Chapter 1

Foreign Direct Investment in India and Research Design

1.1 Introduction

The Indian economy is the world's eleventh-largest by nominal GDP (IMF2011) and third-largest by purchasing power parity (PPP). Following market-based economic reforms in 1991, India became one of the fastest-growing major economies; it is considered a newly industrialised country. India opened up the economy in the early nineties following a major crisis of foreign exchange and was close to defaulting on loans. The response was a slew of domestic and external sector policy measures partly prompted by the immediate needs and partly by the demand of the multilateral organisations. The new policy regime radically pushed forward in favour of a more open and market-oriented economy.

Major measures initiated as a part of the liberalisation and globalisation strategy in the early nineties included scrapping of the industrial licensing regime, reduction in the number of areas reserved for the public sector, amendment of the monopolies and the restrictive trade practices act, the start of the privatisation programme, reduction in tariff rates and change over to market-determined exchange rates.

Over the years there has been a steady liberalisation of the current account transactions, more and more sectors opened up for foreign direct investments and portfolio investments facilitating the entry of foreign investors in telecom, roads, ports, airports, insurance and other major sectors.

1.2 Globalisation

Globalisation is the new buzzword that has come to dominate the world since the nineties of the last century with the end of the cold war and the break-up of the former Soviet Union and the global trend towards the rolling ball. The frontiers of the state with increased reliance on the market economy and renewed faith in the private capital and resources, a process of structural adjustment spurred by the studies and influences of the World Bank and other International organisations have started in
many of the developing countries. Also, Globalisation has brought in new opportunities to developing countries.

Greater access to developed country markets and technology transfer hold out promise improved productivity and higher living standard. But globalisation has also thrown up new challenges like growing inequality across and within nations, volatility in financial market and environmental deteriorations. Another negative aspect of globalisation is that a great majority of developing countries remain removed from the process.

Till the nineties the process of globalisation of the Indian economy was constrained by the barriers to trade and investment. Liberalisation of trade, investment and financial flows initiated in the nineties progressively lowered the barriers to competition and hastened the pace of globalisation

1.2.1 India: A Latecomer in terms of Globalisation

India clearly lags in globalisation. Many countries have a clear lead among them China, large part of east and far east Asia and Eastern Europe. Let’s look at a few indicators how much India lags.

- Over the past decade FDI flows into India have averaged around 1% of GDP against 5% for China 5.5% for Brazil. Now, FDI inflows into China exceed US$ 100 billion annually. It is only US$ 25 to 40 billion annually in the case of India.
- Consider global trade - India's share of world merchandise exports increased from 0.05% to 1.25% over the past 20 years. Over the same period China's share has tripled to almost 10%.
- India's share of global trade is similar to that of the Philippines an economy 6 times smaller according to IMF estimates. India under trades by 70-80% given its size, proximity to markets and labour cost advantages.
- As Amartya Sen and many other have pointed out that India, as a geographical, politico-cultural entity has been interacting with the outside world throughout history and still continues to do so. It has to adapt, assimilate and contribute. This goes without saying even as we
move into what is called a globalised world which is distinguished from previous eras from by faster travel and communication, greater trade linkages, denting in political and economic sovereignty and greater acceptance of democracy as a way of life.

1.3 Major Components of Financial Flows

Financial flows can be put into four categories (i.e.) Private Debt flows, Official Development Assistance, Foreign Portfolio Investment and foreign Direct Investment.

1.3.1 Private Debt Flows

They are comprised of bonds, bank loans and other credits issued or acquired by private sector enterprises in a country without any public guarantee.

1.3.2 Official Development Finance

It consists of Official Development Assistance (ODA) and other official flows –

i. Official Development Assistance: ODA consists of net disbursements of loans and grants made on concessional terms by official agencies of the members of the Development Assistance Committee (DAC) and certain Arab countries to promote economic development and welfare in recipient economies that are listed as developing by the DAC. Loans with a grant element of more than 25 percent are included in ODA. ODA also includes technical co-operation and assistance.

ii. Other Official Flows: These are transactions by the official sector whose main objective is other than development or whose grant element is less than 25 percent such as official export credits, official sector equity and portfolio investment and debt re-organisation undertaken by the official sector on non-concessional terms.FII flows

1.3.3 Foreign Portfolio Investment

Foreign portfolio investment involves –

i. Purchase of existing bonds and stocks with the sole objective of obtaining dividends or capital gains.
1.3.4. Foreign Direct Investment

FDI stands for Foreign Direct Investment, a component of a country's national financial accounts. Foreign direct investment is the investment of foreign assets into domestic structures, equipment, and organizations. It does not include foreign investment into the stock markets. Foreign direct investment is thought to be more useful to a country than the investments in the equity of its companies because equity investments are potentially "hot money" which can leave at the first sign of trouble, whereas FDI is durable and generally useful whether things go well or badly.

1.3.4.1 Foreign Direct Investment-IMF definition

According to the International Monetary Fund, foreign direct investment, commonly known as FDI, “... refers to an investment made to acquire lasting or long-term interest in enterprises operating outside of the economy of the investor.” The investment is direct because the investor, which could be a foreign person, company or group of entities, is seeking to control, manage, or have significant influence over the foreign enterprise.

Direct investment is assumed to have occurred when an investor has acquired 10 percent or more of the voting power of a firm located in a foreign economy (IMF 2004a).

FDI is a major source of external finance which means that countries with limited amounts of capital can receive finance beyond national borders from wealthier countries. Exports and FDI have been the two key ingredients in China's rapid economic growth. According to the World Bank, FDI and small business growth are the two critical elements in developing the private sector in lower-income economies and reducing poverty.

1.3.5 Capital formation: importance of FDI

Capital formation is a term used in national accounts statistics and macroeconomics. It is sometimes also used in corporate business accounts. It basically refers to the net
additions to the (physical) capital stock in an accounting period, or, to the value of the amount of increase of the capital stock; though it may occasionally also refer to the (growth of the) total stock of capital formed.

Thus, in UNSNA, capital formation equals fixed capital investment, the increase in the value of inventories held, plus (net) lending to foreign countries, during an accounting period. Capital is said to be "formed" when savings are used for investment purposes, often investment in production.

In a broader meaning or vaguer sense, capital formation is nowadays also used to refer to savings drives, setting up financial institutions, fiscal measures, public borrowing, development of capital markets, privatization of financial institutions, development of secondary financial markets. In this broad sense, it refers to any method for increasing the amount of capital owned or under one's control or any method in utilising or mobilizing capital resources for investment purposes. Thus, capital could be "formed" in the sense of "being brought together for investment purposes" in many different ways.

Nowadays FDI becomes an important source apart from savings within the country in terms of capital formation. Every developed or developing country is looking for quality foreign direct investment. Since FDI brings sustainable development in that region and creates a series of follow up economic activities. Without the influence of FDI, many countries including US, China can’t grow at a rapid pace.

1.4 US is the largest destination of FDI
Because the US is the world's largest economy, it is a target country for foreign direct investment from rest of the world and it is also a large investor across the world. American origin companies invest in different projects and subsidiary companies all over the world. Even though the US economy has been in recession, the US is still a relatively safe haven for investment. Enterprises representing rest of the world has invested $228 billion dollars in the US in the year 2010 according to the UNCTAD.
1.4.1 India in Attracting Investment Flows

The cumulative amount of FDI equity inflows from April 2000 to December 2010 stood at US$ 186.79 billion, according to the data released by the Department of Industrial Policy and Promotion (DIPP).

The services sector comprising financial and non-financial services continuously attracts more than 21 per cent of the total FDI equity inflow into India, while telecommunications including radio paging, cellular mobile and basic telephone services attracted second largest amount of FDI. Automobile industry was placed third in attracting FDI and followed by power sector.

Mauritius continues to maintain lead position in investing in India followed by Singapore and the US according to data released by DIPP.

1.4.2 AT Kearney Report 2010

Following are the major findings of the 2010 FDI Confidence Index survey, which tracks the impact of likely political, economic and regulatory changes on the foreign direct investment intentions and preferences of the leaders of top companies around the world. With responses from executives from 44 countries and 17 industry sectors, the survey offers a unique window into present and future prospects for international investment flows.

A.T. Kearney released its last Foreign Direct Investment Confident index, the global economy faced unprecedented turmoil – a housing market collapses a banking system teetering on the edge, rising unemployment and falling sales across almost all industries. In the 2010 FDI confident index, it has examined the future prospects for international investment flows in the context of these tumultuous times. While conditions have improved, senior executives at the world’s large companies remain wary of investing during the current climate and few expect a full turnaround before 2011.
Table 1.1  A.T. Kearney FDI Confidence Index (Top Ten Countries)
Scale 0-3 (0-less confidence, 3- High Confidence)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2007</th>
<th>2010</th>
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<tbody>
<tr>
<td>China</td>
<td>2.03</td>
<td>China</td>
<td>2.21</td>
</tr>
<tr>
<td>United States</td>
<td>1.45</td>
<td>India</td>
<td>2.09</td>
</tr>
<tr>
<td>India</td>
<td>1.4</td>
<td>United States</td>
<td>1.86</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.25</td>
<td>United Kingdom</td>
<td>1.81</td>
</tr>
<tr>
<td>Germany</td>
<td>1.17</td>
<td>Hong Kong</td>
<td>1.78</td>
</tr>
<tr>
<td>France</td>
<td>1.03</td>
<td>Brazil</td>
<td>1.78</td>
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<tr>
<td>Australia</td>
<td>1</td>
<td>Singapore</td>
<td>1.75</td>
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<tr>
<td>Hong Kong</td>
<td>0.99</td>
<td>United Arab Emirates</td>
<td>1.72</td>
</tr>
<tr>
<td>Italy</td>
<td>0.98</td>
<td>Russia</td>
<td>1.7</td>
</tr>
<tr>
<td>Japan</td>
<td>0.97</td>
<td>Germany</td>
<td>1.7</td>
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</tbody>
</table>

Source: AT Kearney FDI confidence reports 2001, 2007 and 2010

Amid the economic downturn for the past two years, several emerging markets remain attractive to foreign investors. China, India and Brazil are in the top five of the 2010 Foreign Direct Investment (FDI) Confidence Index, while emerging markets with large consumer bases, such as Indonesia and Vietnam, also rank high. However, some smaller, more open emerging economies dropped in the rankings. For example Hong Kong, a globalized economy according to the A.T. Kearney Globalization Index, fell to 14th position.

In Asia, investors are confident about China and India, the 1st- and 3rd-ranked countries, respectively, but the more advanced economies, Japan and South Korea, both falls out of the Index for the first time since its inception in 1998. Meanwhile, Brazil continues to benefit from strong demand for major commodities such as iron ore and soybeans and sound economic management, and the largest economy in Latin America now ranks as the 4th most attractive destination for FDI.

Higher Index values indicate more attractive investment targets. Since the inception of
the FDI Confidence Index in 1998, the 10 most attractive FDI destinations have consistently received 40 percent or more of global FDI inflows roughly one year after the survey. Over the same period, on average, the top five countries captured 35 percent of global FDI inflows. There is an even stronger correlation between the Index rankings and future bricks-and-mortar FDI, especially after correcting for anomalies, such as those stemming from tax havens.

As per Table 1.1 India becomes a great investment destination for the last 10 years and for the future also. India ranks 2nd/3rd position for the last 10 years. Executives of Multi National companies / Transnational Companies reposed confidence on India for their future endeavours.

1.4.3 UNCTAD FDI Performance and Potential Index
UNCTAD ranks countries by their Inward FDI Performance and Inward FDI Potential Indices. 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 “underperformers”.

India’s FDI Performance Index in 2010 ranked at 97 (China was 86) out of 141 countries. However, it had a relatively high FDI Potential Index at 86 (China is 27) in the year 2009. India’s outward FDI Performance Index in 2007 was also high at the 50th position (China was 59th).
1.4.4 Other Studies

Present studies from different institutions positioned India as most attractive location and second best investment destination.

- India was ranked at the second place in global foreign direct investments in 2010 and will continue to remain among the top five attractive destinations for international investors according to United Nations Conference on Trade and Development (UNCTAD) in a report on world investment prospects titled, 'World Investment Prospects Survey 2009-2012'.
- The 2010 survey of the Japan Bank for International Cooperation released in December 2010, conducted among Japanese investors, continues to rank India as the second most promising country for overseas business operations.
- A report released in February 2010 by Leeds University Business School, commissioned by UK Trade & Investment (UKTI), ranks India among the top three countries where British companies can do better business during 2012-14.
- According to Ernst and Young's 2010 European Attractiveness Survey, India is ranked as the 4th most attractive foreign direct investment (FDI) destination in 2010. However, it is ranked the 2nd most attractive destination following China in the next three years.
- Moreover, according to the Asian Investment Intentions survey released by the Asia Pacific Foundation in Canada, more and more Canadian firms are now focusing on India as an investment destination. From 8 per cent in 2005, the percentage of Canadian companies showing interest in India has went up to 13.4 per cent in 2010.
### 1.4.5 Reasons behind ‘advantage to India’ in attracting FDI (Refer Box No.1)

**Box No.1: Reasons behind ‘advantage to India’ in attracting FDI**

- World's largest democracy with 1.2 billion people.
- Stable political environment and responsive administrative set up.
- Well-established judiciary to enforce rule of law.
- Land of abundant natural resources and diverse climatic conditions.
- Rapid economic growth: GDP to grow by 8.5% in 2010-11
- India's growth will start to outpace China's within three to five years and hence will become the fastest large economy with 9-10% growth over the next 20-25 years (Morgan Stanley).
- Investor-friendly policies and incentive based schemes.
- Second most attractive Foreign Direct Investment (FDI) location in the world: India received a total of US$ 25.9 billion of FDI in 2009-10.
- Healthy macro-economic fundamentals: Investment rate was expected to be 37% in 2010-11 and 38.4% in 2011-12 while Domestic Savings rate was expected to be 34% in 2010-11 and 36% in 2011-12.
- India's economy will grow fivefold in the next 20 years (McKinsey).
- Cost competitiveness; low labour costs.
- Total labour force of nearly 530 million.
- Large pool of skilled manpower; strong knowledge base with significant English speaking population.
- Young country with a median age of 30 years by 2025: India's economy will benefit from this "demographic dividend".
- The proportion of population in the working age group (15-59 years) is likely to increase from approximately 58% in 2001 to more than 64% by 2021.
- Huge untapped market potential.
- The urban population of India will double from the 2001 census figure of 290m to approximately 590m by 2030 (McKinsey).
- Progressive simplification and rationalization of direct and indirect tax structures and Reduction in import tariffs.
- Full current account convertibility and Compliance with WTO norms.
- Robust banking and financial institutions.
1.4.6 Basic Facts about India (Refer Box No.2)

Box No.2: Basic Facts about India

<table>
<thead>
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<th>India.....</th>
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<tbody>
<tr>
<td>• is the world's second largest small car market</td>
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<td>• is one of only three countries that makes its own supercomputers</td>
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<td>• is one of six countries that launches its own satellites</td>
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<td>• one hundred of the Fortune 500 have R &amp; D facilities in India</td>
</tr>
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<td>• has the second largest group of software developers after the U.S.</td>
</tr>
<tr>
<td>• lists 6,500 companies on the Bombay Stock Exchange (only the NYSE has more)</td>
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<tr>
<td>• is the world's largest producer of milk, and second largest producer of food, including fruits and vegetables</td>
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<td>• is a economic power, with growth over the past few years averaging 8%</td>
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<td>• is the world's fourth largest economy, based on purchasing power parity</td>
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<tr>
<td>• sends more students to the USA colleges than any other country in the world (Every year around 100000 Indian students enrolled in the USA.)</td>
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<td>• has the world's second largest pharmaceutical industry after China</td>
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<td>• has a middle class estimated at 300 million out of a total population of 1.2 billion</td>
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<td>• with its large base of English speaking skilled human resource, it is most sought after destination for business process outsourcing, Knowledge processing etc.</td>
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<tr>
<td>• is the second largest English-speaking scientific, technical and executive manpower in the world</td>
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<tr>
<td>• produces more than 900 movies a year - significantly more than the USA</td>
</tr>
<tr>
<td>• has become increasingly attractive to foreign investors in various sectors</td>
</tr>
<tr>
<td>• its low costs and huge, English-speaking, workforce have made it popular with multinationals for work including manufacturing and call centers.</td>
</tr>
<tr>
<td>• provides many tax exemptions to companies set up in SEZs</td>
</tr>
<tr>
<td>• provides many tax incentives available to IT companies, business process outsourcing and KPO companies</td>
</tr>
<tr>
<td>• has a stable political system based on parliamentary democracy</td>
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<tr>
<td>• has a common law legal system with English as a court language</td>
</tr>
<tr>
<td>• is emerging as a major market and investment destination.</td>
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</table>
India is the largest country in South Asia and the seventh largest in the world. China, Nepal and Bhutan are the neighboring countries in the north, Bangladesh and Burma in the east and Pakistan and Afghanistan in the west. In the south the country tapers off into the Indian Ocean. Box No.1 and Box No.2 disseminates facts about India which also influences FDI directly as well as indirectly. India was committed to a free economy after having an economy controlled by licensing until 1991. India has become a member of the WTO and is disbanding quantitative restrictions on imports.

1.4.7 Policy Liberalisation of India to attract FDI

India has liberalised the Industrial policies and invest policies from time to time to attract investments into the country.

**Box No. 3: Liberalisation of FDI policy**

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<tr>
<td>Allowed selectively up to 40 percent</td>
<td>Up to 51 percent under “Automatic Route” for 35 priority sectors</td>
<td>Up to 74 / 51 / 50 percent in 111 sectors under “Automatic Route”, 100 percent in some sectors</td>
<td>Up to 100 percent under Automatic Route’ in all sectors except a small negative list</td>
<td>More sectors opened, equity cap raised, conditions relaxed, foreign exchange management</td>
<td></td>
</tr>
</tbody>
</table>

Compiled from notifications of DIPP

The major decisions belonging to pro-liberalisation are given in the Box No.3 in chronological order. These changes have created confidence in foreign investors resulted in large scale investments and other financial flows in to the country. However there is temporary slowdown in decision making in allowing FDI in retail sector, domestic aviation etc.

1.4.8 Arguments For and Against Capital Flows

Capital flows includes Foreign direct investment, foreign portfolio investment, foreign capital raised through ADRs/GDRs, foreign debt raised through ECBs, FCCBs etc.

According to Mr. D. Subba Rao, Reserve Bank Governor expressed the following arguments. The theoretical arguments in support of capital flows are quite persuasive. Capital flows aid growth by providing external capital to sustain an excess of investment over domestic savings. By affording the opportunity of using the world
market, an open capital account permits both savers and investors to diversify their portfolios to maximize returns and minimize risks. Capital flows could also potentially develop nascent financial markets, promote financial discipline and reduce the borrowing costs both for the government and the corporate.

On the flip side, however, capital flows are known to be procyclical and they complicate macroeconomic management. An open capital account interferes with the simultaneous management of a fixed/managed exchange rate peg and an independent monetary policy – a phenomenon familiarly known as the ‘Impossible Trinity’.

Large and persistent capital flows can potentially jeopardize financial stability. Large speculative flows in ‘search for yield’ typically go into investment in assets leading to rapid and destabilizing build up of asset prices. Since such speculative flows are volatile by nature, they can impair the orderly functioning of the financial markets. When investors exit from securities markets abruptly in a herd, stock and bond prices get affected, and when investors take the redemption proceeds out of the country, the exchange rate gets affected. Should the central bank intervene to stabilize the forex market, the resultant tightened liquidity can affect the money markets. Thus, speculative flows affect all financial markets - the securities markets, the forex market, the money market and the credit market, with contagion spreading from one market to another rapidly. If not contained, these swift developments can threaten financial stability and lead to output and employment losses.

1.5 Indian Economy
India has undergone a paradigm shift owing to its competitive stand in the world. The Indian economy is on a robust growth trajectory and boast of a stable annual growth rate, rising foreign exchange reserves and booming capital markets among others.

Indian economy was estimated to grow at 8.6 percent in 2010-11 as compared to the growth rate of 8.0 percent in 2009-10. These GDP figures were based at factor cost at constant (2004-05) prices in the year 2010-11. The growth rate of 8.6 per cent in GDP during 2010-11 had been due to the robust growth rates of over 8 per cent in the sectors of manufacturing, construction, trade, hotels, transport and communication, financing, insurance, and, real estate and business services. Agriculture sector
registered a growth rate of 5.4 percent in 2009-10. India’s exports and imports also increased by leaps and bounces over years.

1.5.1 Agriculture Sector
The agriculture, forestry and fishing sector was likely to show a growth of 5.4 per cent in its GDP during 2010-11, as against the previous year’s growth rate of 0.4 per cent. The estimate of GDP from agriculture in 2010-11, according to the Department of Agriculture and Cooperation (DAC), production of food grains and oilseeds was expected to grow by 6.5 per cent and 11.9 per cent, respectively, as compared to the previous agriculture year. The production of cotton and sugarcane was also expected to rise by 41.2 per cent and 15.2 per cent, respectively, in 2010-11. Among the horticultural crops, production of fruits and vegetables was expected to increase by 4.1 per cent and 3.8 per cent, respectively, during the year 2010-11.

1.5.2 Industry Sector
The growth in GDP for mining and quarrying and manufacturing sectors during 2010-11 was expected to be 6.2 and 8.8 percent respectively over previous year. According to the latest estimates available on the Index of Industrial Production (IIP), the index of mining and manufacturing registered growth rates of 8.0 per cent and 10.0 per cent during April-November, 2010. The estimated growth rate for construction sector was 8.0 percent in 2010-11. The key indicators of construction sector, namely, cement production and steel consumption have registered growth rates of 4.4 per cent and 8.8 per cent, respectively during April- December, 2010.

1.5.3 Services Sector
The estimated growth in GDP for the trade, hotels, transport and communication sectors during 2010-11 was placed at 11.0 per cent, mainly on account of growth during April- November, 2010-11 of 14.9 per cent in passengers handled in civil aviation, 21.3 per cent in air cargo handled and 40.9 per cent in stock of telephone connections. The sales of commercial vehicles witnessed an increase of 34.1 per cent per cent in April-December, 2010. The financing, insurance, real estate and business services sector was expected to show a growth rate of 10.6 per cent during 2010-11, on account of 14.0 per cent growth in aggregate deposits and 22.6 per cent growth in bank credit during April- November 2010 (against the respective growth rates of 18.6
per cent and 10.1 per cent in the corresponding period of previous year). The growth rate of community, social and personal services during 2010-11 was estimated to be 5.7 per cent.

1.6 Influence of FDI on India’s Fundamental

Foreign Direct Investment has its influence on economy fundamentals in many ways. China is one of the largest beneficiaries of FDI. Higher GDP growth rates, higher per capita income, lower interest rates etc are influenced by FDI.

1.6.1 India: Low rate of growth (1950s to 1980s) to High Growth Trajectory

The low annual growth rate of the socialist economy of India before 1991, refer generally as Hindu growth rate, which stagnated around 3.5% from 1950s to 1980s, while per capita income growth averaged 1.3%.

Lower Indian growth rate is sometimes attributed to the Government of India's protectionist and interventionist policies (License Raj) rather than to a specific religion or to the attitude of the adherents of a particular religion.

Indian economy has reached in the orbit of high rate of economic growth 7% to 10%. She is being widely acclaimed and recognized as an emerging global economic power. The rate of growth recorded during the period 1950-51 to 2009-10 clearly showed a tendency of steady upward trend. However, the decade of eighties emerged as a beginning of the high rate of economic growth or at least a dramatic departure from the past growth performance. This tendency had continued in the 1990s and further growth stimulus has occurred in the first decade of 21st century surpassing critical downturns of global economy. FDI may be one of the elements which contributed to this high growth and prospects of economic development also depend on attracting much larger FDI.

1.6.2 Merchandise/service exports and imports

India’s export and import are gradually increasing over the year. The total trade touched from 0.5% in 1980 to 1.2% of world trade. However there is lot of change in
the profile of components of exports. Manufacturing products (equipments) exports are contributing a major share instead of natural advantage products like agriculture and textiles. Service exports are also contributing a lot to the India’s global trade.

1.6.3 Foreign Exchange reserves
Foreign exchange reserves have increased gradually from less than few days of imports to $300 billion.

1.6.4 Broad Money
The positive capital flows on capital account has eased the pressure on BOP and also leads to more flexible monetary policies of RBI. It has a influence on larger broad money available in the country.

1.6.5 Interest rates
Larger capital flows affected Indian interest rates keeping at the lower levels compared to pre reform period. It helps in reduction of cost of debt to corporate as well as central and local governments.

1.6.6 Inflation
Inflation is the by-product of supply and demand curve. Hot money also enters along with FDI as capital flows there is always a chance of volatility in foreign flows. These flows are influenced by the global factors which has an impact on inflation rates in the country.

1.6.7 Other factors if any
Industry statistics like capital formation, no. of operating companies, employment numbers etc., are also influenced by capital flows.

1.6.8 The factors behind high growth trajectory and major structural problems encountered by the Indian economy

The question that begs for an explanation is that is high growth and inflows of FDI solve structural imbalance of Indian economy and will it succeed in improving bottom section of the Indian economy. The employment elasticity in the agriculture and
industrial sector has gone down in the post-reform period, therefore, the creation of employment opportunities will be a gigantic task for the policy makers.

FDI has come in the most capital-intensive sectors; therefore, the desired employment opportunities could not be created especially for the manual and the semi skilled labour. High skilled labour gained substantially. That is why high growth is called urban centric and thus has created a wedge between the rural and urban economy. There is urgent need to fill this void. Policy making process has matured in the democratic Indian polity since the independence. It is thus expected that the growing problems will receive mature response and policy will be articulated in such a manner to use FDI the way China has used to enhance economic growth while taking more and more investment to industrialize the rural sector of the Indian economy.

1.7 Importance of the Study

It is apparent from the above discussion that FDI is a predominant and vital factor in influencing the contemporary process of global economic development. The study attempts to analyze the important dimensions of FDI in India. The study works out the trends and patterns, main determinants and investment flows to India. The study also examines the role of FDI on economic growth in India for the period 1991-2010. The period under study is important for a variety of reasons. First of all, it was during July 1991 India opened its doors to private sector and liberalized its economic policies. Secondly, the experiences of South-East Asian countries by liberalizing their economies in 1980s became stars of economic growth and development in early 1990s. Thirdly, India’s experience with its first generation economic reforms and the country’s economic growth performance were considered safe havens for FDI which led to second generation of economic reforms in India in the first decade of this century. Fourthly, there is a considerable change in the attitude of both the developing and developed countries towards FDI. They both consider FDI as the most suitable form of external finance. Fifthly, increase in competition for FDI inflows particularly among the developing nations.

The shift of the power centre from the western countries to the Asia sub–continent is yet another reason to take up this study. FDI incentives, removal of restrictions on
investment and trade, bilateral and regional agreements on trade and investment among the Asian countries and emergence of Asia as an economic powerhouse (with China and India emerging as the two most promising economies of the world) develops new economic world order. The research is important from the view point of the macroeconomic variables that were included in the study. Some of these explanatory variables were not included in earlier studies. The study is appropriate in understanding the impact of foreign investment inflows during the period 1991 to 2010.

1.8 Problem Statement and Objectives of the Study

The study is primarily aimed at investigating the impact of FDI on trade and development in India during the post economic reforms period. The study also focuses on analysing the FDI trends, examining the effect of major macroeconomic and socio political determinants on FDI inflows into India.

The overall objectives of the study are as follows:

To study the trends and models of FDI inflows as well as policy initiatives of government of India in external sector over the last two decades;

To assess the impact of determinants on FDI inflows into India like change in GDP, NDP per capita growth rate, trade openness, inflation, average emoluments paid to worker, gross fixed capital formation and country risk;

To analyse the changing pattern of FDI in manufacturing, service and infrastructure sectors;

To know the influence of FDI inflows on economic development factors such as GDP and merchandise exports;

To study the changing trends of FDI inflows and resulting trade patterns with select countries;
1.8.1 Set of Hypotheses

The hypotheses of the study are as follows.

**H1**: Change in GDP, Per Capita National Domestic Product growth rate, trade openness, Inflation, Average wage of worker, gross fixed capital formation, country risk and lagged inward Foreign direct investment do not influence inward FDI.

**H2**: GDP does not Granger Cause FDI and FDI does not Granger Cause GDP

**H3**: The annual real inward FDI from a country was not influenced by the ratio of real home country GDP to real host country’s GDP lagged by one year, real host country’s exports to the home country, real host country’s imports from the home country, REER exchange rate and geographic distance between the host country and the home country.

**H4**: Exports does not Granger Cause FDI and FDI does not Granger Cause Exports

1.9 Research Methodology

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. The methodology of the study is as follows.

1.9.1 Data Collection

This study is based on secondary data. The required data has been collected from various sources i.e.

i. Hand Book of Statistics on the Indian economy, RBI, various issues

ii. UNCTAD, WIR series, various issues

iii. Economic Survey, Government of India, various issues

iv. World Development Indicators, World Bank

v. DIPP –SIA newsletters and reports

vi. Ministry of commerce and CSO data bank

Data has also collected from various websites of OECD and others. It is a time series data and the relevant data has been collected for the period 1991 to 2010.
1.9.2 Analytical Tools

In order to analyse the collected data the following mathematical tools were used. To work out the trend analyses the following formula is used:

\[ \hat{y} = a + b \times (or) \ln \hat{y} = a + b \ln x \]

Where

\( \hat{y} \) = predicted value of the dependent variable
\( a \) = \( y \) – axis intercept,
\( b \) = slope of the regression line

(or the rate of change in \( y \) for a given change in \( x \)),
\( x \) = independent variable (which is time in this case).

**ln \( \hat{y} \) and ln \( x \) are log normal variables**

b) Annual Growth rate is worked out by using the following formula:

\[ AGR = \frac{(X_2 - X_1)}{X_1} \times 100 \]

Where

\( X_1 \) = first value of variable \( X \) at the beginning of year
\( X_2 \) = second value of variable \( X \) at the end of the year

In order to analyse the collected data, various statistical, mathematical tools and packages Eviews 3.1, Gretl and SPSS 17.0 were used.

1.9.3 Model Building

I. To study the influence of determinants on foreign direct investment in to India the following factors were considered for study. The model equation was tested as below:

\[ IFDI = f (\Delta GDP, NDP_{pcgro}, TRADE\_OPEN, INFL, AVG\_WAGE, GFCF, AGGL, Cont\_Risk) \]

Where,

**IFDI** : Inward Foreign direct investment of India, measured in Rs. Million
**\( \Delta GDP \)** : Changes in Gross Domestic product at current prices, measured in Rs. Million
**NDP_{pcgro}** : Annual percentage growth rate of NDP per capita at current prices
**TRADE\_OPEN** : Sum of Exports + Imports divided by GDP [(Ex+Im) / GDP]
INFL : Change in wholesale price index, measured as annual percentage change (i.e.) inflation rate

AVG_WAGE: Avg. emoluments paid to worker measured in Rupees

GFCF : Gross Fixed capital Formation in Rs. Million

AGGL : Agglomeration effect measured by a one year lag values of net FDI inflows

Cont_Risk : Country risk is proxied by S&P Foreign Debt rating of India

Hypothesis was tested as below:

H1 - Null Hypothesis
The variables ΔGDP, NDPpcegro, TRADE_OPEN, INFL, AVG_WAGE, GFCF, AGGL and Cont_Risk do not influence FDI inflows in to India.

Alternative hypothesis
The variables ΔGDP, NDPpcegro, TRADE_OPEN, INFL, AVG_WAGE, GFCF, AGGL, and Cont_Risk influence FDI inflows in to India.

II. The influence of FDI inflow on GDP and vice versa

If any country having higher economic growth rate attracts higher foreign investment and higher inflows of foreign investment leads to higher economic growth. The following model will test the directional relationship between FDI and GDP by using Granger causality tests.

\[
\text{GDP}_i = f(\text{FDI}_i) \text{ or vice versa}
\]

Where

\[
\text{GDP}_i = \text{Gross domestic product at current market prices in crores of rupees}
\]

\[
\text{FDI}_i = \text{Net Foreign direct investment inflows in crores of rupees}
\]

Hypothesis was tested as below:

H2 – Null Hypothesis:
- GDP does not Granger Cause FDI;
- FDI does not Granger Cause GDP
Alternative Hypothesis

- GDP Granger Cause FDI;
- FDI Granger Cause GDP

III. Panel Data Analysis: Country wise inward FDI and its relation on trade with India

India engages trade with many countries. Foreign direct investment flows were also taking place from these countries. Factors such as GDP size, mutual trade, forex rates will influence the FDI inflows between two countries. Panel data analysis has been used to study the relation between country wise FDI flows and select determinants.

\[ FDI_{it} = f (RGDP_{it}^{+} ; REX_{it}^{+} ; RIM_{it}^{+} ; REER_{it}^{+} ; GEOD_{it}^{+} ) \]

Where

- RFDI: the annual real inward FDI from a country;
- RGDP: the ratio of real home country GDP to real host country’s GDP lagged by one year;
- REX: real host country’s exports to the home country;
- RIM: real host country’s imports from the home country;
- REER: REER exchange rate;
- GEOD: geographic distance between the host country and the home country;

where + and - denote the direction of the expected effect of the factors on FDI from the home country in the host county.

The log-linear form of the equation is:

\[
\ln RFDI_{it} = \alpha + \beta_1 \ln RGDP_{it} + \beta_2 \ln REX_{it} + \beta_3 \ln RIM_{it} + \beta_4 \ln REER_{it} + \beta_5 \ln GEOD_{it} + \mu_{it}
\]

\[ i = 1; 2; N; \quad t = 1; 2; T \]

Where \( \alpha \) is constant, \( i \) and \( t \) denote country/region and time respectively, \( N \) is the total number of countries/regions in the sample, \( T \) is the overall time period and \( \mu_{it} \) represents the error term. 10 countries were selected and 11 years of data has been used for analysis.
Hypothesis was tested as below:

**H3 – Null Hypothesis**
The variables RGDP, REX, RIM, REER and GEOD do not influence RFDI.

**Alternative Hypothesis**
The variables RGDP, REX, RIM, REER and GEOD influence RFDI.

IV. The influence of FDI on the merchandise exports (EXP) and vice versa.

The study also examines the influence of FDI inflows on the merchandise exports of India. If any discernible impact is noticed, it can be concluded that the growth in merchandise exports is to some extent propagated by FDI. In other sense, in a macroeconomic perspective, a growing merchandise exports would in turn attract FDI in the economy. The study goes to test the relation between **FDI inflows and merchandise exports** by conducting granger causality tests.

The following regression equation is estimated as

**EXPi = f( FDIi ) and vice versa**

Where

EXPi = merchandise exports in Millions of dollars
FDIi = Net Foreign direct investment inflows in Millions of dollars

Hypothesis was tested as below:

**H4 - Null Hypothesis**
- Merchandise Exports does not Granger cause FDI;
- FDI does not Granger cause Merchandise Exports.

**Alternative Hypothesis**
- Merchandise Exports Granger cause FDI;
- FDI Granger cause Merchandise Exports.
1.9.4 Techniques adopted in Research

Multiple regression analysis was used to assess the variables which have major impact on foreign direct investment. Regression analysis (Simple & Multiple Regression) was carried out using relevant econometric techniques.

To understand the trends in FDI investment in different sectors, natural logarithmic transformations of the raw data is considered. Log transformations are very useful in handling exponential growths and stabilizing the variability in the data.

Panel data analysis is used to understand the trends of FDI and trade (exports and imports) using natural logarithmic transformations of the raw data. The slope coefficients of the regression equation will represent elasticities, if log transformation is taken. It would be easier that way to gauge the impact of the regressors.

Relevant econometric tests such as coefficient of determination, $R^2$, Durbin – Watson [D-W] statistic, Standard error of coefficients, T Statistics and F- ratio were carried out in order to assess the relative significance, desirability and reliability of estimation parameters of tested models.

1.9.5 Limitations of the Study

All the economic / scientific studies are faced with various limitations and this study is no exception to the phenomena. The various limitations of the study are:

As the study is primarily based on secondary data collected from various agencies, homogeneity of data of some variables may be suffered.

The assumption that FDI was the only cause for development of Indian economy in the post liberalised period is debatable. No proper methods were available to segregate the effect of FDI to support the validity of this assumption.
1.10 Thesis Outline
The study was presented in seven chapters. A brief description of each chapter is as follows.

**Chapter 1: Foreign Direct Investment in India and Research Design**
Chapter 1 presents the introduction of the concept about FDI, various reports favouring India as investment destination and the importance of the study. The chapter presents the frame work of research design covering objectives, methodology, and analytical models used.

**Chapter 2: Theoretical framework of FDI and Policy initiatives of India**
Chapter 2 focuses on investment theories and factors influencing FDI. It also explains the benefits and costs of FDI to home and host countries. It also explains the policy initiatives of government of India with respect to routes of investment; investment limits in different sectors, insights of taxation treaties with different countries and legal aspects.

**Chapter 3: Review of Literature**
This chapter presents review of the major work done in the research area both in India and abroad. Categorisation of different international studies had done and presented in this chapter. The studies which are specific to Indian context were also referred extensively along with international studies.

**Chapter 4: Trends and Patterns of FDI Flows**
This chapter presents trends and patterns of FDI flows into India on the basis of country of origin, regional distribution, mergers and acquisitions, FDI in relation with GDP and GFCF, sectoral composition of FDI flowing into India etc. Trend lines of inward FDI into the top ten sectors, were drawn using log normal equation. Specifically for the industrial segment, relation was established between sectoral FDI inflows and respective sectoral output.

**Chapter 5: Determinants of FDI and FDI Impact on GDP**
The influence of various determinants on inward FDI into India was studied in this chapter. It highlights various locational determinants of FDI and select variables of
the present study. Multiple regression analysis of the variables affecting FDI inflows was presented. Analysis of causality relationship between FDI and GDP and vice versa was also presented.

Chapter 6: Country wise FDI and Trade Performance
Against the principal objective of evaluating FDI flows and impact on external trade data have been analysed under three broad heads

Firstly, panel data analysis was performed to know the factors influencing country wise FDI flows in to India. In the second phase, ratio analysis was used to observe the relationship between share of FDI inflows and share of India’s trade of major investing countries. In third part, Causality relationship was tested between FDI inflows and merchandise Exports of India.

Chapter 7: Findings and Suggestions
Chapter 7 presents summary of findings and suggestions. It also lists out various policy measures to be undertaken by the government of India and other agencies to encourage more capital flows in to India.

1.11 Conclusion
India has become one of the important destinations for foreign investors since 1991 and they have been looking for different opportunities occurring in the process of liberalisation. FDI as well as FII investments are at record levels and looking for markets, efficiencies and resources. India became a service web of the world and is looking for a leading place in automobile manufacturing in this region. Huge talented human resources, untapped markets, low wages, democratic environment, sustainable growth rates for few more decades etc. are the reasons behind the FDI flows. However there is a need to understand the trends in FDI and its influence on trade and development. Country wise FDI and sector wise FDI study is really useful and will be beneficial in maintaining good relation with those countries and also helps in further relaxation of policy measures.
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