

## CHAPTER 1

### INTRODUCTION

The importance of foreign direct investment (FDI) in the development process of an economy is well recognized. Inflows of FDI bridges the gap between the desired and the actual level of capital stock, especially when domestic investment is not sufficient enough to push the actual capital stock up to the desired level (Noorbakhsh, Paloni and Youssef, 2001; Hayami, 2001). In addition, FDI also brings in better technology (in both disembodied and embodied forms) and management practices to the host country, which through spillover effects make the economy more competitive. A number of studies (e.g., Caves, 1974; Globerman, 1979; Blomström and Persson, 1983, Basant and Fikkert, 1996; Kathuria, 1998; Pradhan, 2006) find significant evidence of such knowledge spillovers from foreign enterprises<sup>1</sup>. Besides, FDI can also be considered as a substitute of international trade and an instrument to hedge the risks of exposure to foreign exchange<sup>2</sup>.

However, there are studies (Aggarwal, 2005; Pradhan, 2002) that fail to find any robust and positive association between inward FDI and economic growth. This may largely be due to concentration of FDI inflows in relatively advanced locations (Bajpai and Sachs, 2000; Morris, 2004; Aggarwal, 2005; Majumdar, 2005; Pal and Ghosh, 2007; Nunnenkamp and Stracke, 2007). Moreover, impact of FDI on the economy of the host country may vary depending on its nature, i.e., whether the FDI inflows are Greenfield or these follow the route of acquisition of shares of the existing firms. The impact of FDI through acquisition is quite complex. On the one hand, FDI following the route of acquisition may help in more efficient use of resources, international diffusion of technology, rationalization of R&D activities, and increase in efficiency of R&D activities through complementarities, etc. On the other hand, FDI through acquisitions may lead to organizational complexity and favour organizational structures with stricter

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<sup>1</sup> It is also evident that such knowledge intensive FDI inflows raise productivity of the local firms in a significant way (Rodriguez-Clare, 1996).

<sup>2</sup> In fact, the policy makers have high expectations on FDI that has 'huge advantages with little or no downside' (Bajpai and Sachs, 2000). This motivates them in most countries, especially, of the developing nations to go out of their way for attracting more FDI.

financial controls resulting in a lower R&D intensity. However, when compared with such acquisitions, most governments put a lot of efforts in attracting Greenfield FDI and sometimes resist heavily against foreign acquisitions, especially, in industries with a high innovation intensity, as the former expands productive capacity and generates more output and employment.

In addition to its nature, the objective of FDI, (i.e., whether it is for strengthening manufacturing base or for expanding marketing network or enhancing R&D activities), also largely influences the potential benefits and their realization. The foreign investors with market orientation at the local level may have a stronger impact on technology and productivity levels as compared to exports oriented local firms (Kokko et al., 2001). Similarly, spillovers from FDI should not be expected in all kinds of industries (Kokko, 1994). In other words, spillovers from FDI are likely to be industry specific. For example, foreign firms may sometimes operate in “enclaves”, where neither products nor technologies have much in common with that of the local firms. Under such circumstances, there may be little scope for learning for the local firms, and spillovers may not materialize.

Further, the spillovers from foreign technology and skills to the local industry are not an automatic consequence of foreign investment (Blomström and Kokko, 2003). The potential benefits are realized only if the local firms have the ability and motivation to invest in absorbing foreign technologies and skills. In other words, realization of the spillovers is positively related to the host economy’s capacity to absorb them (Kokko, 1994), and weak technological capability at the firm level can be an obstacle for spillovers (Kokko et al., 1996). Supply of human capital at local level along with modern infrastructure and improvements in other economic fundamentals not only raises the attractiveness of the location for FDI, but also enhances the likelihood of its spillovers benefits. Hence, there is a need for learning and investment in local firms to enhance capability and labour skills for greater realization of the potential benefits of FDI<sup>3</sup>.

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<sup>3</sup>For example, Görg and Strobl (2000 and 2001) find that presence of foreign companies has positive technological spillovers on indigenous firms and plants in high tech industries, whereas, no such effect is

Since initiation of the reform process in 1991, Indian economy has witnessed a number of liberal policy measures towards FDI<sup>4</sup>. The major policy changes relating to FDI since 1991 include fixing the limits of foreign investment in high priority industries, liberalizing and streamlining up the procedures and mechanisms, bringing in transparency in the decision making process, lessening of bureaucratic controls, expanding the list of industries/activities eligible for automatic route of FDI, investments by non-resident Indians (NRIs) and overseas corporate bodies (OCBs), etc. A detailed scrutiny of these policy changes suggests that contrary to the government's involvement in creation and augmentation of domestic asset base in the pre-reform era that resulted in large-scale inefficiency in allocation of resources and distribution of goods and services, the policy regime since 1991 recorded a marked shift by introducing a number of deregulatory measures to bring in greater efficiency<sup>5</sup>. In other words, prior to 1991, the FDI policies were subjected to several restrictions limiting inflows of quality capital, whereas the reforms of the 1990s were aimed at overcoming various industry, trade, and investment related policy rigidities to facilitate greater FDI inflows (Basant and Morris, 2000a).

### **1.1 FDI Inflows in India**

In the pre-reform era, especially, after introduction of centralized planning in 1951, the state became the premier catalyst of industrial development and entrepreneurship, reducing the role of foreign capital in the development process to a large extent<sup>6</sup>. The decades of 1960s, 1970s and 1980s witnessed creation and augmentation of domestic asset base for the economy mainly by the government with a receptive attitude towards foreign capital. But, this receptive attitude was combined with a number of policy

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experienced in case of low tech firms and plants. Similarly, Kathuria (1998 and 2000) observe that the spillovers from FDI depend largely on the efforts of local firms to invest in learning and R&D activities.

<sup>4</sup>However, FDI is not a completely new source of finance for the Indian economy. A substantial presence of foreign capital was evident even in the pre-independence era with the British dominating over the country's mining, plantations, trade and creation of manufacturing base (Athreye and Kapur, 2001).

<sup>5</sup>The new policy regime also seeks to prevent restrictive business practices that significantly lessen competition, increase costs and prices and thereby affect consumer welfare adversely.

<sup>6</sup>For example, the number of large business groups controlled by the British decreased from 61 in 1938 to 25 in 1962 (Majumder and Chhibber, 1998).

rigidities and restrictions to prevent the domination of foreign capital over the domestic economy and thereby to protect the domestic firms from the threat of competition by the foreign firms. Such strategic objective of Indian policy makers for creating a self-reliant economy and reducing poverty somewhat distorted the foreign investment climate. The regime of regulation and control as well as creation and augmentation of domestic asset base by the state caused large-scale inefficiency in allocation of resources and distribution of goods and services.

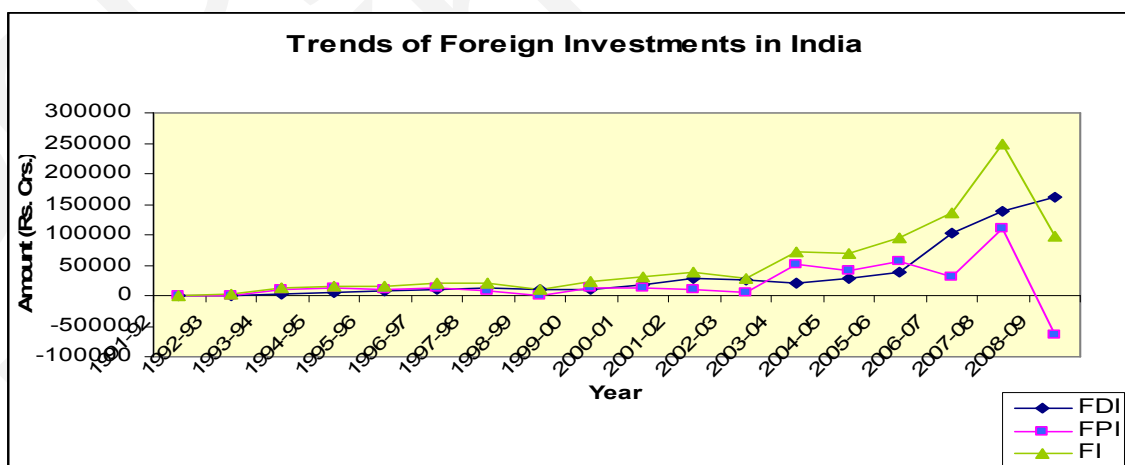
However, bringing in efficiency requires greater market competition through effective combination of market forces and government interventions, particularly when the market forces fail to guide the investments in appropriate direction in terms of various sectors as well as states/regions. While concentration of FDI in a few industries may give birth to X-inefficiencies, that across states/regions may result in spatial inequalities. It is, therefore, necessary to design an appropriate policy framework that can influence the distribution of FDI across sectors and states. The policy changes of the 1990s therefore aim at providing greater flexibility in making investment decisions by removing various restrictions on corporate investments and growth. Further, opening up of a number of new sectors for FDI and allowing higher equity participation in many others have facilitated presence of the MNCs in the domestic market. In other words, reforms have created an environment for growth led by foreign capital.

### **Trends and Patterns of FDI inflows in India**

The liberal policy measures have influenced FDI decisions profoundly (Sethi, et. al. 2003), and as a result FDI inflows into India have increased significantly in the post-reform era (Rao, Murthy and Dhar, 1997; Kumar, 1998; Nagraj, 2003; Rao and Murthy, 2006; Rozas and Vadlamannati, 2009). According to the 'World Investment Prospects Survey 2009-2011' by the United Nations Conference on Trade and Development (UNCTAD), India is ranked at the third place in global FDIs in 2009 and will continue to remain among the top five attractive destinations for international investors during 2010-11. Some other surveys also portray high potential of India in the race of FDI. For

example, the 2009 survey of the Japan Bank for International Cooperation reveals that the Japanese investors continue to rank India as the second most promising country for overseas business operations, after China. Similarly, a report of the Leeds University Business School commissioned by UK Trade & Investment (UKTI), and released in February 2010, ranks India amongst the top three countries in the world where the British companies can do better business during 2012-14. The European Attractiveness Survey 2010 by the Ernst and Young also ranks India as the 4th most attractive FDI destination in 2010 and the 2nd most in the next three years.

As it is reported by the Department of Industrial Policy and Promotion (DIPP), Government of India ([www.dipp.nic.in](http://www.dipp.nic.in)) and the Reserve Bank of India ([www.rbi.org.in](http://www.rbi.org.in)), both FDI inflows and foreign portfolio investment (FPI) have increasing trends over the years during 1991-92 to 2008-09 (Figure 1.1). According to the data released by the DIPP, the cumulative amount of FDI equity inflows from August 1991 to April 2010 stood at US\$ 134,642 million. However, while FPI inflows declined sharply and became negative following the global slowdown in 2008-09, FDI inflows continued increasing. Further, the inflows of FPI fluctuated more as compared to that of FDI. In other words, the inflows of FDI were more stable vis-à-vis that of FPI. Such increasing inflows of foreign investment have made India's growth strategy to be depended predominantly on foreign capital.



**Fig1.1: Trends of Foreign Investments in India (1991-92 to 2008-09)**

Note: FDI denotes Foreign Direct Investment, FPI stands for Foreign Portfolio Investment and FI denotes total foreign investment.

Source: [www.rbi.org.in](http://www.rbi.org.in)

The increase in FDI inflows in the early years of the post-reform era was caused by opening up of many of the industries for foreign equity participation coupled with relaxation of various rules and regulations and introduction of FDI conducive policies by the government. The sudden decline in FDI inflows during 1998-99 and 1999-00, on the other hand, was a fall out of the restrictions imposed on investments in India by the United States (US) following the nuclear test at Pokhran, mild recession across the globe, political instability in the country, and South-East Asian crisis (Rozas and Vadlamannati, 2009). The dip in investment inflows during 2001-02 to 2003-04 may, however, be due to the adverse impact of terrorist attacks on the World Trade Centre (WTO) in September, 2001 and at the Parliament of India in December 2001 (Rozas and Vadlamannati, 2009).

However, though increased considerably over the years, inflows of FDI or FPI are not so high when considered as a proportion of gross domestic product (GDP). Further, as regards the actual FDI inflows, India is far behind not only of China but also of even some smaller economies in Asia like Hong Kong and Singapore. For instance, India's FDI as a share of GDP in 2007 was only about 1.7 percent as compared to 2.8 percent in China. This means that the investment potential of India is not fully realized, especially in comparison with the peer group and there is a gap between India's potential to attract FDI and actual FDI inflows. Rozas and Vadlamannati (2009) point out that six main constraints that have led to such gap, such as, perception of foreign investors on potential of Indian market, domestic policies and regulations, time lags in processes and procedures, quality of infrastructure, obstacles at the center and state level.

The proportion of FDI inflows differs across the route of inflow. While around 53 percent of FDI during April 2000 to November 2007 came in through the automatic approval route, around 20 percent of that came in through the government approval route and the rest in the form of acquisition of existing shares (Economic Survey, 2007-08). The major sources of these FDI inflows include Mauritius, Singapore, U.S.A, U.K, Netherlands, Japan, Cyprus, Germany, France and U.A.E. These ten countries together account for more than 70 percent of the total FDI equity inflows into the country during April 2000 to

May 2009<sup>7</sup>. Again amongst these countries, Mauritius is found to be dominating over the others with a share of 44 percent in total FDI equity inflows during this period followed by Singapore, U.S.A., U.K. and others. Such predominance of Mauritius is contributed to the intentions of investors of other countries towards channelizing their investments through Mauritius for tax evasion (Nagraj, 2003).

An important aspect of FDI inflows in India in the post-reform era is the emergence of mergers and acquisition (M&As) as a predominant channel of foreign investment. For example, nearly 39 per cent of FDI inflows into India during the period 1997-1999 had taken the form of (M&As) of existing Indian enterprises by foreign companies, whereas in the pre-reform era, FDI entry was invariably in the nature of Greenfield investments (Kumar, 2000). In the recent past also, a significant portion of FDI inflows was through M&As and the share of M&As in total FDI equity inflows showed an increasing trend over the years except in 2008-09 (Ranjan et al., 2008)<sup>8</sup>. The share of M&As in FDI declined in 2008-09, possibly due to the global economic slowdown. Acquisition of shares of existing companies by the foreign investors constituted around two-fifths of the total FDI equity inflows during 2005-07 (Rao and Dhar, 2011). Using data on 2,748 large FDI projects, Rao and Dhar (2011) find that around 45.83 percent of FDI inflows in IT and ITES during September 2004 to December 2009 were through acquisitions, where as in manufacturing and services the share of acquisitions in total FDI inflows were 23.85 percent and 19.32 percent respectively. Such significant share of M&As in FDI have important implications on the developmental front as FDI in the form of M&As have limited potential to add to the stock of productive capital, generate favourable knowledge spillovers and competitive effects to Greenfield entry (Kumar, 2000).

It is generally perceived that the sectors that provide larger market and cost advantages attract more FDI inflows and accordingly the distribution of FDI inflows may vary across

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<sup>7</sup> See, Table 1.3 in Appendix- A for the details.

<sup>8</sup> Here, their perception is based on the study done by the U.S International Trade Commission that uses private databases to illustrate the trends related to M&As as well as Greenfield FDI in India (USITC, 2007). Since, according to the report, the data from those private databases is not consistent with official FDI inflows data, therefore, the present study avoids in using that data source.

the industries. It is observed that the distribution of FDI during April 2000 to May 2009 is highly skewed towards the service sector (both financial and non-financial services). This sector alone accounts for 23 percent of total FDI inflows during this period. The other major sectors accounting for reasonably high share include computer hardware and software (10%), telecommunications (8%), housing and real estate (7%) and construction activities (6%). In addition, the infrastructure industries like power, telecom and ports, and construction activities also have reasonable share in total FDI inflows<sup>9</sup>.

At the same time, the liberal policy measures have also forced the state governments to compete with each other for bringing in more FDI into the state. Such ‘locational tournaments’ (Mytelka, 1999), or bidding wars amongst the states for specific investment projects have become a common phenomenon in recent years. The states provide tax incentives, provide land and public utilities at lower price, etc. to win the game. The totality of locational tournaments can, therefore, be thought of as the market for investment. The state governments seek investment and investors seek locations, and overall outcomes can be affected by the competitiveness of various segments of this market, and by the ability or necessity of the players (governments and investors) to cooperate with each other to restrict competition amongst them. But, what is more important is that, even though many states incur substantial administrative and promotional costs over the course of the tournament, only a few of them can have a potentially positive outcome from the tournament. As a result, FDI inflows may vary widely across the states making the distribution highly skewed towards a few of them.

Based on the cumulative data on region-wise FDI inflows as furnished by the Reserve Bank of India, it is observed that the top five states attracting more than half of total FDI inflows during April 2000 to May 2009 are Maharashtra including, Dadra and Nagar Haveli, Delhi including Western UP and Haryana, Karnataka, Gujarat, and Tamil Nadu including Pondicherry. More specifically, Maharashtra appears to be the most favourable destination of both domestic and foreign investment. Apart from Maharashtra, Delhi is also a very attractive destination for the foreign investors. On the contrary, the states like

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<sup>9</sup> See, Table 1.4 in Appendix- A for the details.



Bihar, Rajasthan and Uttar Pradesh are found to draw a very small portion of total FDI inflows<sup>10</sup>. Understanding the dynamics of such inter-state variations in FDI inflows is very important for balanced regional development in the country. This is so because of the skewed distribution of FDI inflows towards some specific states, hence increasing the imbalance in regional development that is likely to have serious consequences on socio-economic-political stability of the country<sup>11</sup>.

## **1.2 Review of Literature**

FDI is a form of international capital flows for investment to expand the production capacity of the economy. In other words, FDI means acquisition of foreign assets for the purpose of ownership control of 10 percent or more of an enterprise's voting securities, or the equivalent interest in an unincorporated business. FDI is positively influenced by the ability to earn profits on activities in the foreign country. By definition, FDI differs from foreign FPI as the latter refers to passive holdings of securities and other financial assets, which do not entail active management or control of the securities issuer. The FPI is positively influenced by high rates of return and reduction of risk through geographic diversification. The returns on FPI are normally in the form of interest payments or non-voting dividends.

FDI is measured either as a flow (amount of investment made in one year) or a stock (the total investment accumulation at the end of the year). It can be classified as outward or inward. When foreign investment flows into an economy, it is called inward FDI, whereas outward FDI refers to investment that flows out from an economy to other countries. Inward FDI can take various forms such as purchase of existing assets of firms, making new investment in property, plant and equipment, and participation in a joint venture with a local partner in the country concerned. Similarly, outward FDI can take the forms of purchase of existing assets, making new investment in property, plant

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<sup>10</sup> See, Table 1.5 in Appendix- A for the details.

<sup>11</sup>For example, Pal and Ghosh (2007) find that extremely skewed inter-state distribution of domestic investment FDI is one of the factors contributing to the increasing inter-regional disparities in India. Similarly, Nunnenkamp and Stracke (2007) point out that FDI is likely to widen regional income disparity in India.

and equipment in foreign country, and participation in a joint venture with a local partner in a foreign country. The country where the investor resides is called the home country; the country where the investment is made is called the host country.

As pointed out in the introductory section, FDI is usually preferred over other forms of external finance because it is non-debt creating, non-volatile and their returns depend on the performance of the projects financed by the investors. FDI also facilitates international trade and transfer of knowledge, skills and technology. In other words, FDI is an important source of economic development, modernization, and employment generation, whereby the overall benefits trigger technology spillovers, assist human capital formation, contribute to international trade integration and particularly exports, help in creating a more competitive business environment, enhance enterprise development, increase total factor productivity and, more generally, improve the efficiency of resource use. However, availing these benefits is dependent on the policies of the host government

A deeper understanding of FDI requires answering the following important questions: Who is the investor (i.e., a new firm or an established one)? What is type of investment (i.e., green-field or brown-field, if merger and acquisition, first time investment or sequential investment)? Why to go abroad (i.e., raising revenues or reducing costs)? Where is the investment made (i.e., choice of investment location on the basis of economic, social/cultural and political factors)? When does a firm choose to go abroad (i.e., timing of investment decision depending on the product life cycle and multinational orientation of firm)? Many of these issues are however inter-linked and addressing one issue necessitates dealing with other related questions as well. Since the present study aims at analysing inter-state variations in FDI inflows in India, the review of literature broadly aims at addressing critically the issues relating to determinants of FDI decisions in general and investment locations in particular.

The literature on determinants of FDI is well explored. Until the 1960s, except for a few works by political economists, there was no systematic explanation of FDI activities. But,

increasing importance and growing interest in the causes and consequences of FDI led to the development of a number of theories. The first theoretical approach was made by Hymer (1976)<sup>12</sup>. Throughout the 1960s, the 1970s and the 1980s new theories of FDI were introduced in the literature. Some of such noteworthy and pioneering theories on FDI include the *product life cycle hypothesis* (Vernon, 1966), *oligopolistic reactions hypothesis* (Knickerbocker, 1973), *industrial organization hypothesis* (Kindleberger, 1969; Hymer, 1976; Caves, 1982; and Dunning, 1988), and *eclectic theory* (Dunning, 1977, 1979, 1988). These theories mainly aim at explaining the reasons behind the multinational corporations' (MNCs) involvement in FDI, selecting one country in preference to another to locate business activity, and choosing a particular mode of investment (Moosa, 2002).

The product life cycle hypothesis of Vernon (1966) is based on existence of market imperfections. According to this hypothesis, FDI is related to international trade and innovation. Innovation forces an economy to switch over from exports to imports. The firms in such an economy indulge FDI at a particular stage in life cycle of products (i.e. when the innovative firm resort to FDI for meeting local demand in foreign countries and seeking cost advantages) that they initially produced as innovations. This approach developed foreign direct investment theory based on market imperfections across nations. The factors stressed were related to innovation (R&D), export and FDI.

Knickerbocker (1973) and Flowers' (1976) demonstrated the concept of oligopolistic reaction in explaining firms' FDI activities. According to the oligopolistic reactions hypothesis, FDI is largely determined by oligopolistic reactions of the foreign firms "follow the leader", and hence emphasis should be given to industrial concentration in raising the oligopolistic reaction in the field of FDI except at very high levels. However, the studies failed to address the reasons behind the first firm in an industry going abroad. Further, the analysis implies that the followers adopt the leaders' action without considering other factors. These are some of the common criticisms against the oligopolistic reaction hypothesis. Yu and Ito (1988) empirically examine the impact of

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<sup>12</sup>Hymer's (1976) contribution to the literature on the determinants of FDI also lies in separating FDI from portfolio investment.

firm-related factors, host-country-related factors, and oligopolistic reaction on FDI behavior in oligopolistic industries of U.S tire and textile industries to address these common criticisms. The postulations of this study have two implications – (1) the first firm in an oligopolistic industry going abroad should examine the same factors which are important to investors in other industries, and (2) the followers should examine the impact of the leader's action on them as well as the impact of other factors if they follow the leader abroad. These arguments are also in the lines of several industry-level studies (e.g. Caves et al, 1980; Pugel, 1981).

The industrial organization models of Kindleberger (1969), Hymer (1976), Caves (1982) and Dunning (1988), on the other hand, point out that intangible assets (e.g., brand name, protection of patent, managerial skills, etc), lesser cost of capital, superior management, better market research, advertising, promotion and distribution system, access to raw materials, economies of scale, efficient transportation network, substantial R&D investment in the home country, etc. motivate a firm in setting a subsidiary in the host country.

The eclectic theory of Dunning (1977, 1979 and 1988) dominates the investment literature of the 1970s and the 1980s. This eclectic theory is a blend of three different factors, ownership (O), location (L) and internalization (I) to explain the advantages of investing abroad by the firms. The advantages of ownership (O) deal with the firm-specific advantages for addressing the question – why to go abroad? The location advantages (L), on the other hand, refer to country-specific advantages in explaining—where to locate? The advantages of internalization (I) address the question – how to go abroad? These three issues form the basis of OLI paradigm.

Most of the above mentioned factors influencing FDI decisions are firm-specific and encompass market-seeking, efficiency-seeking and resource-seeking attitude of the firms. In addition, recent developments in the literature highlight several other factors such as market size, labor cost, quality of infrastructure, economic openness, political stability, risks of investment, governance, etc. that explain why the firms go abroad and how do

they select the investment location. For example, Krugman (1996, 1998) points out two sets of factors, which determine the location of an economic activity. While the first group includes traditional natural advantages of particular a location such as central location, market size, external economies, knowledge spillovers, etc., the second group comprises of market forces that includes all kinds of input costs and non-market factors such as pollution.

On the other hand, Carstensen and Toubal (2004) conclude that the traditional determinants like market potential, low relative unit labor costs, skilled workforce, corporate tax rates and relative endowments have significant impact on FDI. In addition, transition-specific factors, such as the level and method of privatization and country risks (i.e., legal, political and economic environment) play important roles in determining FDI inflows. Similarly, Frenkel, Funke and Stadtmann (2004) identify market size and distance, risks and economic growth in host countries as important and significant determinants of FDI inflows.

All the above mentioned studies draw a macro-level perspective or determinants that are likely to influence inflows of FDI. However, with the implementation of global and regional strategies by MNCs, the choice of location is increasingly gaining importance, hence necessitating a better understanding of the internalization process and of factors influencing the spatial distribution of FDI (Chidlow and Stephen, 2008). Thus, the state-level and regional-level studies help in exploring the determinants that are likely to explain the determinants of spatial distribution of FDI.

However, international experience of FDI suggests that infrastructure (both physical and social) may have significant impact on FDI decisions. Using a dataset of 18 Latin American countries over the period from 1995 to 2004 Quazi (2007) finds that better domestic investment climate, better quality of infrastructure, greater trade openness, higher return on investment, have significant influence on FDI inflows, whereas market size and human capital do not turn to be significant. Similarly, Kirkpatrick, Parker and Zhang (2006) identify infrastructure quality as one of the key determinants of FDI in

infrastructure sector variables in middle and low income countries during 1990-2002. However, the physical infrastructural variables (i.e. telephones lines per 1000 population and electricity generation per capita) are found to be negatively related (and in case of electricity supply statistically significant), confirming that FDI in infrastructure is made, *ceteris paribus*, to the countries having a greater need for additional infrastructure provision.

Hsiao and Shen (2003) analyze the factors affecting the distribution of FDI in China. The study identifies, along with infrastructure development, economic growth, predictable behavior from government institutions, their trustworthiness and commitment, and tax rates as the important factors in affecting FDI inflows. Chen (1996) examines the influence of regional characteristics in mainland China, such as the potential for market share extension, labour cost differences, allocative efficiency, transportation infrastructure, and research and development on the locational choice of foreign direct investment. Some other studies finding significant impact of physical and social infrastructure on FDI inflows include Globerman and Shapiro (2002), Noorbakhsh, Paloni and Youssef (2001)<sup>13</sup>, Abdul (2007), and Wheeler and Mody (1992). However, there are studies that do not find any significant relationship between infrastructure and FDI inflows. For example, Lheem and Guo (2004) do not find any significant impact of human capital on FDI distributions in China, rather geographical and historical conditions and economic growth in a region turn to be significant and deciding factors. More interestingly, it is observed that the determinants of regional distribution of FDI are different from those at the national level.

In Indian context also, a number of studies explain FDI inflows with infrastructure as one of the key factors. For example, Kumar (2002) find significant impact of physical infrastructure on FDI inflows in general and export oriented production for MNEs in particular. Similarly, Bajpai and Sachs (2000) point that poor quality infrastructure is one of the constraints for India in turning up into an attractive investment destination.

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<sup>13</sup>According to Noorbakhsh, Paloni and Youssef (2001), along with infrastructure other location specific determinants like market size and its growth also have significant impact on FDI inflows.

However, Pradhan (2008) observe a significant negative impact of infrastructure on FDI in India during 1970 to 2004, whereas Morris (2005) recognizes the importance of infrastructure and quality governance on FDI decisions. Some of the existing studies in Indian context attempt to explain inter-state differences in FDI inflows in terms of infrastructure. Using panel data regression models over the period 1991-2000, Archana (2006) finds that the variations across the states are caused by growth of market, gross capital formation, physical and social infrastructure. Similarly, Nunnenkamp and Stracke (2007) observe that along with various other structural characteristics inflows of FDI into a state are determined by availability of quality infrastructure and the level of education. The foreign investors prefer locations in India that are relatively advanced in terms of per capita income and infrastructure. Some other studies that find significant influence of infrastructure on distribution of FDI across Indian states include Majumdar (2005)<sup>14</sup>, Pal and Ghosh (2007).

Further, since 1990s, institutions are being considered as important determinants of FDI and economic growth. The business decisions may largely be influenced by the institutions in general and governance in particular. Efficient institutions and good governance raise confidence of the potential investors. For example, Dumludag (2009) identifies a wide range of institutional variables such as corruption, government stability, enforcement of contract law, functioning of judicial system, transparent, legal and regulatory framework, political and economic stability, intellectual property rights, efficiency of justice and prudential standards that have significant impact of institutions on FDI inflows in Turkey. Other variables having significant impact on FDI in Turkey include horizontal or market-seeking strategy, resource, efficiency and asset-seeking strategy<sup>15</sup>, market size, per capita GDP, and quality and integrity of public services. Similarly, Moore (1993), Tcha (1998) and Yang et al (2000) find significant influence of

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<sup>14</sup>According to Majumder (2005), the investors flock to those areas which are successful in expanding and augmenting basic infrastructure facilities.

<sup>15</sup> The variable horizontal strategy comprises of growth of the market, size of the market, penetration into a new market, anticipation of relatively high profits and to watch or forestall a competitor's motive. The indicators of resource, efficiency and asset-seeking strategy are cheap labor, export base for neighboring markets, availability of skilled labor, availability of industrial infrastructure, cost of transportation, innovative capacity, technological skills, technological adoptions and gaining access to raw materials.

industrial disputes and unionization on inward FDI, whereas Wei (1997) and Gastanaga et al. (1998) observe that FDI inflows are significantly influenced by corruption. In addition to corruption, Wei (1997) also finds significant impact of contract enforcement, nationalization and bureaucratic delays on FDI. Further, in a federal structure like India, the regional patterns of investment may to a large extent be influenced by the centre-state political relationships (Jenkins, 2003). Some other important institutional factors that have significant influence on FDI include political strikes and riots and regular constitutional changes by the government (Root and Ahmed, 1979; and Schneider and Frey, 1985). In Indian context also there are a few studies (e.g., Siddharthan, 2008; Morris, 2005) that attempt to explore the importance of good governance in attracting FDI. Some other studies that explore institutions-FDI relationships include Kirkpatrick, Parker and Zhang (2006) and Globerman and Shapiro (2002).

### **1.3 Emerging Research Issues**

#### ***1.3.1. Trends and Variations in FDI***

A proper understanding of inter-state variations in FDI inflows requires systematic examination of the trends in FDI in a particular state over the period of time as well as the variations in it across the states in each and every year during the period under consideration. Such an attempt is largely missing in most of the existing studies and wherever it is made, data on approved FDI is used. It is, therefore, necessary to assess the trends and variations in FDI inflows across Indian states systematically by using data of actual FDI inflows.

#### ***1.3.2 Infrastructure and FDI***

A number of studies (e.g., Wheeler and Mody, 1992; Chen, 1996; Noorbakhsh, Paloni and Youssef, 2001; Kumar, 2002 Banga, 2003; Moosa and Cardak, 2006; Quazi, 2007 and Rozas and Vadlamannati, 2009 etc.) find infrastructure as an important determinant of FDI inflows. It is observed that the countries or regions with better infrastructure have



greater FDI inflows as compared to those lacking necessary infrastructure facilities. For example, Wheeler and Mody (1992), Loree and Guisinger (1995), Chen (1996), Mody and Srinivasan (1998), Kumar (2002) and Abdul (2007) find positive influence of quality physical infrastructure on FDI inflows. Similarly, Banga (2003), Majumdar (2005), Archana (2006), Moosa and Cardak (2006), Siddharthan (2008) and Rozas and Vadlamannati (2009) etc. find both physical and social infrastructure as important determinants of inter-state variations in FDI inflows. As regards social infrastructure, while education is found to have significant influence on FDI inflows (e.g., Hansen, 1996; Noorbakhsh, Paloni and Youssef, 2001; Archana, 2006), the role of health infrastructure is not adequately explored except in a few studies like Globberman & Shapiro (2002) and Chakravorty (2003)<sup>16</sup>.

However, there are also studies that find only weak relationship between FDI inflows and infrastructure. For instance, Chakravorty (2003) finds little significance of infrastructure in determining the location or quantity of new industrial investment, whereas Kirkpatrick, Parker and Zhang (2006) and Pradhan (2008) find negative impact of the same on FDI inflows. Besides, Nunnenkamp and Stracke (2007) do not find any significant influence of electricity and education on FDI inflows across Indian states. Similarly, Root and Ahmed (1979), Lheem and Guo (2004), Quazi (2007) do not find human capital as a significant determinant of FDI.

Thus, although majority of the existing studies consider infrastructure an important determinant of FDI inflows, there is no consensus on this issue. The differences in findings may be contributed to the differences in types of data, methods of analysis, selection of components in defining infrastructure, choice and defining of other variables, choice of timeframe, etc. Further, the relationship between infrastructure and FDI depends largely on the nature of investment. For example, a significant portion of FDI inflows into India in the post-reform era were in the form of M&As and when it is so, infrastructure may not necessarily be a per-condition. This is so because in case of

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<sup>16</sup> Chakravorty (2003) considers infant mortality rate as a measure of social infrastructure, however, does not distinctly specify it as a measure of health infrastructure.

Greenfield investments new projects are set up, and therefore, availability of infrastructure facilities is likely to have an influence on the foreign investor's choice of a particular location. On the other hand, in case of M&As, availability of infrastructure facilities as a locational factor may not be of much importance, as such investments take place only in existing enterprises, though the requirement of the minimum level of infrastructure development for a region to attract FDI cannot be ignored, even when the existing firms use the route of M&As to grow<sup>17</sup>. Further, FDI through acquisition forces the investor to invest in a state where the target firm located, and such a state may not necessarily be a favourable destination for investment, when availability of infrastructure is concerned. In other words, FDI through acquisition is likely to be influenced by compulsion not by choice of locational advantage.

Nature and extent of infrastructure requirement is also largely industry specific. In other words, all the industries do not require similar infrastructure facilities. It is well evident from the sector-wise distribution of FDI inflows<sup>18</sup> that the top three sectors attracting major portion of FDI inflows during 2000-05 include computer software and hardware, services and telecommunication. These sectors do not require road or railway related infrastructure to attract greater FDI inflows. Instead, foreign investment in telecommunication results in expansion and development of communication infrastructure. Therefore, infrastructure-FDI relationship in a state is likely to be influenced largely by industry wise distribution of investment inflows therein and depending on this industry wise distribution, availability of various infrastructure facilities may not arise as a necessary condition for FDI inflows into a state even if the investments are Greenfield in nature. It is observed that the key sectors attracting FDI into Maharashtra energy, transportation, services, telecommunication and electrical equipment. This means that FDI inflows into Maharashtra are mostly either in service providing sectors or for development of infrastructure. The same can be said in case of Delhi as well. It has attracted FDI inflows primarily in sectors like telecommunications,

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<sup>17</sup> There is also a need for the developing countries to reach a certain level of educational, technological and physical infrastructure to reap the benefit from the presence of foreign enterprises in market (OECD, 2002).

<sup>18</sup> The details on sector-wise FDI inflows are available in SIA Newsletter, Department of Industrial Policy and Promotion, Government of India ([www.dipp.nic.in](http://www.dipp.nic.in)).

transportation, electrical equipment (including software), and services (Ranjan et al., 2008). Hence, availability of physical infrastructure facilities may not become a precondition for FDI inflows into Maharashtra and Delhi.

Besides, on many occasions, the foreign investors may create their necessary infrastructure facilities on their own instead of depending on public stock. It is also evident that in a developing country like India a large portion of FDI is directed towards developing facilities, especially when domestic investment is not sufficient enough to meet requirements. In such cases, the state infrastructure is not a cause but an effect of FDI inflows. Further, in many cases, the mobility of human resources nullifies the impact of education and health infrastructure on FDI inflows. All these possibilities restrict generalization of infrastructure-FDI relationship and create the necessity of reexamining the same in Indian context.

### ***1.3.3 Profitability, Risk, R&D and FDI***

The review of the existing studies shows that the inter-state variations in FDI inflows may not necessarily be caused by availability of infrastructure facilities. Even when infrastructure influences location decisions, performance of the existing enterprises and domestic investment may also play a crucial role in attracting investment by a particular state. In other words, in addition to infrastructure, regional differences in FDI inflows should also be analyzed from the investors' perspective. As FDI is generally considered as 'stock', the stream of returns in the long-run largely influences decisions on investment in a particular state (Moosa, 2002). The investors usually flock where they expect greater profitability. In addition, since many of the investors are risk-averse, the decisions on investment may also be influenced by risks of investment (Moosa, 2002). This proposition is based on the portfolio diversification hypothesis of Tobin (1958) and Markowitz (1959). According to this hypothesis, investment decisions are guided not only by the expected rate of return but also by the risks. These risks may be linked to the legal, political and economic environment and can turn out to be a significant deterrent to FDI inflows (Cartstensen and Toubal, 2003). Further, on many occasions, the decisions

on FDI may be irreversible involving huge sunk costs like R&D<sup>19</sup>. Hence, careful planning and evaluation on expected returns of alternative investment locations are carried out by the prospective foreign investors before making investment decision in a specific state. Existing literature do not adequately explore the influence of profitability and risks of investment on FDI inflows.

#### ***1.3.4 Domestic Investment and FDI***

According to Apergis et al. (2006), there are two channels through which domestic investment can influence FDI. On the one hand, domestic investment may be directed towards building physical and social infrastructure that would attract FDI. More domestic investment may also signal better business environment at the local level and this may encourage foreign investors to invest. This is particularly so when there is incomplete information and the foreign investors perceive that domestic investors have more accurate information relating to the local business climate.

There are a number of studies that examine the influence of inflows of FDI on domestic investment, though the nature of impact is inconclusive in the literature. For example, while Fry (1992), De Mello (1999), Lipsey (2000), Agosin and Mayer (2000), Kim and Seo (2003) and Titarenko (2006) find FDI as a substitute of domestic investment, Borensztein et al. (1998), De Mello (1999), Agosin and Mayer (2000), Krkoska (2001) and Changyuan (2007) observe complementarities between the two. However, studies examining the influence of domestic investment on inflows of FDI are scarce. Some important studies that find domestic investment as an important determinant of FDI include Hecht, Gad and Shinar (2004), Apergis et al. (2006) and Quazi (2007). The findings of these studies are based on the proposition that domestic investment signals future profitability for the foreign investors. However, when the market size is given, larger domestic investment may reduce the scope for FDI it may not have any significant impact on the same. For example, Harrison and Revenga (1995) do not observe any impact of domestic investment on FDI. This creates the necessity of controlling the

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<sup>19</sup> R&D sets technology frontier which is likely to influence FDI inflows.

impact of domestic investment while examining infrastructure-FDI relationship. But, such an attempt is largely absent in the existing studies.

### ***1.3.5 Institutions and FDI***

Business decisions may largely be influenced by the institutional factors like governance, business environment, political structure, etc. Efficient institutions are expected to raise confidence of the potential investors. Although a number of the existing studies (e.g., Schneider and Frey, 1985; Edwards, 1990; Wheeler and Mody, 1992; Loree and Guisinger, 1995; Hanson, 1996; Jaspersen et al, 2000; Globerman & Shapiro, 2002; Banga, 2003; Kirkpatrick et. al., 2006; Abdul, 2007; Duumludag, 2009, etc.) attempt to explain FDI inflows in terms of institutional factors, the nature of relationship is not very clear. For example, Schneider and Frey (1985) and Edwards (1990) find that political instability reduces FDI inflows. On the other hand, Loree and Guisinger (1995), Hanson (1996) and Jaspersen et al (2000) do not find any significant relationship between political instability and FDI inflows. Similarly, Abdul (2007) does not find any significant impact of corruption on FDI inflows. Further, the existing studies are mostly country specific and, therefore, influence of institutions on FDI inflows at the state level has remained largely unexplored, especially in Indian context. This requires examining role of institutions in inter-state variations in FDI.

### **1.4 Objectives**

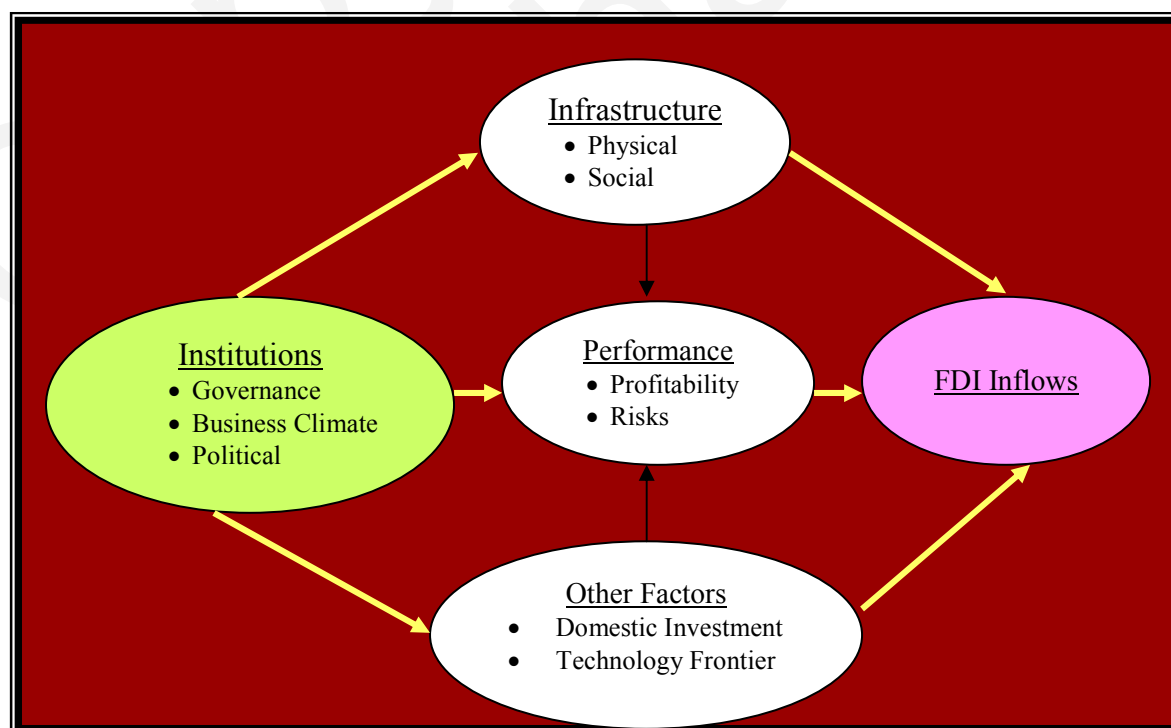
The basic objectives of the present study are the following:

- To examine the trends and variations in FDI inflows as well as that of physical and social infrastructure facilities across different groups of Indian states.
- To examine the role of infrastructure as a determinant of variations in FDI inflows across groups of Indian states controlling the influence of profitability, risks of investment, research and development intensity and domestic investment.
- To understand institutions-FDI inflows relationships in Indian states.
- To make appropriate policy suggestions that can reduce disparities in FDI inflows across the group of states.

It is observed that the amount of FDI inflows increased significantly during April 2000 to May 2009 vis-à-vis that during August 1991 to March 2000. As much as 87 percent of the total FDI equity inflows into the country during August 1991 to May 2009 were drawn during April 2000 to May 2009 (Table- 1.2 of Appendix- A). Besides, during this period India has moved along the high growth trajectory aiming at double digit growth rate in near future. So, the present study concentrates on analyzing the trends and patterns of FDI inflows during the current decade.

### 1.5 Analytical Framework

The present study addresses the above research objectives on the basis of the following analytical framework. Following the review of literature, the determinants of inward FDI are broadly classified into four groups, such as, availability of infrastructure facilities, financial performance of the existing enterprises, institutions and other factors like domestic investment and technology frontier. Here, infrastructure captures the route of FDI and nature of the industry, whereas performance controls ability and willingness of the investors. On the other hand, technology frontier and domestic investment signal scope for investment in a state and institutions stand for governance, business environment and political structure existing therein.



It is assumed that inter-state variations in FDI inflows are caused by availability of infrastructure facilities, financial performance of the existing enterprises and other factors like extent of domestic investment and the level of the technology frontier in the state. Here, infrastructure includes both physical (i.e., transport and communication, power supply etc.) and social infrastructure (i.e., education and health). Similarly, financial performance of the existing enterprises comprises of level of profitability and its variability. Variability in profitability is considered as a proxy for risks of investment. It is further assumed that various aspects of institutions like governance, business environment and political structure also have influence on FDI inflows. But, while infrastructure, business performance and other factors have direct impact on FDI, institutions affect investment indirectly. The institutional factors determine the FDI inflows via the state of infrastructure, business performance of the existing firms, extent of domestic investment and technology frontier. In other words, the analytical frame of the present study assumes that institutions affect infrastructure, business performance, domestic investment and technology frontier which in turn influence FDI inflows.

The analytical framework of the present study, therefore, considers business performance of the existing firms captured in terms of the level of profitability and its variability as the key determinants of FDI inflows into a state. The business performance of the firms, in turn, is determined by availability of infrastructure facilities, technology frontier, domestic investment and institutions. Hence, when the profitability of the existing enterprises is high or its variability is low in a state, it signals quality infrastructure, better technology frontier, business friendly environment, good governance, and stable political situation available therein. All these raise the willingness of the potential investors to invest in such a state.

## **1.6 Methodology**

In order to address the research objectives mentioned above, the present study employs the following methodologies:

**Objective 1:** To examine the trends and variations in FDI inflows as well as that of physical and social infrastructure facilities across different groups of Indian states.

The present study examines the trends and variations in FDI inflows as well as that of different components of physical and social infrastructure facilities by applying descriptive statistics, e.g., arithmetic mean, coefficient of variations and trend growth rates. However, measuring the infrastructure facilities available is a critical issue in empirical research. This is so because there are many aspects of infrastructure, such as road and railway network, ports, airports, telecommunication network, information infrastructure, energy availability, education and health facilities, etc. Although many of these indicators are correlated amongst themselves (Canning, 1998), a particular component may not capture the overall infrastructure adequately. For example, a state may have a very good network of roads but a telecommunication infrastructure may not be so good. Hence, capturing different aspects of infrastructure adequately requires a comprehensive measure.

Given that a comprehensive measure of infrastructure is not available, in empirical research generally attempts are made to develop a composite index by using the principal component analysis or factor analysis. The present study applies factor analysis to construct measures of infrastructure that can adequately capture three important aspects of infrastructure, namely, transport and communication, education and health. It should be mentioned that though both factor analysis (FA) and principal component analysis (PCA) are amongst the best practices of extraction in social science research, there is a debate regarding their choices. While Bentler & Kano (1990), Floyd and Widaman (1995), Ford, MacCallum and Tait (1986), Gorsuch (1990), Loehlin (1990), MacCallum and Tucker (1991), Mulaik, (1990), Costello and Osborne (2005), and Snook and



Gorsuch (1989) consider factor analysis more appropriate, Arrindell and Van der Ende (1985), Guadagnoli and Velicer (1988), Schoenmann (1990), Steiger (1990), Velicer and Jackson (1990) find either that there is no difference between the two methods or prefer principal component analysis.

However, the present study considers factor analysis more appropriate as compared to PCA. This is so because the latter is simply a data reduction method where the computations are made ignoring the underlying structure caused by latent variables, the components are estimated on the basis of all the variance of the manifest variables and all of that variance are found in the solution itself (Ford et al., 1986). On the other hand, factor analysis aims not only to reveal any latent variables that cause the manifest variables to covary, but also can discriminate between shared and unique variance (Costello and Osborne, 2005 and Garson, 2010). In other words, during factor extraction the shared variance of a variable is partitioned from its unique variance and error variance. Further, factor analysis is a correlation-focused approach and it is possible to add variables to the model without affecting factor loadings, whereas principal component analysis is a variance focused approach and adding variables to the model change the factor loadings (Garson, 2010). Hence, factor analysis is more flexible vis-à-vis principal component analysis.

This helps in understanding the state of infrastructure in a comprehensive way and relating the same to FDI inflows. It should be mentioned that while the trends and variations in FDI inflows are examined for the period of 2001-02 to 2005-06, that of infrastructure is assessed for the period from 1999-00 to 2003-04. Introduction of this time-lag helps in incorporating coinstantaneous relationship between infrastructure and FDI inflows and hence eliminates the possibility of simultaneity in the envisaged relationship.

**Objective 2:** To examine the role of infrastructure as a determinant of variations in FDI inflows across groups of Indian states controlling the influence of profitability, risks of investment, research and development intensity and domestic investment.

In order to address Objective 2, the present study first frames a theoretical model on the determinants of FDI inflows and then empirically examines the validity of the same. Panel data analysis is carried out for sixteen groups of Indian states over the period of five years. Applicability of panel data analysis vis-à-vis pooled regression is confirmed on the basis of Restricted-F Test and Breusch and Pagan Lagrange Multiplier Test. Further, selection of appropriate panel data model (i.e., fixed effects model vs. random effects model) is made on the basis of Hausman Specification Test.

**Objective 3:** To understand institutions-FDI inflows relationships in Indian states.

The present study explores institutions-FDI inflows relationships in Indian states on the basis of the assumption that institutions affect FDI inflows via performance of the firms. Here, four different dimensions of institutions are captured, such as, law and order, transparency and accountability, business environment and political structure. The study uses crime as a proxy for law and order, corruption for transparency and accountability, industrial disputes for business environment, and centre-state political relationships and stability of the state government for political structure. First, the states are ranked for different dimensions of institutions by using appropriate measure. Next, simple regression analysis is carried out for nineteen Indian states to examine the proposition that institutional factors affect FDI inflows via performance of the existing firms.

### **1.7 Data Structure**

The necessary data are collected from a variety of sources. In case of FDI, the most easily available and widely used data in India are on approved FDI. Such FDI data are available across sectors, by country of origin and at state level. On the other hand, the data on actual inflows of FDI are available under five broad categories, that is, FDI following (i) automatic approval route of the Reserve Bank of India (RBI) for equity holding up to 51 percent, (ii) discretionary approval route of the Foreign Investment Promotion Board (FIPB) for larger projects with equity holding greater than 51 percent, (iii) acquisition of shares (iv) investment schemes of the RBI for the non-resident Indians (NRIs), and (v)

external commercial borrowing .i.e. through American depository receipts (ADRs) or global depository receipts (GDRs) (Nagraj, 2003).

However, since 2000 onwards, year-wise data on actual FDI inflows are available that are compiled following the best practices at the international level. This database consists of data on FDI inflows according to the country of origin and across sectors on the basis of amount of inflows received through FIPB/SIA, RBI's automatic route, and acquisition of existing shares. On the other hand, this database provides information on inflows of FDI across regions. Here, many of the states are grouped according to the jurisdiction of the RBI's regional offices. In other words, unlike the data on approved FDI that is available at state level, the data on actual FDI for many of the states are available only at the group level. Besides, the region wise data on FDI inflows include investment in equity capital only.

Accordingly, the present study uses data on FDI inflows for eleven groups of Indian states<sup>20</sup>. Here, Maharashtra includes Dadar Nagar Haveli and Daman & Diu, Tamil Nadu includes Pondicherry, Kerala includes Lakshadweep, Uttar Pradesh includes Uttaranchal, Bihar includes Jharkhand, Madhya Pradesh includes Chhattisgarh, North-Eastern region includes Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, West Bengal includes Sikkim, Andaman & Nicobar Islands, Chandigarh includes Punjab, Haryana and Himachal Pradesh, and Delhi includes a part of Uttar Pradesh and Haryana. However, for Andhra Pradesh, Gujarat, Rajasthan, Orissa, Goa and Karnataka data on FDI inflows are available at the state level.

The data on different aspects of infrastructure such as railway density, road density, number of telephone lines, population and vehicle density are collected from the Economic Intelligence Service of the Centre for Monitoring Indian Economy (CMIE), Mumbai. On the other hand, data on birth rate, death rate, infant mortality rate, number of teachers, enrollment of students, educational institutions and inflows of FDI are

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<sup>20</sup> However, in the present study, a group of states is treated as an individual state for analytical convenience.

collected from [www.indiastat.com](http://www.indiastat.com). This database also provides information on industrial disputes and crimes. Data on approved Industrial Entrepreneurs Memorandum (IEM) and Letter of Intent (LOI) are sourced from [www.dipp.nic.in](http://www.dipp.nic.in). The data on profits and output for Indian states are compiled from [www.mospi.gov.in](http://www.mospi.gov.in), whereas that on state gross domestic product is collected from [www.rbi.org.in](http://www.rbi.org.in). The information on corruption is sourced from the report on Tracking Corruption in India 2005 of Centre of Media Studies, New Delhi and that on centre-state political relationship and stability of the state government are compiled from [www.indiastat.com](http://www.indiastat.com).

### 1.8 Organization of the Thesis

The thesis is divided into five chapters. Chapter I is introductory that sets the context of the study, reviews literature critically, highlights the emerging research issues and broad research objectives of the present study, develops an analytical framework to address the research objectives, and mentions the methodologies applied to deal with these objectives along with the sources of data and other necessary information. Chapter II examines the trends and variations of FDI inflows as well as infrastructure facilities available across different groups of Indian states. An attempt is also made to explore infrastructure-FDI linkages in this chapter. Chapter III attempts to examine the role of infrastructure in variations in FDI inflows across the group of states controlling impact of other determinants of FDI. First a theoretical model on determinants of FDI is framed and then the validity of this theoretical model is tested through regression analysis. The role of institutions on state-specific investment decisions are examined in chapter IV. In this chapter, the states are ranked on various aspects of institutions to understand their relative position. Next, the role of institutions is examined by applying regression analysis. Chapter V summarizes the major findings of the study, and suggests necessary policy measures towards reducing disparities in FDI inflows across the states. Chapter V also points out the main contributions of this study along with its limitations and also the future scope in this area.