adjoining areas through operations of your plant

- | | |
|---|--------------------------|
| 1. Employment Generation | <input type="checkbox"/> |
| 2. Incremental Incomes | <input type="checkbox"/> |
| 3. Improvement in skills | <input type="checkbox"/> |
| 4. Outsourcing | <input type="checkbox"/> |
| 5. Improvement in Social Infrastructure | <input type="checkbox"/> |
| 6. Any other (specify _____) | <input type="checkbox"/> |

IX. Comparators

39. Please provide comparative performance of your plant vis-a-vis similar company of your FDI provider. (Please mention in US \$ terms)

Indicators	Foreign Affiliate	FDI Partner
Sales (\$)		
No. of employees		
Wage rate (\$) (provide range)		
Value of output (\$)		
Value of inputs (\$)		
Profit before interest depreciation and tax (PBIDT) (\$)		
Profit before depreciation and tax (PBT)		
Profit before tax (PBT)		
Profit after tax (PAT)		

X. Constraints

40. Do you propose to increase your FDI proportion in your company? Yes/No. If yes, what are the constraints you have faced or are facing for investing in India? Investment Limit/ FDI cap. Rank them in the order of 1–14 with 1 being most restrictive to 14 being least restrictive.

- | | |
|----------------------------|--------------------------|
| 1. Labour laws | <input type="checkbox"/> |
| 2. Physical infrastructure | <input type="checkbox"/> |
| 3. Social capital | <input type="checkbox"/> |
| 4. Telecommunication | <input type="checkbox"/> |
| 5. Electricity | <input type="checkbox"/> |
| 6. Transportation | <input type="checkbox"/> |
| 7. Access to land | <input type="checkbox"/> |
| 8. Regulatory policy | <input type="checkbox"/> |



9. Tax rates
10. Tax administration
11. Skills and education of available workers
12. Business Licensing and operating permits
13. Bureaucratic hassles.
14. Others (specify _____)

XI. Capacity Building/Forward Looking

41. Do you undertake research and development (R&D) activities? Yes/No

If yes, please provide the details:

Year	R&D expenditure (As % of total expenses)	R&D activities
2005–06		
2006–07		
2007–08*		

*Proposed.

42. Do you have any new investment plans for receiving foreign investment during the year 2008 Yes/No

If yes, please mention the amount, country of origin, location and sector of production

1. Amount: _____
2. Country of origin: _____
3. Location: _____
4. Sector of production: _____

43. How do you rate each of the following during 2008? (Use the scale of 1–10 with 10 being very high and 1 very low)?

1. New investment intentions of your plant through:
 - a) Foreign Capital _____
 - b) Domestic capital _____
2. Indian political environment _____
3. Indian economic environment _____
4. Indian investment environment _____

Name of the Investigator :

Date of Survey :

Verified and Attestted by the Field Coordinator / Company Official :



Questionnaire for FDI-Enabled Production Units

National Council of Applied Economic Research

Parisila Bhawan, 11-I.P. Estate, New Delhi-110 002

Phone: 011-23379861-3 Fax: 011-23370164

Services Firm

How Inclusive is the Impact of FDI on the Indian Economy?

Analysis of Regional, Employment and Growth Effects¹

(Note: Please provide details for any one of your foreign facilities, in case your company has more than one facility)

I. Profile of the Company

1. Respondent's Name:
2. Designation:
3. Name of the Company:
4. Organisational Address:
5. Phone: _____ Fax: _____ E-mail: _____
6. Year of Establishment:
7. Name of the service facility and address:
8. Listing status of the company (Yes/No): BSE/ NSE
9. Type of services provided by the firm _____

10. Mention type of the company and foreign equity capital holding
 1. Foreign equity: > 50% equity (% _____)
 2. Foreign equity: 10–50 % equity (% _____)
 3. Foreign equity: < 10% equity (% _____). Do you plan to increase foreign equity beyond 10% during 2008/09? Yes/No. If yes, how much? _____
 4. Type of ownership : (Associate/Subsidiary)
 5. Foreign equity/ownership by an individual (Yes/No)
 6. Others (specify) _____

¹ This study is being conducted by the National Council of Applied Economic Research (NCAER) with support from the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. The information provided by the respondents would be treated as "Highly Confidential" and would not be shared with any other party. The details of responses would be used only for the purpose of research analysis. Your cooperation would be highly appreciated. We shall be extremely thankful to you for your time.



11. Mention which category from below does your firm belongs to? Tick whichever is applicable:

1. Financial
2. Non-financial services
3. Banking services
4. Insurance
5. Hospital and diagnostic centres
6. Outsourcing
7. Research and Development
8. Education
9. Other Services (specify)

II. Capital

12. Please provide the details on capital employed in rupees

Fixed capital	2005–06	2006–07
Land and building		
Equipment		
Other fixed assets		
Depreciation		
Working capital		
Raw materials & components, spares, stores and others		
Cash in hand and bank balances		
Other current assets		
Total current liabilities (loans, cash credit, overdraft, etc.)		

13. Mention the following particulars in Rupees (Provide answers as applicable)

Particulars	2005–06	2006–07
Value of Business/contract		
Total revenue		
Revenue from domestic market		
Revenue from Exports		
Expenditure on salaries *		
Profit (profit after tax)		

* Inclusive of all benefits/ incentives (CTC).

**14. Mention details of FDI**

Year	FDI (US \$)	Route ^a	Type of investment ^b	Name of the investor/partner (Mention all)	Country	Sector
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
Total						

Note: a : 1 – RBI Automatic Route and 2–Government Route (SIA/FIPB).

b : 1 – Green field investment, 2 – Brown field investment, 3 – Joint venture and 4 – Others (specify) _____.

III. Employment**15. Total number of Indian employees in your facility.....(Male..... Female.....) as on 31-12-07**

Please provide the following details :

Type of employees	Number of employees	Salary (Rs.) (provide range)*	Residential status of employees (percentage)		
			Rural.....	Urban.....	Semi-urban.....
Skilled			Rural.....	Urban.....	Semi-urban.....
Semi-skilled			Rural.....	Urban.....	Semi-urban.....
Unskilled			Rural.....	Urban.....	Semi-urban.....

* Inclusive of all benefits (CTC).

16. Does the facility have any expatriate employees? Yes/No

If Yes, mention the number of managers / supervisors / workers by their country-wise nationality.

17. Please provide educational background of your employees

Education	Skilled		Semi-Skilled		No. of other employees	
	Male	Female	Male	Female	Male	Female
Matriculate						
Senior Secondary						
Graduate						
Post-Graduate						
Ph.D.						
Technical / Professional Degree						
Any other (Specify)						



18. Do you provide/sponsor skill development of employees? Yes/No

If yes, please mention total costs of training

Year	Total cost (Rs.)	Remarks
2005–06		
2006–07		
2007–08		

19. What are the facilities that you provide to your employees? Tick whichever is applicable.

- | | |
|--------------------------------|--------------------------|
| 1. Accommodation | <input type="checkbox"/> |
| 2. Transportation | <input type="checkbox"/> |
| 3. Meals | <input type="checkbox"/> |
| 4. General Insurance | <input type="checkbox"/> |
| 5. Health / Medical Insurance | <input type="checkbox"/> |
| 6. Other Perks (specify _____) | <input type="checkbox"/> |

20. From which regions do your employees come from along with their corresponding numbers

1. Migrant workers from other states: _____
2. Local people/people from nearby villages: _____
3. Workers from urban areas: _____
4. Outsourced Jobs: _____
5. Others (specify): _____

IV. Preference: Country of Origin

21. Are you expecting external infusion of capital during 2008? Yes/No

If yes, mention the name of the country _____

22. Are you aware of the foreign investment promotion treaties (Double Taxation Avoidance Agreement, Bilateral Investment Treaties, Bilateral Investment Promotion Agreements, and Regional Trade Agreements)? Yes/No

If yes, how do you benefit from such treaties? _____

23. Mention advantages of receiving FDI via Mauritius / Cyprus / British Virgin Islands

V. Location Considerations

24. What is the objective of infusing foreign investment in your company

(Please rank them in the order of importance from 1 to 9 in the decreasing order of importance, 1 being most important)

- | | |
|-----------------------------|--------------------------|
| 1. Domestic market seeking | <input type="checkbox"/> |
| 2. Using of local resources | <input type="checkbox"/> |



3. Export oriented
4. Access to technology
5. Access to managerial skills
6. Introducing new services
7. Increased global footage
8. Improving brand image
9. Other (specify) _____

25. Which of following factors guided you to locate your existing FDI facility in India

S. No.	Criteria/factors	Tick the factors which guided you	Rank the factors in decreasing order of importance from 1–14. 1 being most important	Remarks
1.	Labour availability			
2.	Population density			
3.	Presence of industrial estates/ industrial parks			
4.	Physical infrastructure (roads, airport, port, etc.)			
5.	Presence of SEZ			
6.	Communication/information technology			
7.	Government policies & Incentives			
8.	Liberal labour policies vis-a-vis other states			
9.	Location specific incentives			
10.	Near to urban centre			
11.	Near to rural areas			
12.	Near to metropolis			
13.	Others _____			
14.	_____			



26. Number of any other facility and their locations (mention all of them)

S. No.	Name of the facility	Location	Whether FDI enabled	Sectors / Items
1.				
2.				
3.				
4.				

VI. Location Incentive Factors

27. Mention the general and sectors specific incentives given by the states/central government for FDI facility vis-a-vis domestic facility. Tick whichever is applicable:

Incentives	Centre Specific	State Specific
1. Tax holidays		
2. Profit Repatriation		
3. Flexible Labour Laws		
4. Credit Facility		
5. Exemption from service tax		
6. Capital subsidy		
7. State specific transport subsidy		
8. Any other (specify)		

28. How did you utilise your profits in (2006–07)

Utilisation	Per cent of profits utilised	Remarks (how used? etc.)
Repatriation		
Reinvestment		
Social responsibility		
Dividend distribution		
Retained profits / Earnings		
Others _____		

29. Are you satisfied with the profit repatriation norms of the Government of India? Yes/No. If Yes, tick in the appropriate box.

Very easily transferable	Easily transferable	Transferable	Transferable but with bureaucratic hassles	Not transferable at all



30. Do you fall under dividend balancing requirements? If yes, what are the implications for your firm?

VII. Local Infrastructure

31. Is your facility located in a Special Economic Zone (SEZ)? Yes/No

If yes, what special benefits given in the SEZ help to improve the performance of your facility?
(Tick whichever is applicable)?

1. Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units.
2. 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years.
3. Exemption from minimum alternate tax under section 115JB of the Income Tax Act.
4. External commercial borrowing by SEZ units upto US \$ 500 million in a year without any maturity restriction through recognized banking channels.
5. Exemption from Central Sales Tax.
6. Exemption from Service Tax.
7. Single window clearance for Central and State level approvals.
8. Exemption from State sales tax and other levies as extended by the respective State Governments.

32. Mention the distance from the facility to the closest metro/urban centre in kilometres and average time taken to reach there, means of transport and quality of facility:

Distance: _____

Mode of transport: Road / Rail / Air / Water

Time taken: _____

Quality (tick one): 1. Excellent; 2. Good; 3. Average; 4. Below average; 5. Poor

33. Are the following facilities available within a radius of 10 km. from your FDI facility? Please tick, if the facility is available and provide names.

1. High School:
2. Senior Secondary School:
3. Degree College:
4. Technical/Vocational Training Centre:
5. Inpatient Care Hospital:
6. Automobile Selling Showroom (s)
 - a) Two-wheeler:
 - b) Four-wheeler:
7. Cinema House:
8. Fire Station:



VIII. Linkages

34. Has the location of the facility led to improved infrastructure in the area since its inception? (Yes/No)

If yes, tick the relevant improvements?

1. Better roads/ better linkage to nearby towns
2. Electricity supply
3. Health centres/ Hospitals
4. Education centres (Secondary school, Degree college, Vocational Training Institute
5. Drinking water supply
6. Recreation centres
7. Any other (specify _____)

35. Do you have any linkage with your FDI partner located in a different country? (Yes/No)

If yes, please mention the type and extent of relationship (tick in the appropriate box).

Type of linkage	None	Intermittent	Regular
Financial resources			
Human resources and skills training			
Technology transfer			
Management practices			
Market access to other countries			
Marketing/distribution network			
Transfer Pricing			
Others _____			

36. Indicate which of the following indirect benefits have accrued to the adjoining areas through operations of your facility. Tick the appropriate box below :

1. Employment Generation?
2. Incremental Incomes
3. Improvement in skills
4. Outsourcing
5. Improvement in Social Infrastructure
6. Any other (specify _____)

**IX. Comparators**

37. Please provide comparative performance of your facility vis-a-vis similar company of your FDI provider. Please mention in US \$ terms).

Indicators	Foreign Affiliate	FDI Partner
Total revenue		
No. of employees		
Wage rate (\$) (provide range)		
Value of contract/business (\$)		
Profit before interest depreciation and tax (PBIDT) (\$)		
Profit before depreciation and tax (PBT)		
Profit before tax (PBT)		
Profit after tax (PAT)		

X. Constraints

38. Do you propose to increase your FDI proportion in your company? Yes/No. If yes, what are the constraints you have faced or are facing for investing in India? Investment Limit/ FDI cap. Rank them in the order of 1–14 with 1 being most restrictive to 14 being least restrictive.

1. Labour laws
2. Physical infrastructure
3. Social capital
4. Telecommunication
5. Electricity
6. Transportation
7. Access to land
8. Regulatory policy
9. Tax rates
10. Tax administration
11. Skills and education of available workers
12. Business Licensing and operating permits
13. Bureaucratic hassles
14. Others (specify)



XI. Capacity Building/ Forward Looking

39. Do you undertake research and development (R&D) activities? Yes/No

If yes, please provide the details:

Year	R&D expenditure (As % of total expenses)	R&D activities
2005–06		
2006–07		
2007–08*		

*Proposed.

40. Do you have any new investment plans for receiving foreign investment during the year 2008? (Yes/No)

If yes, please mention the amount, country of origin, location and sector of production.

1. Amount: _____
2. Country of origin: _____
3. Location: _____
4. Sector of production: _____

41. How do you rate each of the following during 2008? (Use the scale of 1–10 with 10 being very high and 1 very low.)

1. New investment intentions of your facility through:
 - a) Foreign Capital (in US \$) _____
 - b) Domestic capital (in Rs.) _____
2. Indian political environment _____
3. Indian economic environment _____
4. Indian investment environment _____

Name of the Investigator :

Date of Survey :

Verified and Attestted by the Field Coordinator / Company Official :

