FDI in India: A Macroeconomic Diagnosis

By

S. Balasurya

A thesis submitted in partial fulfillment
of the requirements for the degree of
BA. Honours
Azim Premji University
Bangalore, India

Submitted: May 2019

Table of Contents

Acknowledgments

I would like to acknowledge my honors mentor Prof. Alex M. Thomas for guiding me in this project. I am grateful for all the time and energy he has spent in reading, correcting and advising me throughout this project for the past two years. I must mention that he has patiently listened to my grievances and has helped me overcome all the problems I faced during this project. I also would like to acknowledge Prof. Anand Shrivastava for helping me in construction of regression model for this project. His help was particularly useful in the secondary data analysis of my project. I am thankful to Prof. Rahul De for reading and commenting on my history section. His classes on the Indian Economy improved my understanding on this topic. I am also grateful to all my teachers as the skills they taught me proved to be very useful while doing this project. I thank the Azim Premji University for providing this great opportunity to undergraduate students. Finally I would like to thank my family and friends for all their cooperation and help.

Abstract

In recent times a lot of priority is given to Foreign Direct Investments (FDI) in India. Campaigns like “Make in India” and the urge to improve rankings in the Ease of Doing report published by the World Bank stand as testimony to this. This prioritization of FDI has led to negative effects on other forms investment like government and private investment. Fiscal prudence and inflation targeting is widely practiced keeping in mind the interests of credit rating agencies who thereby affect foreign investors sentiment. At this stage, a critical evaluation of FDI in India is must as many economist and policymakers feel that FDI in India has not met the intended result. The aim of developing the industrial sector by receiving FDI has not been much successful as a large part of India’s economy is under the service sector. Tax holidays and subsidies given to foreign investors has led to various corrupt practices like round tripping of capital, thereby raising serious questions on the intent of FDI. Hence, this paper tries to critical evaluate the role of FDI in the Indian economy by looking at secondary data, theories of investment, trade and firm, history and other policy documents. The main finding of this paper is that though FDI has its positive effects of economic growth and development, it has to be critically evaluated given its limitations.

List of Tables

Table

List of Charts

Chart

List of Boxes

Chapter 1

Introduction

The cry for Foreign Direct Investment (FDI) became louder in the late 1980s. The then Prime Minister of India Rajiv Gandhi during his trip to the United States welcomed US based businesses to actively collaborate with Indian Companies. Deputy Chairman of the Planning Commission and later the Prime Minister of India Manmohan Singh strongly advocated for foreign investment and foreign technology transfers. In fact he criticized the Indian companies for being slow in collaborating with foreign firms. This sudden push for foreign investments and foreign technology transfers was a new phenomenon in India. Prior to the 1980s Indian policy makers strongly advocated for self sufficiency. Policies such as import substitution was the order of the day and it very much suited the nationalistic agenda which was popular at that time among people immediately after years of foreign rule. These policies did not prefer foreign capital and the Indian government then carefully screened the foreign investors before they could invest in India. Laws such as Foreign Exchange Regulation Act, 1974 (FERA) imposed severe restricts on foreign investments and ensured the closure of some British Monopolies which continued operating in India even after the Independence. This kind of hostile attitude towards foreign investment was strongly prevalent until the 1980s.

In the 1980s, slow change of mind started happening in the Indian policy circles. Inefficient public sector units, slow growth rate, widespread poverty and lack of industrialization severely affected Indian economy. China which was on the same page with India during the 1950s started industrializing at a rapid rate. Countries in the East like South Korea, Taiwan and Singapore started witnessing stellar rate of growth. This caught the eye of Indian policy makers who then started slowly pushing for pro-business reforms (Pant and Srivastava, 2015). Under these reforms collaboration between Indian and foreign companies was encouraged. The main aim behind promoting collaborations was to ensure technology transfers to Indian firms. It was thought that Indian industries using the modern technology will become internationally competitive and pave way for industrialization.

Amidst these pro-business reforms, Balance of Payment (BoP) crisis of 1991, proved to be a boon for foreign capital in India. Under the IMF plan for restructuring the Indian economy post the crisis, entry of foreign capital into India was allowed (Bhaduri and Nayyar, 1995). Indian policy makers under this restricting plan had to dilute and remove all stringent laws which posed restriction on FDI. In fact, they started to favor foreign investments and started readily providing them with many concessions. The reasons for this was to enable Indian firms acquire world class technology and become globally competitive. Indian policy makers also envisioned that Multinational Companies (MNCs) will set up their factories in India and will export goods to the global market by making use of the available cheap land and labor. They thought this will enable India achieve export led growth and also generate new employment opportunities (Aggarwal, 2012). They forecasted a multiplier effect by which Indian companies will turn to internationally competitive after competing with international companies. Many of this was based on actually experience of China and East Asian countries. Indian policy makers too wanted to tread on the same path and achieve economic growth. Major political parties in the country including the BJP which earlier wanted to protect the interest of local producers also

started promoting pro-FDI policies (Frankel, 2006). Huge infrastructural development, construction of Special Economic Zones, removal of screening for foreign investors, tax holidays, relaxation in labor laws etc. were given in order to encourage foreign Investors. State governments started organizing business summits to welcome investors. Huge nationwide business summit were organized in the name of "Make in India". Improving the rankings in the Ease of Doing Business report became key poll priority for major political parties in India. In fact FDI became one of the most popular forms of investment and is widely touted as the elixir of economic growth.

However, the problem here is that Indian policy makers have blindly prioritized FDI without performing any macroeconomic diagnosis. This is because India's experience with FDI is nowhere close to the experience of role model countries like China or Taiwan (Sundaram and Chowdhury, 2017). This is true especially in the recent past because India has been receiving huge amount of FDI for mergers and acquisition rather than for new investments. A sector wise analysis shows that India receives most of the FDI in service sector and other highly capital intensive industries. Thus, the effect of FDI on manufacturing sector and employment has to be evaluated closely. The regional distribution of FDI in India is highly skewed towards few developed states and the rest of India receives nor or very less FDI. This makes prioritization of FDI very problematic as in the rush to promote FDI the policy makers are curtailing other forms of investment. Fearing backlash from the credit rating agencies which influence FDI inflows, Indian government has been following tight fiscal control. Also, this blind prioritization of FDI is problematic as a large number of government policies are being crafted to benefit Foreign Investors. Benefits like tax holidays, subsidies and other incentives given to foreign investors cost the government dearly. In fact these incentives have led to corruption in the form of round tripping of capital through tax havens. Hence, a close evaluation of FDI is required to ascertain its usefulness in terms of economic growth and development particularly in the Indian context.

In this paper, I have attempted to perform a diagnosis of FDI in India by looking at various relevant factors. The main aim behind this is to understand and evaluate the effect of FDI on the Indian economy by looking at history, policy documents, and theories of firm, trade and investment. In this process I have also analyzed secondary data with respect to FDI and have calculated the FDI multiplier to ascertain the effect of FDI inflows on GDP.

This paper has been divided into six chapters: the second chapter is devoted to understand the contemporary nature of FDI in India. In this chapter a detailed history of foreign capital of India is presented to the readers. The study of history starts from colonial India and stretches till the recent past. The second section under this chapter focuses on the relation between international and treaties and agreements. This is highly relevant as treaties play an important role in safeguarding the varied interests of foreign investors. The third section talks about the role SEZs plays in promoting foreign investments. India since the 2000s has witnessed a phenomenal increase in the SEZs. The last section in this chapter focuses on round tripping of capital through tax havens. It looks at the corruption in foreign capital markets across the world.

The third chapter aim to understand the motivation behind the decision to invest abroad. This chapter consists of three sections and studies the above question through the lens of theories

of investment, firm and trade. I have looked at various important thinkers like Coase, Keynes, Marx, Smith, Dunning and Minsky for this analysis.

The fourth chapter contains the analysis of various secondary data available with regards to FDI. Here, I take a broad look at the trends of FDI inflows. Regional distribution of FDI and the sources of FDI in India have also been analyzed in this section

The penultimate chapter aims to estimate a FDI multiplier for the Indian economy. This chapter uses econometric techniques to ascertain the effect of FDI inflows on GDP. It also compares different form of investments with regards to the effect on GDP.

The final chapter is the conclusion and presents the findings of this paper in a concise manner.

Chapter 2

The Contemporary Nature of Foreign Investment

2.1 History of Foreign Capital in India

The question of openness of India with respect to FDI is not a recent one; it has vexed policy makers in the past too. In this section we document how various policy makers dealt with this difficult question historically. This will help us understand the circumstances and the economic logic that led to various decisions with respect to foreign capital in India. This will also enable us get crucial insights for analyzing the current state of FDI in India.

Pre-Independence

Foreign investments in India peaked during the pre-independence period. Most of these investments came from Britain based companies. In fact, according to the historian B. R. Tomlinson, India and Sri Lanka (Ceylon then) were the third largest repositories of private long term capital of the British (Tomlinson, 1978). This continued even after independence, as India and Pakistan together was the fifth largest recipient of British capital during the 1960s. Most of the British investments went into select sectors like railways, tea, cotton, jute and other capital goods related industries. In fact, the British continued to dominate in some of these sectors post-independence too.

The main reason for the British companies to establish themselves in India was war-time trade restrictions which made it difficult for them to export goods to India. This resulted in British companies establishing their subsidiaries in India. Changes in various policies by the colonial government also forced British companies to set up their subsidiaries in India, i.e. the government allowed Indian companies to participate in railway tenders and issued tender in rupees, thus making it difficult for the British to secure orders. Also, it is important to note that closer to the time of independence, foreign companies invested in the upcoming sectors like pharmaceuticals, manufacturing and petrochemicals. The already existing companies also diversified and entered into new sectors. For instance, Martin Burns of Calcutta went from steel industry to railway engineering and Parry's of Madras went from chemicals to sanitary wares.

Apart from British capital, India also received significant amount of remittances from non-residents. However, there are no accurate calculations on the exact amount of foreign capital received from various sources during the pre-independence times. There were also several confusions within the Reserve Bank of India (RBI- set up in 1934) on the treatment of direct and portfolio investment. Tomlinson illustrates this by giving a hypothetical example:

> "tea plantation in Assam with 100 ordinary shares each of which was owned singly by a retired Indian Civil Service (I.C.S) officer resident in Britain would be classed by the Reserve Bank as direct investment because it would be wholly owned abroad; yet such a company would be classified as portfolio investment because no one investor had control of it." (Tomlinson, 1978, p.661)

Finally, it is important to note that India did not have any organized market for raising capital and there were no issue houses or underwriters available. However, in the late 1950s stock markets with a few traders were established in several cities like Madras, Calcutta and Bombay.

The 1947-1970 Phase

Post-independence is a very crucial period as a lot of policy changes took place with regards to the treatment of foreign capital. Leaders, policy makers and stakeholders had varied opinions on how to treat foreign investors as it would have wide ranging impact on the local producers, balance of payments (BoP) and political ambitions as there was strong support for promotion of *swadeshi* goods (indigenous goods) .

At the onset of independence, India initially welcomed foreign capital as it would help the government strengthen the BoP account. In fact India's then Finance Minister Chintaman Deshmukh told Lok Sabha on the 20th December 1954 that India was open to foreign investments, assistance and loans at least during the First Five Year Plan (1951-1956) as it would help to supplement various government programs and policies (Tyson, 1955, p.177). The basic aim was to take help from foreigners in the First Plan and then maximize local resources during the Second Plan (1956-1961) in order to be self-sufficient. Also around the same time T.T. Krishnamachari, Minister of Commerce and Industry, in a newspaper article, strongly supported the need of foreign capital. He says,

> "It is worthwhile re-stating why we have been anxious for the participation of foreign capital in our industry. Any inflow of foreign capital has the immediate effect of strengthening our foreign resources. Secondly we are aware that our industrial development is hampered by the inadequacy of capital formation within the country and, to the extent that we can use foreign capital to help the progress of industrial development, the inflationary pressures that are generated by our own recourse to deficit financing, to counterbalance capital formation, would be avoided. The third and most important consideration, perhaps, is that with foreign capital we generally get the technical know-how, for the lack of which in starting industries on our own we are likely to waste a considerable amount of our resources and also produce an inferior article at an uneconomic price." As quoted in *Commerce* (Bombay) Annual Review, December I954 (Tyson, 1955, p. 177)

It is important to note here that India during this period annually received around Rs. 30 crore as remittances from 1948 to 1954 and Rs. 320 crore as foreign investment in the year 1948 (Tyson, 1955). This was a significant amount during that time and thus could have influenced the views of the top government officials at that time.

Apart from the government opinion, members of Federation of Indian Chambers of Commerce & Industry (FICCI) were confident in competing with foreign companies. In fact they wanted foreign capital in the refinery segment as there was a lack of technological knowledge. They also wanted foreign capital in the consumer goods segment as Indian investments were inadequate. Moreover, they wanted to issue equity to foreign companies especially in the banking and insurance sector (Chenoy, 2015).

Despite such opinions, strong nationalist sentiments are present in the Industrial Policy Resolutions (IPR) of 1948 and 1956. Many people viewed foreign capital as a tool used by

British to control India and vehemently opposed it. The makers of the "Bombay Plan" JRD Tata and GD Birla were against foreign investment and even asked the government to step up their expenditure rather than look for foreign capital (Ranjan, 2018). It is worth mentioning here that the Bombay Plan of 1945 was a plan for India's economic development made by a small group of industrialists. The plan became hugely popular and influenced India's policies even after independence. Though the plan does not talk much about foreign investments, the plan has a lot of emphasis on foreign loans and assistance for financing massive development programs.

Though the official industrial policy documents have stringent rules for foreign investors, Nehru and his government selectively allowed foreign companies to establish in India as they believed that it will help in industrialization and solve BoP related problems. In fact the Dutt Committee (1967) report tells us that there were three large multinational companies among the top 20 monopoly industrial houses in India ranked by size of their capital. Also many Indian industrial houses had technical collaborations with multinational companies during this time. Many a times these companies controlled the operations of the Indian firm though they were not the majority shareholder. N. K. Chandra (1977) wonders if there was any actual knowledge gain in these companies as majority of them just imported foreign technology. Moreover, there were also various subsidiaries of foreign firms operating in India at that time, the author calculates that more than 60 of the 150 large business houses in India were subsidiaries of foreign companies (Chandra, 1977). India also established Asia's first Special Economic Zone (SEZ) in Kandla, Gujarat at this time. More about SEZs are described in section 2.3.

The 1951-1966 Phase

In the First Plan (1951-1956) period there seemed to be not much attention towards foreign capital. A small section in the document calls for fair and equal treatment of foreign capital

> "In securing rapid industrial development under present conditions, foreign capital has an important part to play. A free flow of foreign capital should be welcome because it will ensure the supply of capital goods and of technical know-how. The Government's policy in this regard gives the following assurances to foreign capital:
>
> 1. There will be no discrimination between foreign and Indian undertakings in the application of general industrial policy,
> 2. Reasonable facilities will be given for the remittance of profits and repatriation of capital, consistently with the foreign exchange position of the country, and
> 3. In the event of nationalization fair and equitable compensation would be paid." (Chapter 29: Industrial development and policy, First Five Year Plan)

In the Second Five Year Plan (1956-1961) period the government continued the same policies, but foreign exchange related problems forced the government to change its hostile attitude towards foreign capital. They started allowing foreign capital based on the local needs. There is also a lot of emphasis on technical collaborations.

In the Third Five Year Plan (1961-1966) there was a consensus that foreign capital was required to solve the foreign exchange problem and that it also improves India's growth. Foreign private capital in particular was seen to be advantageous. However, this sudden demand for foreign

capital was halted due to volatility in getting foreign aid and the war with Pakistan where India did not receive aid at difficult times.

The 1970-1980 phase

During 1970s, many Indian companies were in collaboration with foreign companies for both supply of capital and technology. K.K Subramanian (1973) in his article on the "Role of Foreign Aid and Investment" notes that joint ventures and collaborations were the most preferred route used by foreign companies to enter into markets which had restrictions on foreign capital. This benefited the foreign companies on two fronts, i.e. they could get the required royalty for sharing their technology and they could also export capital goods to the Indian companies which were manufacturing their products. This phenomenon of foreign collaboration is said to have negative effects on the growth of indigenous technological development as most of the times Indian companies just imported foreign machines from their collaborators to make goods (Chandra, 1977).

Apart from foreign collaborations, multinational companies (MNCs) were operating on a large scale in the oil and plantation sector. The oil companies imported crude oil from their own companies aboard and did not obey the government orders on importing crude oil; the Indian government at that time had received a lucrative deal with the Soviet Union and the oil companies had refused to import crude from the Soviet Union. This caused tension between the government and the oil companies, thereby leading to nationalization of oil companies in India. The three oil majors Esso, Burmah-Shell and Caltex were nationalized. Following this move, in 1974, the government passed the Foreign Exchange Regulation Act (FERA) as India was suffering from a BoP crisis due to huge import bills. This Act is a significant moment in the history of FDI in India as it brought in strict rules and procedures for dealing with foreign investments. The main aim of this Act was to control and regulate foreign exchange. It was also aimed at ending all monopolies as it asked all the multinational companies to dilute their stake from 100% to 40%, which implied that the majority shares in foreign company must be owned by Indian nationals only. This law negatively impacted companies like IBM, Coca Cola and Unilever as it restricted foreign equity and increased the mandatory volume of exports required. This led to closure of the former two companies mentioned, whereas the third company diversified and met the export targets. Companies operating in export-oriented sectors were exempted from this Act.

FERA also made it difficult for foreign collaborations and there was a fall in the number of foreign collaborations in this period. In fact, according to Pant and Srivastava (2015), 1970s to 1980s is the most restrictive period in the Indian FDI history.

1980 Onwards:

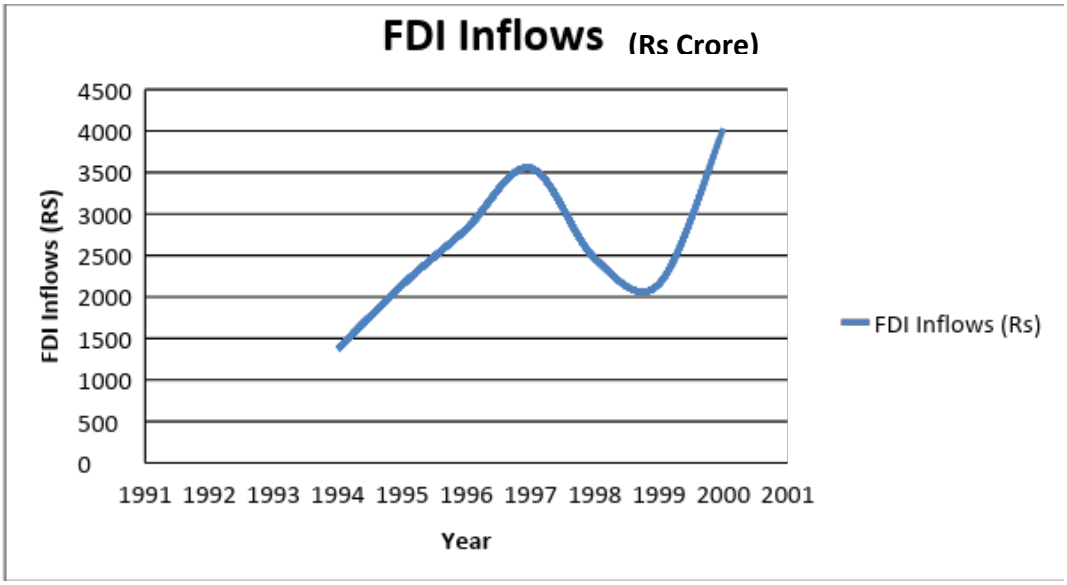
From 1980 onwards the restrictions towards foreign investments and foreign collaborations were slowly eased. The time period between 1980 and 1990 is particularly important because the government was actively engaged in attracting multinational companies for collaborations in the private sector. This was a change in the government policy as it only attracted foreign collaboration for the public sector companies. The Indo-American chamber of Commerce was confident about investing in India particularly after the then Prime Minister Rajiv Gandhi's

announcement regarding a change in the government's stance towards foreign capital. He is reported to have told the American media that the bad experience with the East India Company was the reason for hostility towards foreign capital and that now the government is ready to change its approach (B M, 1985).

The number of foreign collaborations especially in the private sector increased rapidly and it was in line with the government's aim of increasing productive capacities and generating export surpluses by encouraging foreign collaborations. Although the collaborations increased, many within the government were unimpressed. In fact Manmohan Singh who was the then Economic Secretary felt that India needed a lot more collaborations to get new technology and to substitute for the bad performance of Public Sector Undertakings (PSUs). It is important to note that Manmohan Singh later became the Prime Minister of India and introduced several pro-FDI policies during his tenure.

At the end of this decade, in 1991 in the wake of the severe BoP crisis, India accepted the recommendations of the IMF and the World Bank. According to the recommendations, the government had to adopt prudent fiscal policy and various short term measures to avoid crisis. In the long term, the government was asked to open up the economy by relaxing various stringent restrictions. Foreign investments were preferred as it provided non-debt creating foreign inflows and new technology. Along with this, the government introduced the New Industrial Policy 1991 and also replaced the stringent FERA with Foreign Exchange Management Act (1999). The Foreign Investment Promotion Board (FIPB) was set up after the 1991 crisis to negotiate and facilitate potential foreign investments. The automatic route without any government delays was introduced for companies with up to 51% equity in select sectors barring a few. Initially much of the investment by foreign firms was to acquire businesses in India. This is because the already existing firms in the country were not producing the right quantity of goods that were demanded and there existed scarcity of goods in various markets for consumer goods (Bhaduri and Nayyar, 1995). This profit seeking behavior induced many firms to enter into India. The prominent acquisitions were Parle by Coca Cola and Boyce and Godrej by Procter & Gamble (P&G). In spite of such large scale acquisitions, FDI accounted for less than 1% of the GDP in the period 1994-1997 (Frankel, 2006). The Pokhran Nuclear Test conducted in 1998 led to fall in foreign investments for a brief period. The graph containing the annual FDI inflows data below depicts this.

Chart 2.1



Source: Data from Department of Industrial Policy and Promotion, Ministry of Commerce and Industry

Politically also, accepting FDI was a challenge to many political parties in India. Particularly, the National Democratic Alliance (NDA) led by Bharatiya Janata Party (BJP) during their rule from 1998-2004 had to face challenges from their sister organizations like Rashtriya Swayamsevak Sangh and Swadeshi Jagran Mach, as they feared that globalization could destroy local *Swadeshi* industries. They equated globalization with foreign invasion and feared that large MNCs would start influencing the politics in India. They also worried that globalization would promote consumerism and influence the local culture of the people. However, in spite of such opposition, the NDA government under Vajpayee took various steps to boost FDI and opened up various sectors for FDI.

Since then, there were no major policy reversals with regards to FDI. The cap on foreign investments in many sectors was reduced. Currently, foreign investments are barred only in a handful of sectors. Apart from this, massive campaigns by state governments and central government are often undertaken to attract prospective investors (Thomas, 2016). Competition for receiving FDI among various states is a new phenomenon as every state is trying to perform better by offering incentives and promises to end delays in approvals to potential investors. There have also been significant Macro-level policy adjustments to facilitate foreign investments. For example, various steps are being actively taken to reduce the fiscal and current account deficit as they are believed to have an impact on investors' confidence.

2.2. Role of International Trade Agreements and Treaties

International trade agreements and treaties are instruments used to remove restrictions in the movement of capital, goods and labor across different countries. With respect to foreign investments these treaties secure the interest of the foreign investors by safeguarding their investments and assets from abrupt expropriation by the host countries (Buthe T, Milner H V, 2008). This safeguard is important in raising the confidence of foreign investors because historically Multinational Companies (MNCs) were often abruptly closed down in many countries due to political opposition. These international agreements are considered more credible than domestic laws because they are signed in the international forum. These agreements also contain clauses which protect the foreign investors from policy changes and other new regulations aimed at foreign investments. These laws have become important because as soon as investment takes place, power shifts from the hands of the MNC to the host country, which can affect the profitability of firms by enacting new laws and taxes. Signatory counties to these agreements and pacts become favorable destinations for foreign investors and often see a surge in FDI inflows (Buthe and Milner, 2008). Tax related clauses are also very crucial for foreign investors as these treaties specify rules for transfer of profits between different countries. India also has signed Bilateral Investment Treaties (BITs) with many countries. All these BITs aim at protecting foreign investments from both countries and also offer an agreed mechanism to deal with disputes. The Ministry of Finance in India is the government body that is involved in framing policies and negotiating BIT deals with foreign countries. Recently, in 2015, a new model BIT version was developed to replace the old BIT framework that was created in 1993 (Ranjan et al, 2018).

Apart from economics of foreign policy, the pressure of lobbies, politics and some special interests also play an important role in shaping these treaties. That is, these treaties have provisions on a variety of things like health and safety standards, intellectual property, labor, environment, banking and finance rules (Rodrik, 2018). This makes the trade deals very complex and often time consuming. Since there are a lot of political challenges with respect to trade agreements, traditional forums like the World Trade Organization are breaking up due to their inability to accommodate the interests of a diverse set of nations. This has led to the emergence of mega trading blocs, which are formed by a group of nations with similar interests (Kantha, 2018) Currently there are three major trading blocs: Transatlantic Trade and Investment Partnership (TTIP: between USA and European Union Countries), Trans Pacific Partnership (TPP: Pacific rim countries) and Regional Comprehensive Economic Partnership (RCEP: ASEAN nations, India, China, Korea, Australia and New Zealand). Countries are forced to align with these trading blocks to receive investments and be part of the global supply chain. As

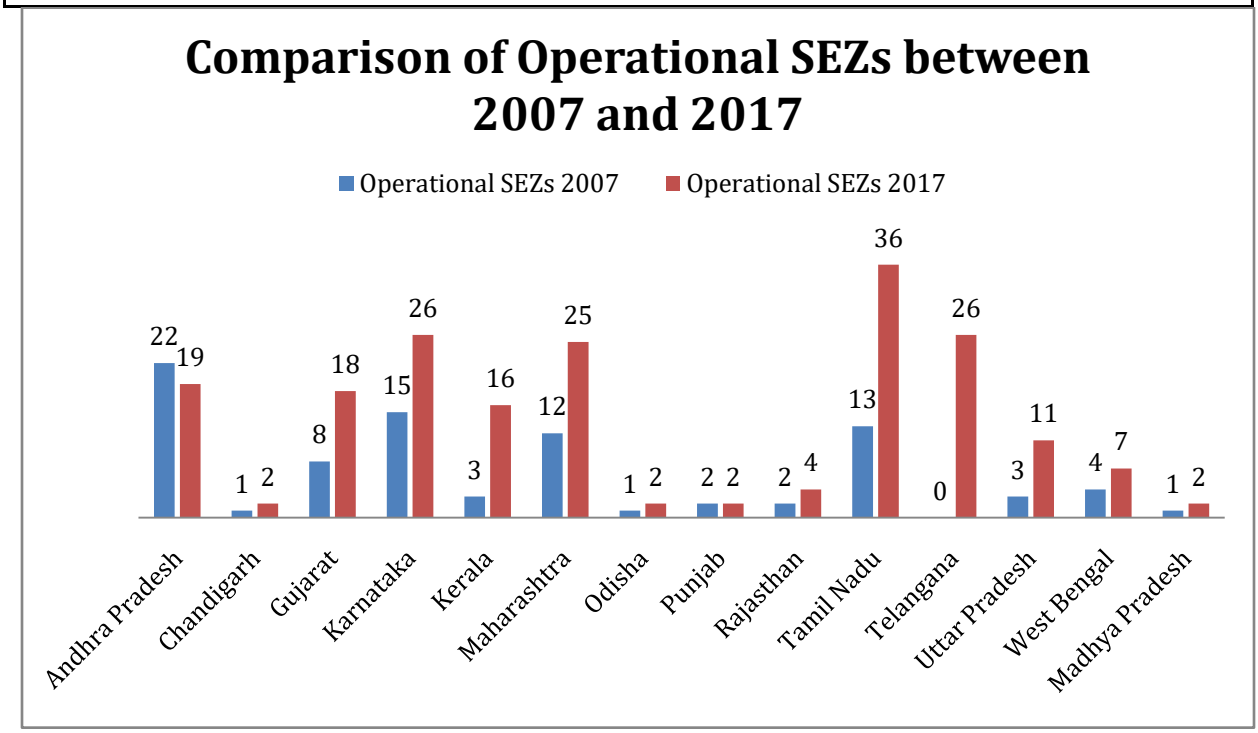
a consequence political intentions of large countries are often met through these treaties and agreements. Participants of these trading blocs have to follow certain rules and standards. As a result, developing countries often will be forced to follow to various regulations with respect to environment, labor laws, and health standards which are set by the developed countries (Kantha, 2018). This poses challenges to producers in developing countries as their cost of production increases.

2.3 SEZ and FDI

With the advent of globalization, Special Economic Zones (SEZs hereafter) have become a popular vote to attract foreign direct investment. These zones have become immensely popular and have risen from a mere 176 zones across 47 countries in 1986 to 3,500 across 130 countries in 2006 (Aggarwal, 2012, p. 872). These economic zones are specially designated investment enclaves, which offer a range of attractive benefits to investors like tax exemptions, single window clearance and other exemptions subject to certain conditions. Tax exemptions and other advantages mentioned above play a very important role to attract FDI and we will see in section 2.4, on how many domestic investors pretend to be foreign investors to gain these advantages.

The first form of SEZs was the Export Processing Zones. Special incentives were given to companies that invest in these zones so that they can export their goods competitively. These zones were primarily meant to attract foreign companies and help in the creation of jobs and promotion of exports. In order to make these zones attractive for foreign investors, countries strategically located these zones near major business centers and ports (Aggarwal, 2012, p. 874). Taiwan followed this strategy and was very successful in attracting large amount of investments. In Korea, the SEZs are planed like megacities with all the necessary infrastructure. Local companies were debarred from investing and only foreign firms which were ready to outsource to local companies were allowed to invest. India, with the shift in policy from import substitution to export promotion, first established its Free Trade Zone (a type of SEZ) in Kandla (Gujarat) and Santa Cruz (Mumbai, Maharashtra) in 1965 and 1972 respectively. Though these were some of the earliest zones in Asia, they did not fare well due to high regulations on investors. The government was overcautious and wanted to ensure that the companies contributed to the economy. Till 2000, the role of SEZs in providing employment and contribution to production was negligible. A new SEZ policy was formulated in 2005 (Special Economic Zones Act, 2005) and many state governments started establishing SEZ in their states (Sharma, 2009). A large number of information technology (IT) related zones were established in Gujarat, Maharashtra, Karnataka, Andhra Pradesh and Tamil Nadu. However, land acquisition, stringent subcontracting laws preventing outsourcing from local firms and stringent rules to get credit pose constraints to the growth of SEZ's in the country (Aggarwal, 2012).

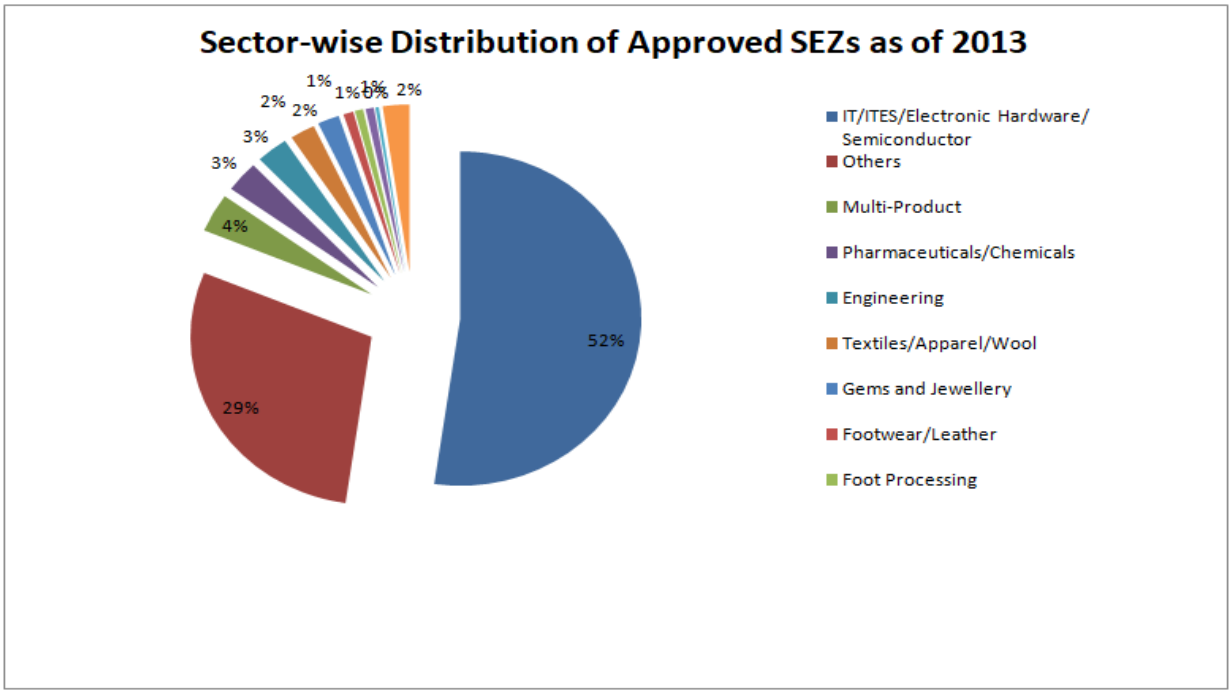
Chart 2.2



Source: Data from Indiastat.com, Lok Sabha Unstarred Question No. 81, dated on 30.11.2015 &
Lok Sabha Unstarred Question No. 2899, dated on 20.03.2017 and Rajya Sabha Unstarred Question No. 938, dated 10.12.2000

Chart 2.3 shows us the increase in number of operational SEZs from 2007 to 2017. Here, we can find that most of the SEZs are spread across few states like Maharashtra, Andhara Pradesh, Karnataka, Tamil Nadu and Telengana. This shows us the in equal distribution of SEZs across different states.

Chart 2.3



Source: Indiastat.com, Ministry of Commerce & Industries, Government of India

The above chart shows us the distribution of SEZs is concentrated in the Information Technology (IT) sector. "Others" contain also those SEZs which have multiple industries.

With the growth of SEZs and the coming of MNCs, there is noted overall change in infrastructure facilities, policies and regulations, thereby improving the investment climate in the country (Aggarwal, 2012). However, given the potential advantages of job creation, promotion of exports and change in the investment climate, there seems to be a lot of issues with the developmental role of SEZs. Many economists point out that SEZs lead to unfair competition to local firms given that investors in SEZs receive a lot of incentives (Balasubramanyam and Mahambare, 2003). They also result in the displacement of people during acquisition of land for these huge industrial zones. These zones are set up particularly in the countryside with the intent of developing real estate urbanization. This leads to displacement of traditional communities living in these areas (Sampat, 2008). Compensation and other rehabilitation of displaced people is usually carried out by the investing companies and the government does not monitor this. The Nandigram incident in West Bengal, where the government's effort to set up a SEZ triggered violent protests, stands as a testimony for

improper implementation of SEZ related policies. Apart from displacement, the technology spillover effect from SEZ also seems to be low due the low interaction between foreign and local firms (Sharma, 2009). The loss of revenue to governments by providing incentives and subsidies to companies in SEZs is also a cause of concern.

Table 2.1: SEZ and their location in selected states

STATE	TOTAL SEZs	Cities	Number of SEZs
Uttar Pradesh	11	Noida	9
Maharashtra	28	Mumbai	5
		Pune	10
West Bengal	4	Kolkata	4
Andhra Pradesh	18	Visakhapatnam	7
		Nellore	5
Karnataka	28	Bengaluru	19
		Mysore	3
Tamil Nadu	33	Chennai	7
		Coimbatore	4
		Kanchipuram	8

Source: Data compiled from list of operational SEZs

Table 2.1 shows the location of SEZs in some selected states. Here we find that most of SEZs are located near major cities. For example in U.P out of 11 SEZs 9 are located in Noida city, similarly in West Bengal all the SEZs are located in its capital of Kolkata.

Incentives provided to investors in SEZ's:

"The incentives and facilities offered to the units in SEZs for attracting investments into the SEZs, including foreign investment include:-

- Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units
- 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years. (**Sunset Clause for Units will become effective from 01.04.2020**)
- Exemption from Central Sales Tax, Exemption from Service Tax and Exemption from State sales tax. These have now subsumed into GST and supplies to SEZs are zero rated under IGST Act, 2017.
- Other levies as imposed by the respective State Governments.
- Single window clearance for Central and State level approvals."

From SEZ website: [http://sezindia.nic.in/cms/introduction.php] accessed on 12.06.18

2.4 The Rise of Tax Havens

The maximization of profits with respect to capital invested is the most important aim of any investment. In order to achieve this, investors and firms often manipulate government rules and regulations for their benefit. Foreign investors and MNCs are no exception to this, as they often use loopholes in taxation laws of the host country to transfer their earnings to tax havens or other countries which have favorable laws. MNCs dodge taxes by making use of the large network of subsidiaries spread across the globe. This is mainly done in two ways with the help of auditing firms (Zucman, 2015). In the first technique, the company loads its branches located in countries like USA and France heavily with debt which are obtained from its own subsidiaries from countries like Bermuda and Luxembourg. Loading certain branches with debt helps the firm to show smaller profits, thereby reducing the tax it has to pay. The other way is by manipulation of transfer prices. Transfer prices are charged when branches of a given company buy their own goods from another subsidiary located in some other country. Through this way, the MNCs often sell services at artificially elevated prices from branches like Bermuda (a tax haven) to USA, for increasing the operating cost of the subsidiary located in USA. Thus, they end up reducing the tax for the subsidiary in USA and also transfer profits to their subsidiary in Bermuda by means of receiving payment for the service provided to the subsidiary in the US. Gabriel Zucman, in his book *The Hidden Wealth of Nations,* has estimated that around 650 million dollars of corporate profits of US origin firms was made abroad in countries which have zero or low taxations. That is, countries like Netherlands, Ireland, Switzerland, Singapore and Bermuda account for 55% profits of US firms functioning abroad in 2013 (Zucman, 2015)

A large volume of FDI is suspected to be from tax havens, thus raising doubts about tax evasions. For instance, India which is the seventh largest country in the world receives most of its FDI from Mauritius which is a tiny island nation in the Indian Ocean. A detailed analysis of various sources of funds is provided in section 4.3. Similarly, China receives most of its FDI from neighboring Hong Kong, which is considered to be a popular tax haven. Apart from tax laws, MNCs also use Bilateral Agreements and tax treaties signed between countries to round trip their capital to avoid taxes. Dunning and Lundan in their book have coined the term “escape investments” to investments in tax havens that have been invested as a result of tax concessions offered by these countries (Duning & Lundan, 2008).

To tackle this problem Zucman suggests maintaining a global FDI registry which keeps tracks of the details of the companies’ investments.

Chapter 3

Why Do Firms Invest Abroad

3.1 Trade Theory and FDI

Analyzing why and how international trade incentivizes FDI is very crucial for understanding FDI. Economists like Ricardo have briefly talked about how trade provides new opportunities for the firms outside their countries, i.e. as a result of trade, firms can invest their capital in new areas of foreign commerce rather than already existing activities in the domestic economy (Ricardo, 1817). This is said to increase the general rate of profit in an economy as capital gets allocated from low productive activities like agriculture to profitable activities like foreign commerce:

> "It has indeed been contended, that the great profits which are sometimes made by particular merchants in foreign trade, will elevate the general rate of profits in the country, and that the abstraction of capital from other employments, to partake of the new and beneficial foreign commerce, will raise prices generally, and thereby increase profits. It has been said, by high authority, that less capital being necessarily devoted to the growth of corn, to the manufacture of cloth, hats, shoes, &c. while the demand continues the same, the price of these commodities will be so increased, that the farmer, hatter, clothier, and shoemaker, will have an increase of profits, as well as the foreign merchant" (Ricardo D, 1817, p.85)

In fact, according to Ricardo this outflow of capital from low productive activities will reduce the supply of these goods (say agricultural goods) with respect to their demand, and thereby increase the price at which these goods are sold. Hence, in this manner trade benefits the local producers also. The other way in which trade can improve profitability is when the goods consumed by the working class are cheaply obtained from other countries, as this results in a reduction of wages and increase in rate of profits. Ricardo feels that the second one is the most important reason for a rise in profitability.

In Ricardo's analysis we can find the various effects of foreign trade and the resultant movement of foreign capital. Similar to Ricardo, several economists have also tried to understand the benefits of free movement of capital in recent times. Many of them seem to favor free movement of capital as it allows capital to get the highest rate of return and reduces the risk by diversifying lending and investment across different sectors and countries. Hence, the free movement of capital provides the above advantages to a firm which chooses to invest abroad. Apart from the above advantages, firms with exclusive expertise in certain areas of production have the incentive to invest in foreign countries as they are in an advantageous position over the local firms (Balasubramanyam and Mahambare, 2003). Dunning and Lundan have neatly explained this in his OLI (ownership, location and internalization) framework. According to this framework, a firm will invest abroad only when it has ownership, location and

internalization advantages (Dunning and Lundan, 2008). Ownership advantages refer to the possession of certain technology, marketing skills or patents which local companies do not have. Location advantage implies access to state incentivizes proximity to trading centre and internalization is the process of reducing the number of sub-contracts it has to issue.

Apart from this, firms also invest to get hold of strategic assets and to increase their market share even if the venture is not profitable. These investments are classified into natural resource seekers, market seekers, efficiency seekers, strategic asset seekers, and other investment motives (adapted from Dunning and Lundan, 2008):

The natural resource seekers are further divided into three segments. The first is the primary resource seekers. These are companies which have invested abroad to minimize cost of production and secure supply. They deal with industrial metals, fossil fuels, agricultural goods, rubber, plantation crops, metals like zinc, iron and tobacco etc. (Dunning and Lundan, 2008, p.68). This area of FDI is a place where companies from developing companies such as China and India play an important role. The second category is for obtaining manpower of various skill levels. These investments take place in countries with abundant cheap labor (e.g. developing companies). EPZ (Export Processing Zones) have been set up for this purpose. Business Processing Outsourcing (BPO) units in India are an example of such investments. The last category of investment is aimed at gaining expertise in certain technology or management technique. This investment is done mainly through joint ventures between various companies operating in different countries. They together share technology and invest in Research and Development.

Market seekers are those who invest in a particular country to supply goods in that market or the adjacent market. The reason behind this might be because tariffs impede trade (export) between countries, or the market is so large that exports will not be adequate. Apart from this, the author has identified four other reasons. The first reason is to compete with international companies that have been established in the home country. For instance, Japanese auto makers establishing plants in US, prompted the American companies to do the same in Japan (to improve global competitive position). The second reason for market seeking investment is to offer customized products to consumers in other countries, that is, offering products according to the tastes, conditions and requirements of the people of investing country. The third reason to invest is to get orders from countries adjacent to it. For example, an American company investing in India can also serve countries like Nepal and Sri Lanka (treaties like NAFTA play an important role). The fourth but important reason is to have a global presence so that they can compete effectively with competitors. The other reason is to avail the incentives which the host countries' government offers.

Efficiency seeking is when companies invest in other countries to diversify risks and achieve economies of scale. According to Dunning and Lundan, "The intention of the efficiency-seeking

MNE is to take advantage of different factor endowments, cultures, institutional arrangements, demand patterns, economic policies and market structures, by concentrating production in a limited number of locations to supply multiple markets." (Dunning and Lundan, 2008, p.72) They invest in regionally integrated markets like European Union (EU), Gulf Cooperation Council (GCC) and African countries.

Strategic asset seeking investments are done to acquire assets of foreign companies which will be helpful in the long run. According to Dunning, such investments are done by firms from emerging economies. That is for example "the acquisition of IBM's PC business by the Chinese firm Lenovo in 2005, and the Indian firm Tata's purchase of the UK steel giant Corus in 2007" (Dunning and Lundan, 2008, p.73). They invest to acquire global competence and physical assets in other countries which will enhance their capabilities. These investments are usually in form of mergers and acquisitions.

Apart from the above investment motives, other investment strategies like escape investments, support investments and passive investments are also important ways in MNCs invest:

Escape investments are done by round-tripping of capital, in order to exploit incentives given in another country. The prominent examples are round tripping of capital between China- Honk Kong and India-Mauritius. Shifting of polluting industries to developing nations to escape penalties is also an example of escape investments. Escape investments are result of government policies which the business community dislikes (p.74).

Supporting investments are those done to support companies overall operations in certain country. That is buying houses and other type of intermediaries of MNC's which source goods from the local manufactures are a typical example. Retail Chains like Wall Mart and Nike are prominent examples.

Passive investments are those done to reap future gains in the asset value. They are mostly done in the form of Foreign Portfolio investment. Softbank investing in transport companies like OLA is an example of passive investment.

3.2 Theories of the Firm

Understanding the reason behind the existence of firms is very crucial for understanding the reason why firms organize production at an international level. R. H. Coase in his paper 'The nature of the firm' gives insights on the reason behind the existence of firms in an economic system. According to him, although coordination in the economy takes place naturally with the help of the price mechanism, coordination within the firm takes place because of "orders". He argues that, this fact has been largely ignored in economic analysis and only few economists

like Alfred Marshall have identified firm as a unit where planning takes place. This makes firms very important because it is an entity where entrepreneurs' direction determines the production activity. According to Coase, the primary reason behind the existence of firms is for allowing the entrepreneur to control production. Controlling production within a framework called the firm will allow him to save on certain costs which otherwise would be lost if individuals operate by themselves. This cost is to be understood as transactions cost: the cost of acquiring goods, bargaining and policing. Coase argues that transaction costs can be saved if production is organized within a firm.

Similarly, the "General Formula of Capital" given by Marx also can be said to explain the emergence of firms in the capitalistic economic system. He starts his analysis from the phase where the simple circulation of a commodity is replaced by the capitalistic mode of production. That is, in the simple circulation of money, commodities are exchanged for money and the money obtained is used to buy back commodities, i.e. production is undertaken by households or small production units to produce commodities so that they can obtain money to purchase goods which they can use for their subsistence. In this circuit, there is only a qualitative exchange of commodities, i.e. cotton being sold to get money which in turn is used to buy corn. This is represented by

$$C_1 - \mathrm{M} - C_2$$

Commodity C_1 is sold to get money which is later used to buy C_2There exists only a qualitative difference between $C_1$and $C_2$and no profits arise in this transaction.

In the capitalistic circuit, however money is used in the form of capital to purchase inputs. These inputs in the form of labor power and raw materials are used in production of a commodity. Here, it is important to note that the commodity produced after the production process is valued higher than the combined value of all the inputs. As a result of this profit arise for the capitalist as the value of the commodity produced is higher than the cost of inputs used in the production process, i.e. value addition takes place in the production process. Thus, here we find a quantitative difference in the value of money as the value of money gotten back after production process is greater than the money invested to source inputs. This is represented by

M - C- C'- M'

here *M* is the initial money invested to purchase inputs (raw material and labor) *C*. Inputs are used in the production process to produce commodity *C'*. This commodity *C'* is valued higher than the total value of inputs *C*. The produced commodity *C'* is sold in the market place and M' is the value of money received after the sales. It is important to note here that in the capitalistic

circuit the value of *M'* has to be greater than that of *M*, for a capitalist to continue to invest, i.e. there must be profits to motivate the capitalist to continue his investment.

From this above formula of capital given by Marx, we can find that the capitalist will start a firm and invest in production only when there is some profit. Hence, profit is a vital factor that influences the decision making of the capitalist with regards to undertaking production.

This same idea of profit making drives any investment including the decision to invest abroad. Thus, for a firm to become multinational there must be some profit motive to invest in some other country. This can be represented by

$$M_{\text{Abroad}} - C_{Abroad} - C'_{Aborad} - M'_{Abroad}$$

where the resultant M'_{Abroad} derived from investing in some other country is greater than the profit obtained in the domestic sphere M'. Hence for a firm to invest abroad the net earnings derived from investment in the foreign country should be greater than investing in the home country. That is firms use strategies such as internalization to save costs. Internalization is the process by which a firm internalizes certain external transaction within its firm structure, i.e. external transactions such as processing and sourcing of inputs from external firms located in different countries now takes place within a firm with the help of its own subsidiary (Dunning and Lundan, 2008).. Internalization can help in saving various costs by: (1) providing total control and coordination over the production process, (2) preventing hassles that occur during transfer of knowledge to other firms, and (3) Procurement of intermediate goods helps in escaping various taxes through transfer pricing (Transfer pricing is the price at which subsidiaries of a firm transact with each other)**.**

However, it is important to note that internalization makes intra-firm communication costly, thereby increasing the organizational cost (Dunning and Lundan, 2008). Moreover, the investment required to set up subsidiaries is costlier than outsourcing to other firms. Though there are these problems, companies have come up with their own set of policies to reduce the impact of these problems. One way in which they address this is to arrive at firm level objectives which all subsidiaries must strictly follow. These firm level objectives aim to facilitate smooth communication between various subsidiaries, stakeholders and employees. It is also frequently modified to represent popular sentiments like environment friendly production and ethical investments. Thus, we can find that the firm has to be quick in changing its objectives or structure in order to reap the benefits of internalization.

The other way a firm addresses these problems is based on the attitude and style of operation of a company, which is again largely influenced by the country of their origin. For instance, companies hailing from countries like Japan (and eastern countries) have a lot of links with the government and have large families controlling them, whereas countries in the West rely on institutions and formal contracts (Dunning and Lundan, 2008). In fact Dunning has classified

countries into coordinated and liberal markets. Companies of coordinated markets are said to have

> "High debt/equity ratios, cross-ownership of banks and industrial enterprises and interlocking directorates, and are generally sympathetic to the goals of stakeholder capitalism" (p.65)

And companies of liberal markets are said to

> "feature widespread share ownership, an active market for corporate control, flexible labor markets with the right to hire and fire, and education systems geared towards mobility" (p.65).

Companies from coordinated market often place managers from their home countries in key official posts in the investing country. This helps them prevent communication gaps and also prevents loss of technology/management skills as the manager from the home country has already been a trusted employee for many years and will not shift to any new company in the investing country. Apart from bringing managers from the home country, companies from coordinated markets also bring their supplementary industries/ancillaries from their home country. This again helps then to reduce the intra-firm transaction costs as they have a already existing relationship with the ancillaries from their home country. Examples of countries belonging to coordinated markets are Japan and Germany. Companies from liberal markets often rely on intra-company rules to reduce the communication costs. For instance, companies from liberal markets train their staff in domestic country in such a manner to reduce intra-firm communication. They also have strict rules which impose restriction on their staffs' transferring the technology to other domestic firms. USA is an example of a country belonging to the liberal market. Thus, we can see that the country of origin can have substantial impact on management practices of the firm.

3.3 Theories of Investment

Investment can be broadly classified into two types: a) real Investment and b) financial investment. Real investment is when the investor purchases assets to put it in use for productive purposes. Here, the asset has both the stored (intrinsic) value and use value. A truck which carries goods can be considered to be a real investment as the truck, by itself has some value and it can also generate income by transporting goods. Financial investment is the investment in financial assets like bonds and stocks. These assets posses only store value. For example, people invest in stocks of a particular company in anticipation that the company's stock prices will go up in the future. With respect to foreign capital, FDI can be thought of as real investment and foreign portfolio investment (FPI) can be thought of a financial investment. The more detailed definition is as follows:

1. Foreign Portfolio Investment: Here the firm buys the stocks of a foreign company, but has no "controlling interest" or "long term interest" in the operation of the firm. For accounting purposes, less than 10% investment in any venture by a foreign company is considered to be FPI in most countries.

2. Foreign Direct Investment: It is an investment where a foreign company has "controlling interest" or long-term interest in the operation of the firm.

2.1 Greenfield Investment: It is a type of FDI where the foreign company builds up the company in the host economy from its inception.

2.2 Brownfield Investment: It is a type of FDI where the foreign company merges or acquires a company in the host country.

Given this classification, it is important to note that Keynes did not prefer financial investment for the purpose of speculation or earning interest and called for euthanasia of the rentier class by having very low interest rates (Keynes, 1936). According to Keynes, investment for speculation diverts funds from productive usage and thereby creates an artificial scarcity of capital. Due to this artificial scarcity of capital, entrepreneurs often face difficulty in executing their business plans. This is true in the context of foreign capital as FPI investors often invest in various companies of various countries either to earn interest or to wait and sell the stocks. They are very risk averse and often withdraw their funds from the economy when the economic situation is not favorable for them.

Given this, we should understand that elements like risk and profitability play a key role in investment decisions. It is important to note that both private investment and FDI have similar characteristics as the source and motives of both the investments are same with minor differences. Equity capital, retained earnings and loans are the major sources of both private investments and FDI. The only difference is that in the case of FDI the investment is undertaken internationally and hence the source of the funds might also be acquired at the international level. International factors like exchange rate can also influence FDI decisions. But however, in spite of some differences the main end motive behind both these investments is profit maximization. As seen in section 3.2, in the capitalist system an investment is only considered successful when the returns of investment are positive and growing. Thus, the generation of profits is the most important motive of both FDI and private investment. However, this motive of profit maximization is often absent in the government investments. Government investments are mostly taken with the motive of maximizing social goals, like providing decent jobs, basic necessities to people and improving the living standard of people under poverty.

In addition to profits, the risk factor plays an influential role. According to Adam Smith, if three investments offer the same return it is the natural inclination of people to choose the least risky

one among the three (Smith, 1776). This is very important in the case of FDI as countries constantly have to adjust their policies in order to keep the investors feel safe.

Apart from risk, the other big challenge faced by the foreign investor is that of expectations. Investors often have to calculate the expected yield of investment before undertaking any investment. For this they must calculate the rate of future yield and the risk associated with the investment to arrive at an expected price. This calculated expected price of investment has to match with the realized price in order to generate adequate profits. If the realized price is less than the expected price then it might cause discomfort for the investor and can slow down the rate of reinvestment (Minsky, 1980). To prevent non-matching expectations, government authorities try to maintain macroeconomic stable policies, exchange rate and low inflation as these factors can directly and indirectly influence the expectations of the investors and thus influence investment decisions. We must also remember that the business expectations can change on daily basis and can also affect the employment scenario in the country. Business expectations originate from the presence of a time gap between producing a good (incurring the cost) and selling it. This time gap provides scope for investors and entrepreneurs to guess the time and price at which the consumer will purchase their finished output. Keynes uses the term “short term expectation” to refer to the above kind of expectation. The second kinds of expectations are called as long term expectations. These expectations determine the expected yield when a firm invests in capital goods. Unlike, the short term expectations which calculate the expected yield of working capital, long term expectations calculate the future yield of long term capital investments (Keynes, 1936).

These two expectations affect the firms’ daily operations significantly. That is, daily behavior is determined by the expected cost of output and the expected proceeds from the sale of the finished good. Also, the producers of capital goods whose main customers are industries that produce consumer goods will be affected when the expectation of producers of consumer goods change. Thus, deviation in expectations of one firm in the chain can affect all the connected firms. However, it must be noted that the daily change in expectation will not immediately affect employment. In fact, short term employment does not vary frequently. However, current expectation will determine future employment. This, we can see that there exists a clear link between expectations and employment. Since these expectations are prone to changes on daily basis, the reliability of private investment as tool for economic growth and employment generation is an important question. Here, it is important to keep in mind that, since government investment is not based on a profit motive, there is no need for the investors to calculate the future returns and thus they do not have any expected price. Thus, government investments will not be volatile as they are not influenced by expectations.

Chapter 4

4.1 Sector-wise Trends

In this section we use the sector-wise classification of an economy to understand the various aspects of FDI. These classifications are useful as we can assess the usefulness of FDI in terms of its economic development based on the details of sector which receives FDI. For instance, a high inflow in a labor intensive sector implies more jobs and drop in the level of unemployment in a country. We can also asses the reason why certain sectors receive high amount of FDI compared to other sectors. The reasons for this can be explained using various reasons given in section 3.3 i.e. FDI might flow in certain sectors because MNCs might be in want of cheap skilled workforce or there might be new government policies which make it easy to do business in certain sectors.

4.1.1 The Nature of FDI in India

The two modes for investing India:

Automatic Route: Under this route no government or Reserve Bank of India permission is required for investment. For example, sectors like and animal husbandry, civil aviation and railway infrastructure are classified under automatic route. Most of the investment in this route takes place through acquisition of share (Kathuria and Jaju, 2013).

Approval Route: A government approval is compulsorily required for any investments that come under this route. For example, investments in sectors like defence, mining and print media need compulsory approval of the government.

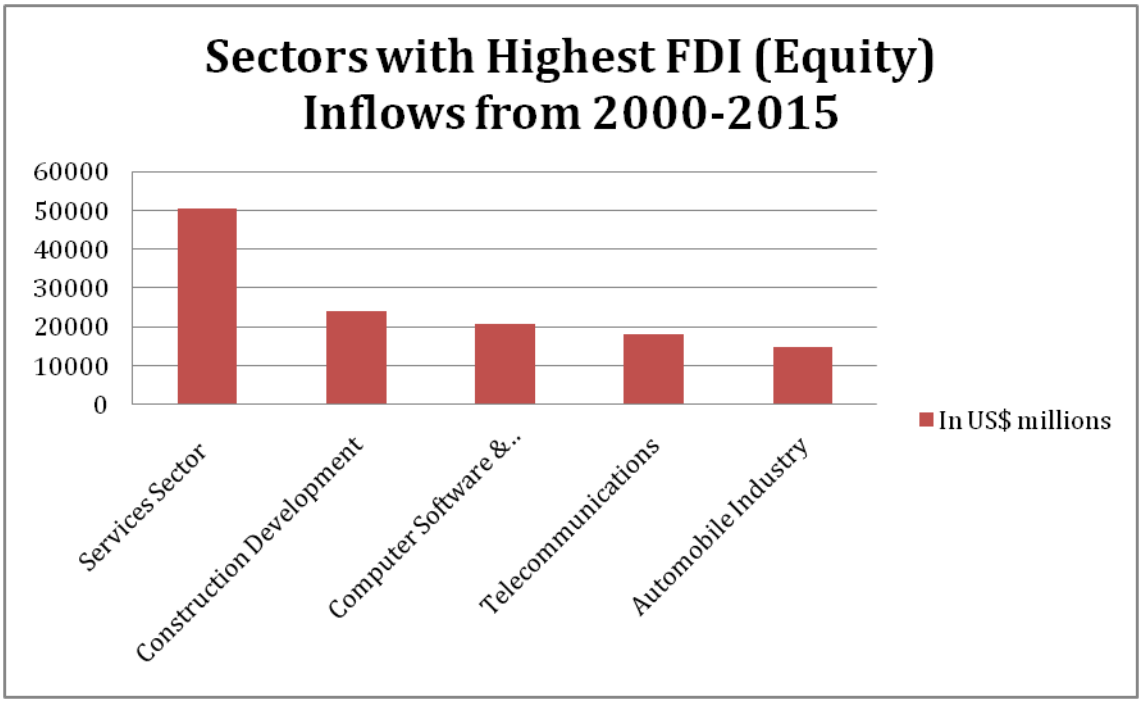
It is important to note here that there might be certain sectors which might be part of both automatic route and part approval route; for instance, up to 26% of investment in print media can be under automatic route and any investment above 26% needs government approval.

Table 4.1

Some Sectors and their Routes for Entry		
Sector Under Automatic Route with conditions	Cap	Government Approval
Agriculture	100%	No Approval
Manufacturing	100%	No Approval
Trading- Wholesale	100%	No Approval
Railway Infrastructure	100%	No Approval
Pharma- Greenfield	100%	No Approval
Insurance	100%	No Approval
Pension	100%	No Approval
Sectors where Government Approval is required	Cap	Government Approval
Food Product Retail Trading	100%	Up to 100%
Defense	100%	Beyond 49%
Telecom Services	100%	Beyond 49%
Pharma- Brownfield	100%	Beyond 74%
Banking-Private Sector	74%	Beyond 49%
Banking-Public Sector	20%	Up to 20%

Source: Data obtained from MakeinIndia.com website

Chart 4.1



Sources: Data obtained from quarter-wise factsheets, DIPP, June, 2018

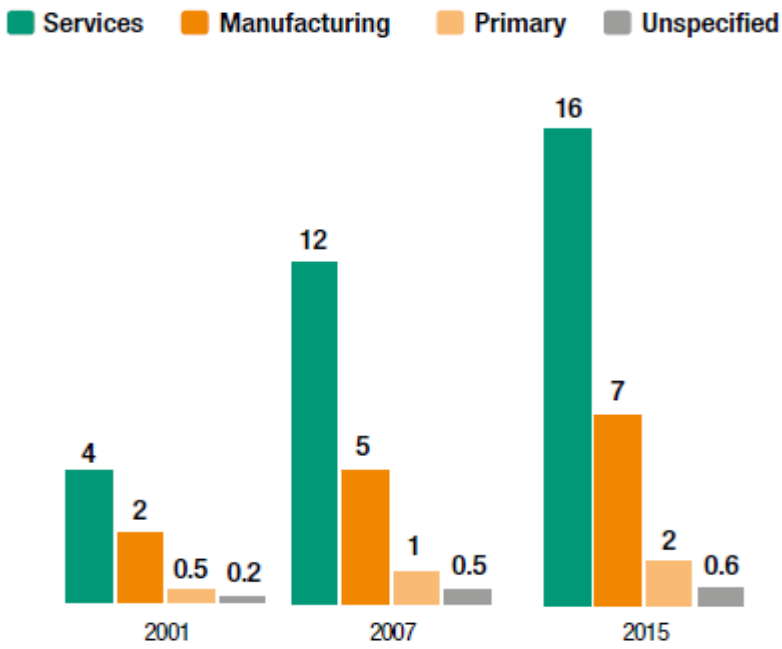
In the above chart 4.1, top 5 sectors with highest total inflows have been depicted. The service sector with $50,792.42 million investment is the highest receiver of FDI inflows. Service sector specifically consists businesses belonging to finance, banking, insurance, non Finance/business, outsourcing, R&D, Courier, Technology Testing and Analysis. Followed by service sector are Construction and Development, Computer Software and Hardware, Telecommunication and the Automobile industry. Construction and Development sector consists of group of businesses like Townships development, Housing development, Built-up Infrastructure and Construction-development Projects. The other sectors mentioned in the list are self explanatory.

The service sector being at the top of the list is surprising because the history section (2.1) policy makers have always advocated for FDI because it helps in strengthening the manufacturing sector of India. Given that the constituents of service sector are large, one must examine further data to understand which business actually receives most of the investment within the service sector. This is because sectors like Research and Development and outsourcing are considered to beneficial as they lead to technology spillover (Balasubramanium VN).

Internationally too service sector receives the largest amount of FDI. The *World Investment Report, 2017* published by the United Nations Conference on Trade and Development (UNCTAD) claims that the service sector accounts for 2/3rd of all investments as of 2015. The chart below gives us idea about the rise in service sector investments over the last decade.

Chart 4.2

Figure I.17. Estimated global inward FDI stock by sector, 2001, 2007 and 2015
(Trillions of dollars)



Source: ©UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

Source: Graph Obtained from World Investment Report 2017 (Page 21)

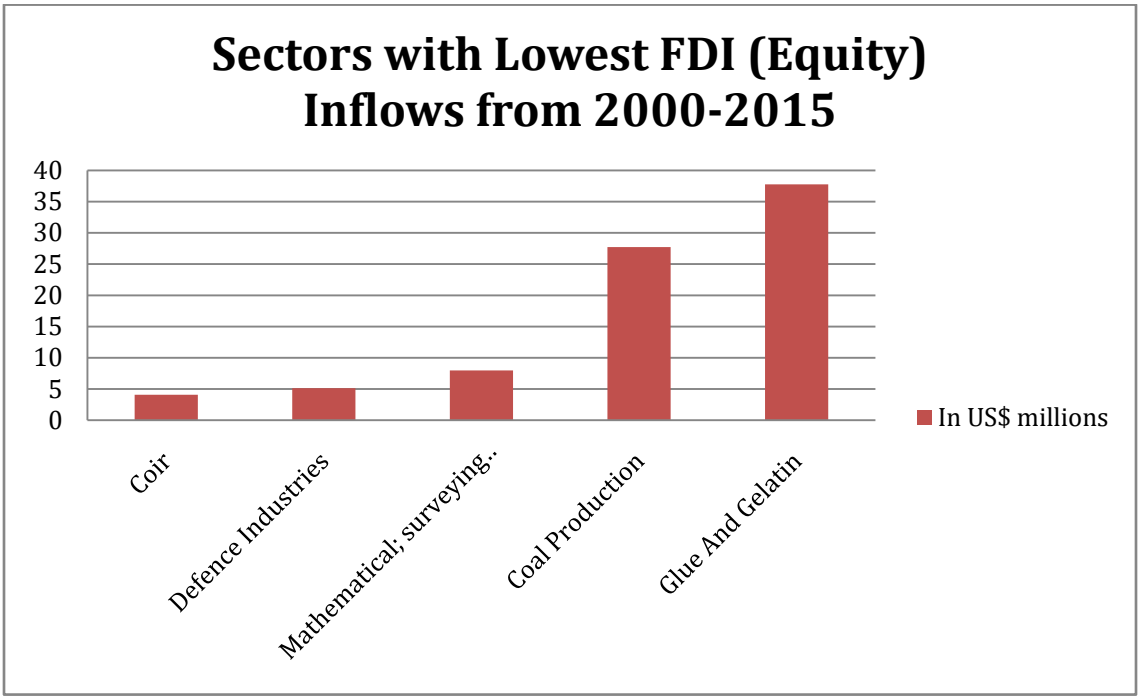
In the *World Investment report, 2017* the service sector includes wholesale-retail trade and telecommunications also. The rise in the service sector FDI makes us question about the intent of FDI as it has been traditionally perceived to drive industrial development.

Construction and Development sector has helped in the creation of large scale employment opportunities (State of Working India, 2018). FDI in this sector can be viewed positively with respect to employment generation. However, as seen when discussing section 2.3, construction sector can lead to real estate led urbanization, which results in large scale displacement of people in rural areas and thus leads to negative impacts on people living in those areas.

Finally, it is important to note here that the top 5 sectors received almost 44.87% of total FDI inflows from 2000-2015. This is shows us that large amount of FDI is concentrated in specific sectors and is not spread evenly.

Now we will take a look at the bottom 5 sectors:

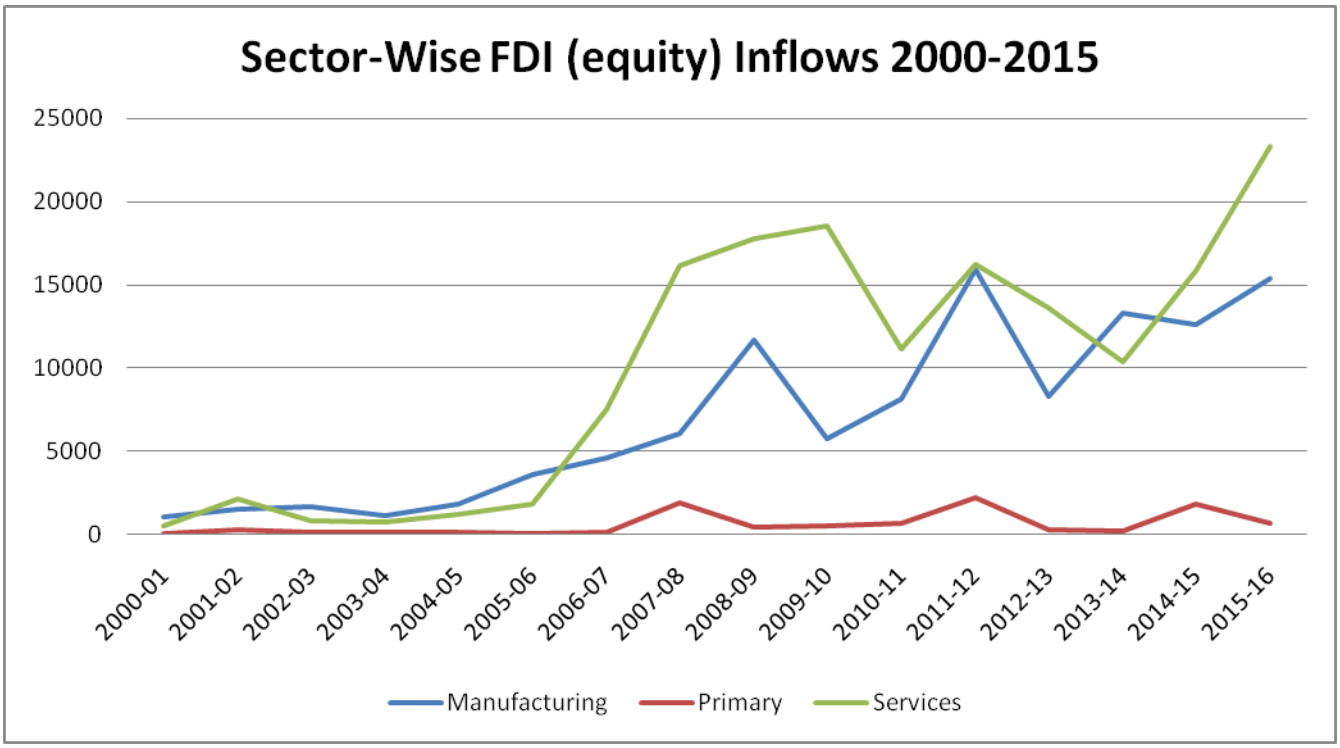
Chart 4.3



Source: Data obtained from quarter-wise factsheets, DIPP, June, 2018

The bottom 5 sectors receive only 0.02865% of total FDI inflows. Coal Production is a notable entry in this list as India is the third largest producers of coal and is highly dependent on thermal power. Coal sector was also placed in automatic route recently in 2018, thus implying that the companies do not need prior government approval.

Chart 4.4



Source: Data obtained from quarter-wise factsheets, DIPP, June, 2018

The above figure depicts the trends in FDI inflows into different sectors from 2000-2015. This chart has been prepared by clubbing together various individual industries into primary, manufacturing and service sector by using the definitions given by the *World Investment Report 2017*.

From the chart we observe that manufacturing sector took off at 2003-2004 and continued to rise till 2008-2009. Service sector began a little late but took off sharply at 2005-2006. In few years, it surpassed the manufacturing sector until 2008-2009. 2008-2009 is a notable year as the Global Financial Crises affected various countries and had a cascading effect across all sectors. There was a slump in FDI inflows until 2012-2013 but both sectors quickly picked up after that. The primary sector consists of only mining industries and it receives only a tiny amount of FDI inflows.

Years 2003-2004 and 2005-2006 are important as FDI in both manufacturing and services pick up in this year. The announcement of new export import policy (2002) and SEZ policy (2005) can be a major reason for the increase. The EXIM policy gave a lot of emphasis on industries. Post 2003-2004, a lot of public infrastructural projects like construction of government owned IT parks, roads under golden quadrilateral and high speed internet were developed.

2008 Global Financial crisis has had a powerful impact on the FDI inflows towards India. We can see that in all sectors the sentiments of the investors have been affected. As seen in section 3.3, investor expectations play a key role in their investment decision. Any policy/phenomena that

affect their sentiments will result them in withdrawing their investment. Thus, this must be taken into account as government investment, unlike private and foreign investment is not affected by any kind of expectations.

Post the crisis FDI inflows remained sluggish for the next few years. 2013-14 is an important year as FDI inflows into the service sector reach new heights. This is considered to be due to large scale acquisitions and mergers in the telecom sector. In fact the recent increase in FDI inflows is largely due to large scale investments in mergers and acquisitions rather than any new projects (Sundaram and Chowdhury, 2017).

Given our policy objective is to use FDI for the purpose of developing the manufacturing sector, India must frame policies to get more FDI inflows in the manufacturing sector. China until recently had strict controls for FDI in the service sector (Sundaram and Chowdhury, 2017).

FDI: Greenfield vs. Brownfield

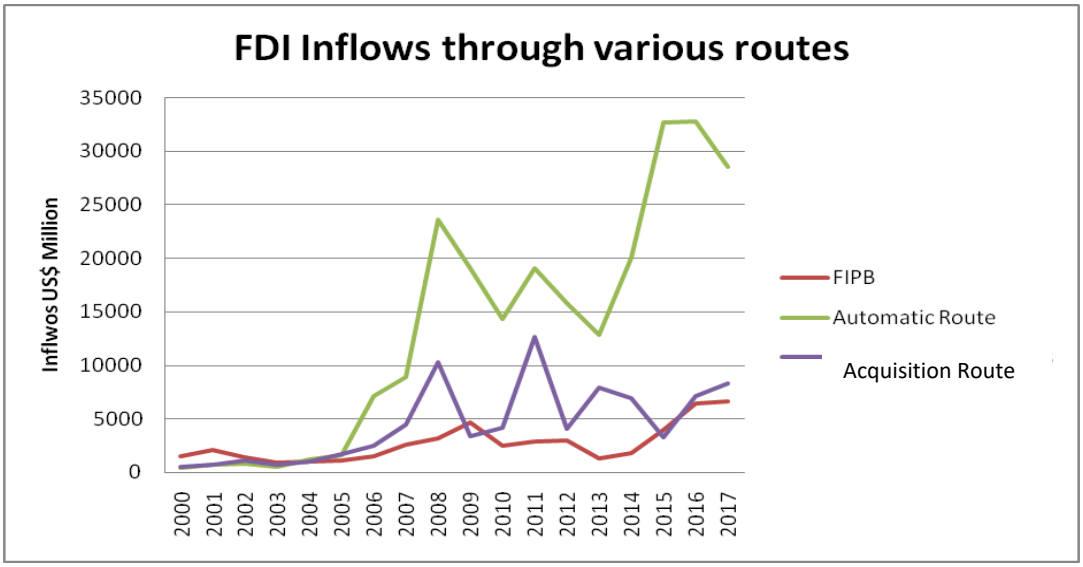
Based on the mode of entry we can classify FDI into Greenfield and Brownfield FDI. Greenfield investments are those where the investors build their companies from scratch and also have lasting control in them. Brownfield investments occurs either through acquisition of an existing company or by merging with it. The decision to choose the mode of investment is based on industry-specific factors. According to the National Council of Applied Economic Research (NCAER) report titled *FDI in India and its Growth Linkages, 2009* Brownfield investments occur for the following reasons:

> "the search for new markets, increased market power and market dominance; access to proprietary assets; efficiency gains through synergies; greater size; diversification (spreading of risks); financial motivations; and personal (behavioral) motivations" (p.25).

This list roughly corresponds to the market seekers and strategic asset seekers as seen in section 3.3. It is widely believed that Greenfield investment is more beneficial as it creates new job opportunities and production facilities. Given this now, we shall asses India's performance with respect to Greenfield and Brownfield investment.

In the case of India, the FDI statistics reporting agency (Department of Industrial Policy and Promotion) does not record FDI with respect to the above classification. Hence, there is no official data capturing Brownfield and Greenfield investment in India. However, we do have data on the amount of FDI which India receives through acquisition of shares route. This is considered as a proxy for Brownfield investment (NCAER report). The disadvantage with this is that Brownfield investment through mergers and stock swap agreements are not recorded.

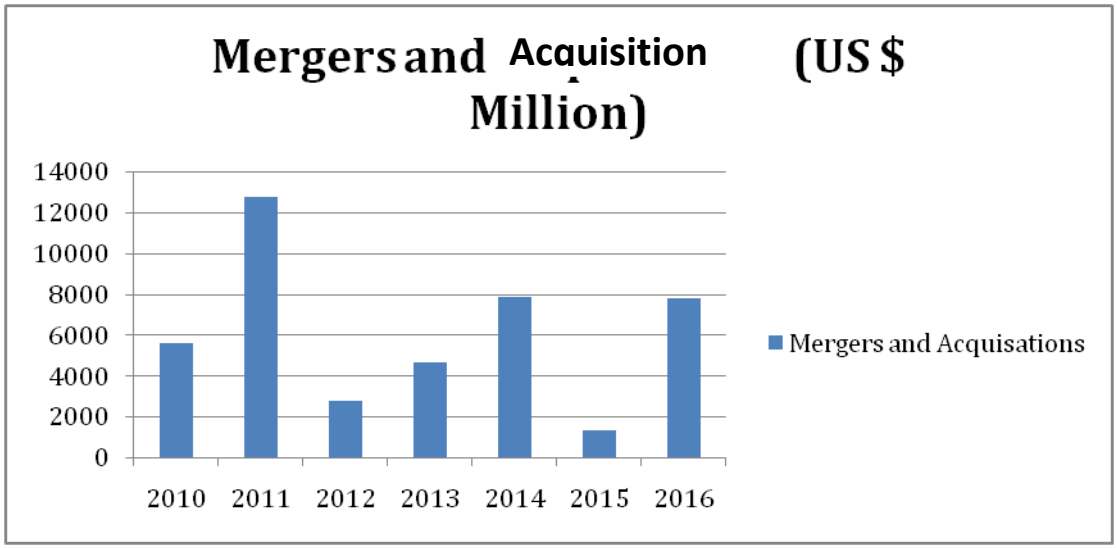
Chart 4.5



Sources: Breakup of FDI inflows data obtained from Department of Industrial Policy and Promotion (DIPP)

The above data indicates that fresh investments are higher than investments by acquiring existing shares. This is a positive trend as it means that new production capacities are being created and new employment opportunities are created through FDI. The *World Investment Report 2017* also has reported on the value of Mergers and Acquisitions in India:

Chart 4.6



Sources: Data obtained from World Investment Report, 2017

Chart 4.6 shows the values of Mergers and Acquisitions seem to change frequently as in 2011 it reached 12795 Million Dollars and dropped to 1323 Million Dollars in 2015. The reason for such sudden increases could be due to large Indian companies being acquired by foreign Companies. In fact according to *World Investment Report 2017*, M&As are highly dependent on the world market prices as when the price of a commodity increases, a lot of activity happens in that sectors as large companies tend to expand. This can be connected to the section 3.3 as we have seen there that expectation of future profits can drive investments. Positive long term expectations on certain sectors can thus result in increased capital investment in such sectors. Thus, apart from OLI advantages expectations do also a play a major role in affecting FDI inflows in a country.

It is also important to note that there should be strict controls on M&As as this can result in formation of monopolies. That is, MNCs with a lot of capital power can often act as strategic asset seekers and can acquire companies in various countries. This in the long run will lead to formation of oligopolies. For example the telecom sector in India, has only three large companies after the British telecom giant merged with Idea. Similarly, Wall Marts acquisition of Flipkart can be seen as a strategic investment by Wall Mart as India's E-Commerce industry is predicted to grow with increased access to internet. Thus, to prevent formation of monopolies the government should control M&As (Bhaduri and Nayyar, 1995).

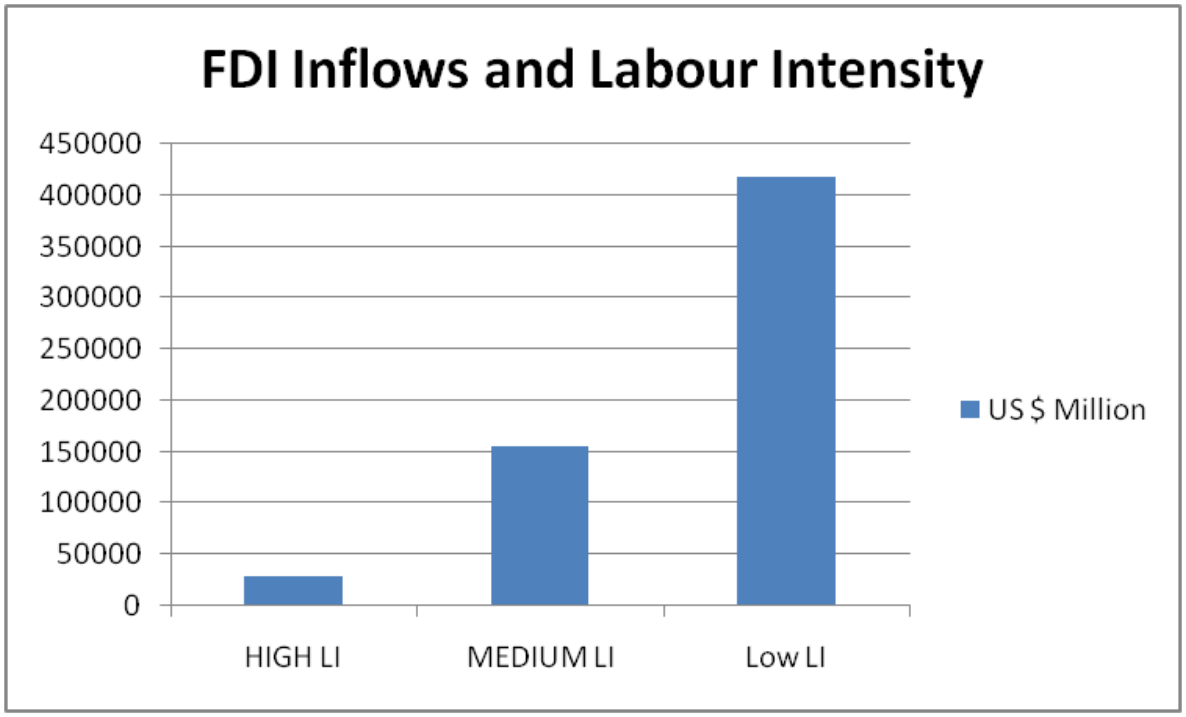
FDI and Employment:

In this section we are categorizing FDI inflows into various sectors based on their labor intensity. Labor intensity is the ratio of the amount of labor employed per unit of capital employed. This ratio helps us indentify the intensity of labor required by different sectors. Thus, a sector which is classified as highly labor intensive has high potential of creating jobs when additional capital invested in that sector. In this section we are calculating the amount of fid which flows into highly labor-intensive, medium labor-intensive and low labor-intensive sector.

For doing the above calculation, the KLEMS dataset of the RBI has been used. The KLEMS data set contains sector-wise information on the value of inputs employed, employment generated and capital formation from 1980-1981 to 2015-2016. It is important to note that KLEMS is an abbreviation of various inputs used during production, i.e. K- Capital, L- Labor, E-Energy, M-Materials and S-Services (RBI Report-Measuring Productivity at the Industry Level – The India KLEMS Database, 2018). From this data set, labor intensity was calculated by dividing the variable labor employed in different sectors by the variable capital which is represented by the sum of intermediate energy input, intermediate service inputs and intermediate material inputs. This gives us labor intensity of various sectors listed in the KLEMS data. The next step was to match the list of sectors in the DIPP data with the list of sectors in the KLEMS data. For this, the National Industrial Classification (NIC) codes were used to match the industries present in both the list. Finally, after matching the data sets three categories namely, high labor-

intensity, medium labor-intensity and low labor-intensity was created. The top 9 labor-intensity sectors were assigned high labor intensity category, the next 9 was assigned medium and the last 9 were given low labor-intensity category. After this graphs were generated and the result is given below:

Chart 4.7



Note: L/K calculated using the KLEMS data set for India

The above chart shows the total FDI Inflows received in US dollars million by high, medium and low labor intensive sectors. Low-labor intensive sector has received the highest total FDI inflows, i.e. almost 70% of total FDI inflows were received by the low-labor intensive sectors. Only a meagre of 5% was received by the high labor-intensive sectors. This is a very important observation as it has significant implications for employment generation. The claim that FDI can bring in jobs can be disputed because of this result. Hence, a growth in FDI cannot always necessarily mean creation of jobs as the direct employment in sectors which received high FDI is low. Also, it is worth analyzing the reasons why India does not receive FDI in labor intensive sectors as India is considered to be a labor abundant country. An important question to ask here is if MNCs are finding it difficult to achieve the desired rate of return in India in comparison to other labor abundant nations (section 3.1). Are the OLI advantages possessed by India is not attractive enough to attract FDI? These are some of the important questions to be asked in this context. India to harness it demographic dividend must get in a lot of labor intensive FDI rather than FDI in less labor intensive sectors.

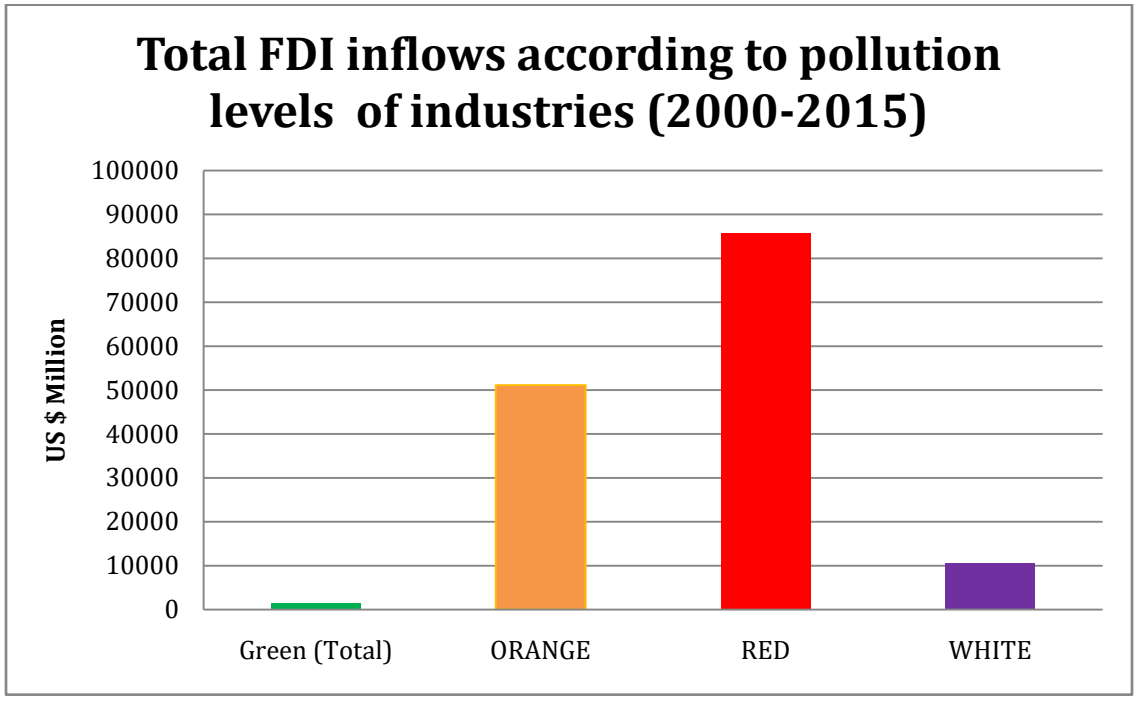
Some examples of low labor-intensive sectors include chemical, pharmaceutical and metallurgical industries. Medium labor-intensive sector include software, food processing and tourism industries. High labor-intensive sector includes textile, hospital and transport sectors. Given this, incentives and preferences in SEZs must be given only to those sectors which are highly labor intensive, if the motive is to generate employment. Thus, the contribution of FDI towards job creation can only occur by giving preference to certain sectors.

FDI and Environment

In this subsection we will try to understand the environmental impact of FDI inflows. For this, we will use the Red, Orange, Green and White classification given by the Central Pollution Control Board, Delhi (CPCB). Under this classification, different types of industries are color coded based on the level of pollution. Red color coded industries are considered to be the highest polluters followed by orange, green and white. Here green and white are the low polluting industries. This classification of various industries by color codes was done to make formulation of policies easy for the pollution control departments across various states.

In this subsection we will categorize FDI inflows into various industries by using the above color codes. That is we match industry name given in the DIPP data with the relevant color code available in the CPCB document. The chart below contains the details of total FDI inflows received by various industries belonging to the above given color codes. It is important to note that the service sector was kept out for this analysis due to the lack of information on the pollution levels of the service sector.

Chart 4.8



Note: Calculated using the Central Pollution Control Board industrial classification of industries based on pollution levels

In this chart 4.8 we find that the Red category of industries to be receiving the highest FDI inflows. Some prominent industries under Red are the automobile, pharmaceuticals and chemical manufacturing industries. The Red categories of industries are considered to be highly polluting and cannot be established in all locations. They need to undertake various safety precautions while the operation of their plants. The orange category comprises moderate polluters and includes the construction industry, rubber industry and the food processing industry. The prominent examples among the green category are tea and coffee, timber products and making of office equipments. Few examples of the white category industries are non-conventional energy, scientific equipment and coir manufacturing.

From the above chart it is very clear that FDI inflows are very high in polluting industries. Can be due to several reasons about which we will talk now. The first reason could be that large scale industrial units like automobile, pharmaceuticals and chemical industries require a lot of capital which often results in the necessity for foreign collaborations. For instance, automobile companies in India are largely dominated by foreign companies which operate using large factories. Thus, the dominance of FDI inflows in large scale industries might have led to FDI being high in the Red category of industries.

Secondly, MNCs establishing their units in SEZs have exemptions from various environmental laws and are also exempted from public hearing under Environment Impact Assessment (Kohli, 2015). This could motivate companies to establish in India given the fact that developed nations have stricter pollution control norms. Thirdly, India is gifted with various natural resources and thus there are various MNCs which have interest in controlling them. As seen in section 3.1, these investors are called natural resource seekers. Their primary aim is to control the natural resources worldwide. This is very surprising as FDI is touted to industrialize India by having way for technological transfers, but in reality a large part goes into natural resource seeking industries. In fact, FDI inflows in mining, petroleum/natural gas and metallurgical industries account for 20% of Red category. These mining based industries have a record of damaging the ecology around their factories/quarries and are thus classified as Red.

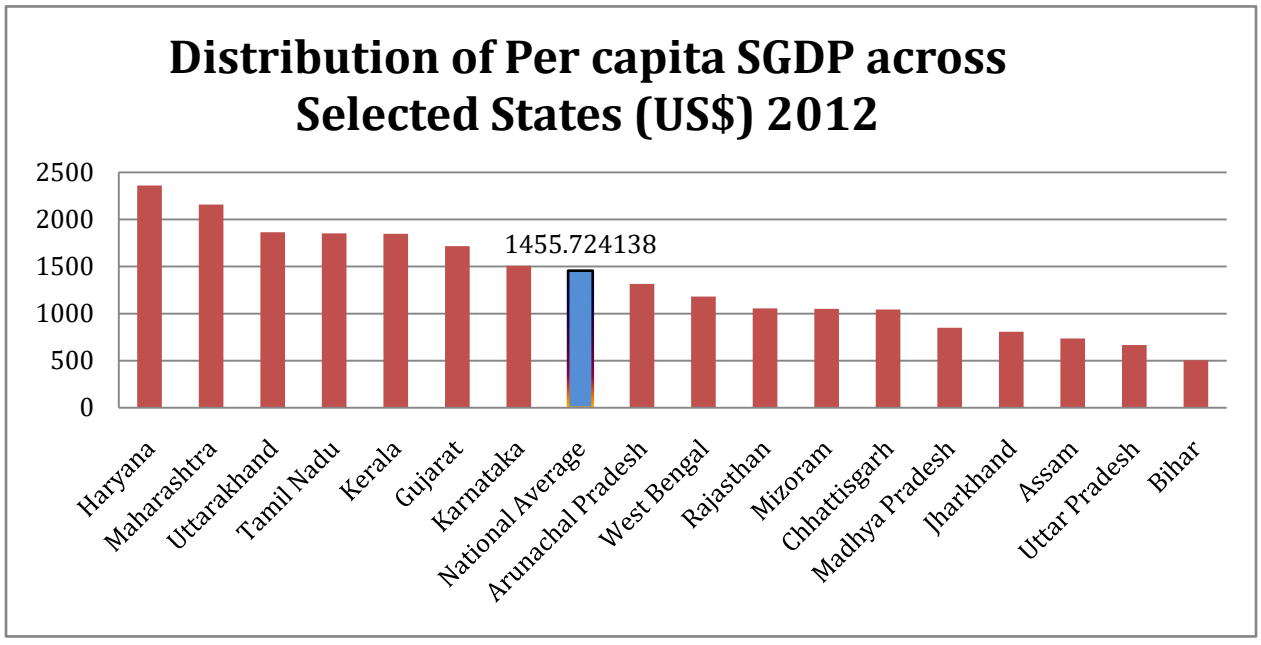
This is an important finding as India is providing OLI advantages to polluting industries (section 3.1). This implies that Indian laws and regulations enable polluting industries to earn higher returns in comparison to the returns they would have got if they had invested in their home country (section 3.1). Indian policy makers must thus ensure that India does not become the dump yard of the world and must have laws that protect the environment. The air pollution in Indian cities stands as testimony of improper environmental regulations. Authorities must ensure enforce these laws equally on all establishments and must not provide any kind of waivers to polluting MNCs.

The limitation of this analysis is that an entire industry is given a single color code. For instance, the entire automobile industry is given a single color code, but there can be various sub-industries within the industry which can have a different color codes. For example, servicing and maintenance of automobile might be less or more polluting than the manufacturing of automobile. Thus, the lack of recognizing sub-industries is a problem in this analysis. This problem mainly arises because of the lack of data on FDI inflows into the subsectors of various industries.

4.2 Regional Trends

India is a large country with a diverse set of states and union territories. There are 29 states and 7 union territories in this country. Each of these states and union territories have unique social and economic characteristics. In fact the diversity among the states is so much that each can be thought of as a separate country itself. Given this, analyzing FDI in the national level is alone not enough as each of these states have had different experience and posses different views on FDI. For instance, states located in geographically difficult terrains and states located on the plains have different economic potentials, thus impacting their experience with FDI. Politically too, states might have varied views on FDI and necessarily do not always concur with the view of the national government. Hence, in this section we will try to understand the various regional trends of FDI in India.

Chart 4.9



Source: Data Obtained from Kathuria and Jaju, 2013

Chart 4.9 shows us the GDP per person across some selected states of India. Here we can see the diverse economic position of various states. Among large states (geographical area) we can find that Maharashtra, Tamil Nadu and Karnataka have performed better than the national average. Bihar, Uttar Pradesh and Madhya Pradesh have remained backward among the large states. Uttarakhand and Gujarat are some of the few states that have performed well in spite of difficult geographical terrain. Overall, the above chart gives us a glimpse of the economic inequality among different states of India.

Given the above economic inequality we will now asses the performance of these states with respect to FDI inflows. FDI equity inflows data is collected and compiled by RBI's regional offices. Since multiple states have a single regional office we do not have exact state-wise FDI inflow data. In the table below distribution of FDI inflows across RBIs regional offices is given.

Table 4.2

RBI Region Wise Distribution of FDI (Equity) Inflows 2000-2018

RBI's Regional Office	State Covered	US$ in Million	%age of FDI Inflows
Mumbai	Maharashtra, Dadra and Nagar Haveli, Daman and Diu	118134	30
New Delhi	Delhi, Part of Uttar Pradesh and Haryana	79760	20
Bangalore	Karnataka	32721	8
Chennai	Tamil Nadu, Puducherry	27953	7
Ahmedabad	Gujarat	19155	5
Hyderabad	Andhra Pradesh	16487	4
Kolkata	West Bengal, Sikkim, Andaman and Nicobar Islands	4782	1
Kochi	Kerala, Lakshadweep	1973	0.5
Jaipur	Rajasthan	1673	0.4
Chandigarh	Chandigarh, Punjab, Haryana, Himachal Pradesh	1472	0.4
Bhopal	Madhya Pradesh, Chhattisgarh	1407	0.4
Panaji	Goa	970	0.3
Kanpur	Uttar Pradesh, Uttarakhand	680	0.2
Bhubaneshwar	Odisha	490	0.1
Patna	Bihar, Jharkhand	113	0.3
Guwahati	Assam, Arunachal Pradesh, Manipur,Meghalaya, Mizoram, Nagaland, Tripura	110	0.3
Jammu	Jammu and Kashmir	6	0
Region Not Indicated		81713	21
Total		389599	

Source- Data compiled from Secretariat of Industrial Assistance (**SIA**) newsletter, Annual Issue, 2017.

The above data establishes that FDI is limited to only few regions in the country. Delhi and Maharashtra receive about 50% of the investments followed by Karnataka and Tamil Nadu. Another important point to note is that 21% of investments have no region indicated, thereby seriously impacting any analysis on region wise distributions of FDI.

Given this data, we can conclude that FDI flows only to affluent parts of the country and not to the poor regions. This is a serious finding as other forms of investments particularly the government investment has a specific aim on the poorer regions of the country. In fact,

statistics indicate that out of 671 districts in the country only 320 have received FDI inflows, out of which 6 have received more than 50% of FDI (Kathuria and Jaju, 2013). Hence, it is reasonable in this context to deeply introspect on how much incentives we should give to the foreign investors.

Globally too, the trend of foreign investments flowing towards developed regions is present. For instance, in China 90% of FDI flows towards coastal regions (Kathuria and Jaju, 2013). The *World Investment Report 2017* data also indicates that almost 60% of the world share of FDI flows towards the developed nations. Large continent such as Africa just receive 4% of world share in FDI. This establishes the fact that like private investments, FDI is also motivated by profits[1] (see 3.1 FDI in firm theory).

The fact that FDI flows only to developed regions is true, but one must also discuss the details of why certain regions receive more flows than the others and analyze the role played by 'location' in influencing MNCs. FDI in trade theory (section 3.1) talks about Dunnings OLI framework. According to that framework, MNCs choose locations which provide them maximum benefits given their requirements. For example, a company which readily exports goods after manufacturing will certainly want to invest in coastal regions that are part of major maritime routes. Apart from geography, features like infrastructure, land acquisition, single window clearance, corruption, labor laws, power supply, and security play a key role in influencing the MNCs decision to invest (Kathuria and Jaju, 2013). Various reports that monitor the performance of states often provide rankings and suggestion on the reforms that must be undertaken to receive more investments. State governments can play an important role as according to Pant and Srivastava (2015), the success of China in receiving huge amounts of FDI is often attributed to local bodies that were controlling key decisions on FDI. These local bodies used a decentralized approval setup and provided a red-tape free process in processing investment proposals.

In India also many state governments have hoisted investors' meets and are trying to promote their state as an investment destination (Thomas, 2016). Commercial Advertisements of states showing their salient features like airports, ports and literacy rate can be often seen in the media. Thus, as pointed out in section 2.3, SEZ and FDI competition to attract FDI can pave way for overall improvement in states policies, infrastructural facilities, governance etc. However, one important thing to note here is that states must not blindly compete in attracting FDI as this will make bargaining harder. It will also lead to regional inequality among various states and is not good for the overall growth of the nation.

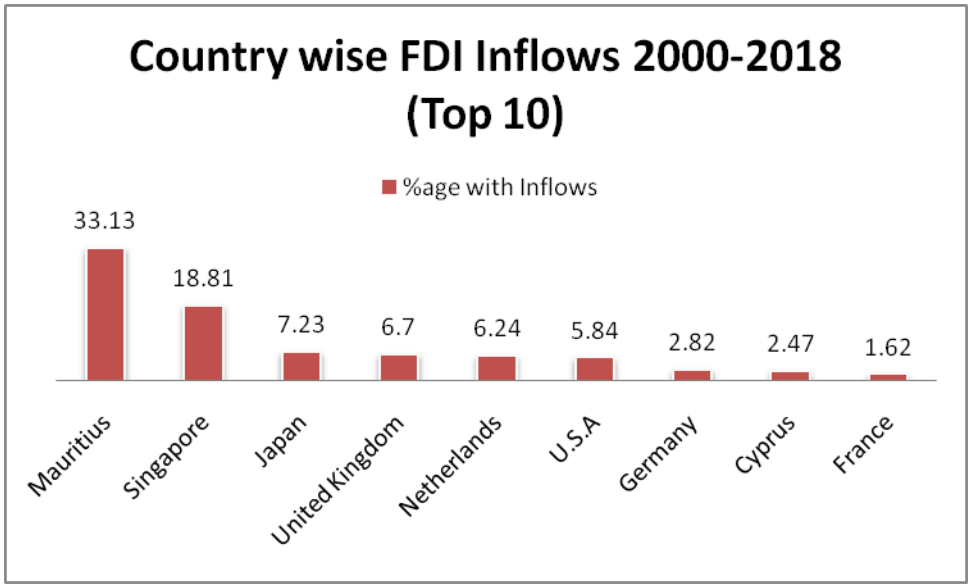
[1] China's One Belt One Road Project is an example of a project where international relations and politics play a key role in influencing investments. Under this project China is trying to redevelop the 21st Century Maritime Silk road by investing in the countries that fall in this route. International observers see this project as a move by Chinese to spread their influence across the world by challenging the current dominant powers in various regions

Also, they must try to get the most from FDI by having trained skilled workforce who can readily absorb new technologies from foreign investments and must provide suitable environment for research and development as these are some of the gains which the host region can gain (Balasubramanyam and Mahambre, 2003).

4.3 Sources of FDI

In this section I will be performing an analysis on the various sources from which India receives FDI as this can help us get information on the type of countries that invest in India. This can be useful as we can dwell deeper to analyze the factors that influence them to invest in India. For instance: cultural ties, international relations and taxation benefits can be factors that influence countries to invest in other countries. One of the reasons why China receives a lot of FDI inflows from Hong Kong is because of the presence of Chinese Diaspora in Hong Kong. Similarly, China invests a lot in many African nations as part of its OBOR program because it helps to serve the strategic interests of the Chinese.

Chart 4.10



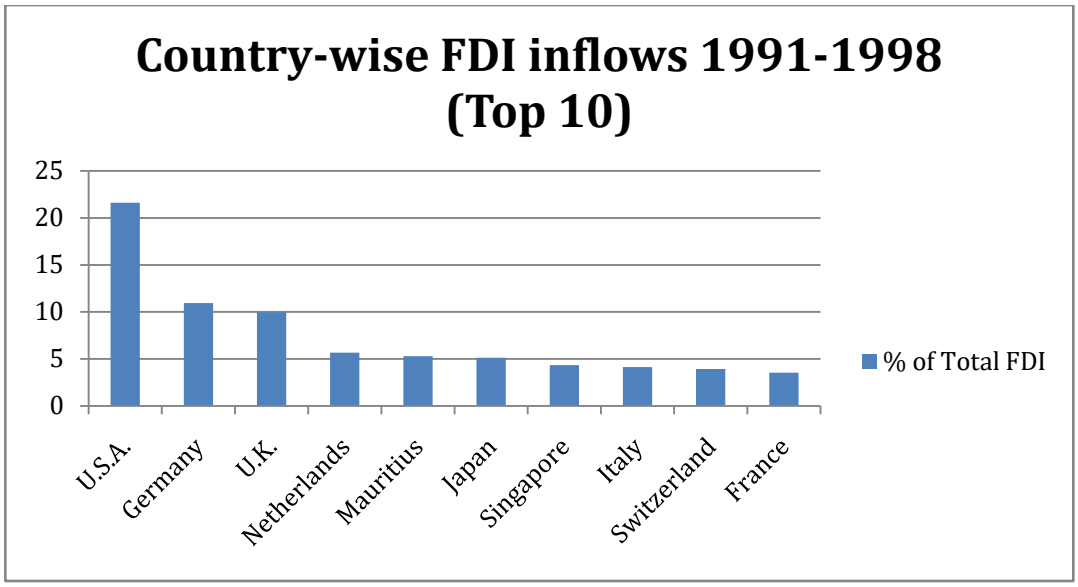
Source: Data Obtained from quarterly fact sheet of DIPP, June, 2018

Thus, we look at the top the top investors in India and find out the reasons on why they do so. Chart 4.10 shows us that Mauritius is the largest contributor of FDI into India from 2000-2018. Followed by Mauritius, we have other countries like Singapore, Japan and the United Kingdom in the list. The fact that tiny nations like Mauritius is the largest contributor of FDI in India has been a cause of concern for the policymakers as it is a tax haven. Similar fears apply for countries like Singapore and Cyprus too as they are considered to be popular tax havens. As seen in section 2.4, foreign investors often use loopholes in taxation laws to dodge taxes. Mauritius has signed the Double Taxation Avoidance Agreement (DTAA) with India in 1982. Under this agreement

> "Capital gains arising from the sale of shares are taxable in the country of residence of the shareholder and not in the country of residence of the company whose shares have been sold." (p.21, NCAER report, 2009)

Thus profits of a Mauritius based firm operating in India is taxed only in Mauritius and not in India. Hence, a lot of MNCs (and Indian corporates) operating in India transfer their profits using their Mauritius office. This is an important issue as the government loses the revenue it has to get due to such manipulations. In fact, in India there has been tussle between the tax officers and the members of Foreign Investor Promotion Board as the latter refused to scrutinize FDI inflows from Mauritius, citing that there is no strong evidence of loss of revenue for the government due to such inflows (NCAER report, 2009). It is important to note here that popular tax havens like Switzerland, Cayman Islands and Luxembourg feature in the top 20 contributors of FDI into India. These countries (tax havens) have served as important facilitators for "escape investments" as seen in section 2.4. They help companies to exploit the difference in taxation laws between countries. This can be also seen as in internalization advantage as having subsidiaries in tax havens can help in transfer of profits to these places to avoid paying taxes (section 3.1).

Chart 4.11



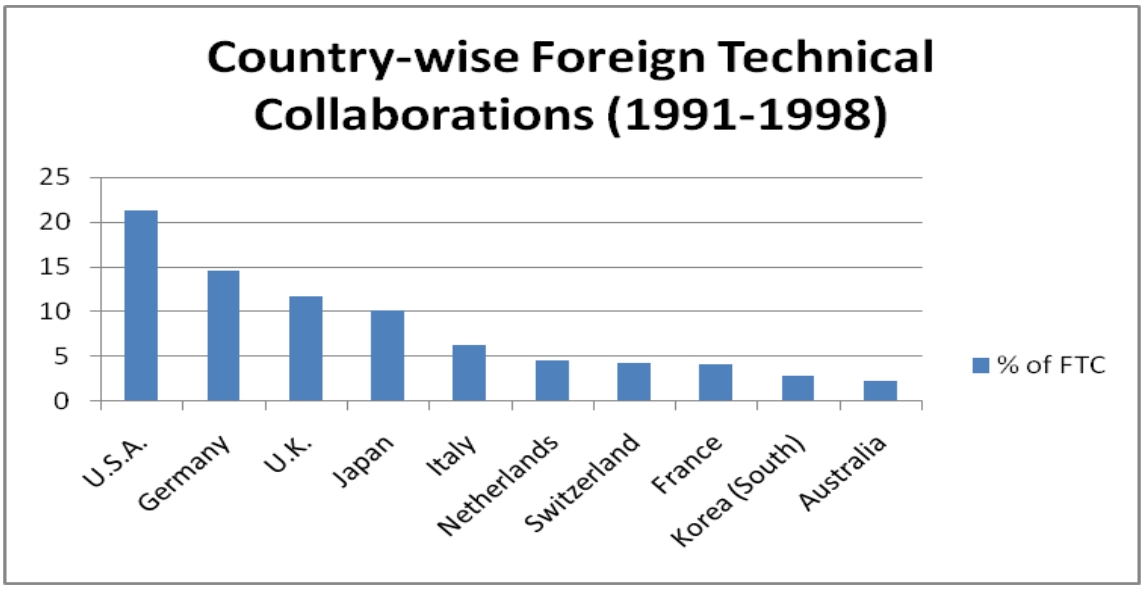
Source: Data obtained from Annual Issue, SIA Newsletter, 2001

The chart (4.11) above depicts country-wise FDI inflows from 1991 to 1998. In this period, USA, Germany and the U.K. are the largest contributors of FDI. Although tax havens like Mauritius and Switzerland also are part of the top 10 countries contributing FDI. This seems to strongly

suggest that the round tripping of capital could have begun immediately after liberalization in 1991 as the DTAA with Mauritius was signed in 1982 itself.

The possible reason for USA, Germany and U.K. being in the top could be because companies from these countries were in foreign collaborations with a lot of Indian firms before 1991 (see section 2.1). After the liberalization regime in 1991 they would have started directly investing in these countries instead of undertaking foreign collaborations (according to these agreements, Indian companies received foreign technology in exchange for royalty). The country-wise data for foreign collaborations is very similar to that of FDI. In fact, the only difference is that Mauritius and Singapore were absent from the Foreign collaboration list.

Chart 4.12



Source: Data obtained from Annual Issue, SIA Newsletter, 2001

The other major reason could have been large scale acquisitions of Indian companies by US based companies. Some popular examples are Parle by Coca Cola (USA) and Godrej by Proctor and Gamble (USA) in 1993.

Chapter 5

5.1 Estimating the FDI multiplier for India

In this chapter, we build an econometrics model to calculate the FDI multiplier. FDI multiplier is an economic factor that depicts the effect of rise of FDI inflows on the country's gross domestic product (GDP). It basically depicts the relationship between FDI inflows and the country's GDP. While constructing the multiplier, we will also asses the nature of FDI and answer important questions with regards to the volatility of FDI inflows. Calculating the FDI multiplier is of interest to us because various sections from chapter 2 to chapter 4 have talked about the impacts of FDI on the host country's economy.

In chapter 2, section 2.1 (History of Foreign Capital in India), we can constantly see that the supporters of FDI argue that it will strengthen industrialization by providing technical know-how and non-debt creating capital. Similarly, the Trade Theory section (3.1), tells us that free flow of capital amongst nations will help capital choose the sector which can offer it the highest rate of return. This is beneficial to the entire economy as the general profitability increases. MNCs through internalization also achieve economies of scale and save various costs which increases their returns (section 3.2). FDI also increase the general competiveness in the host countries economy as MNCs have monopoly over certain resources which motivate them to invest in other countries. Increase in the competitiveness often forces firms to think out of box and helps in the development of new strategies and production techniques. In fact, many Indian companies have turned into multinational companies since the era of liberalization. Thus, from this we can see that the investments by MNCs can potentially have a multiplier effect in the economy. It is important to note that by multiplier effect we mean that increased FDI inflows will amplify the total income (GDP) of the country. The section on SEZs (2.3) also highlights this as setting up of SEZs to attract FDI paves way for creation of business friendly administration, good quality infrastructure and institutions that encourage businesses. In fact, in section 4.2 we can find that this has led to a race among various Indian states to reduce red tape and in introducing business friendly reforms. Given all this, it is extremely useful to compute the FDI multiplier as we can assess its performance with respect to government and private domestic investment.

In order to calculate the multiplier, we examine the effect of various variables like FDI inflows, Private Final Consumption Expenditure (PFCE), Government Final Capital Expenditure (GFCE) and Gross fixed capital formation (GFCF) on the GDP. By doing this we can understand the contribution of each of these investments/expenditure on the country's GDP. Secondly, this will also help us determine whether FDI inflows must be prioritized or not with respect to other investments. PFCE is the expenditure on goods and services by households, GFCE is the governments' expenditure/investment in non-market and market goods and services. Non-

market goods and services refer to expenditure in areas such as like defense, judicial system whereas market goods and services refer to investment in education, health care and housing schemes for the poor. Finally, GFCF represents the addition to fixed assets (capital formation) by private individuals, businesses and the government. GDP is the main explanatory variable as it measures of the size of the economy in terms of the value of final output.

Data Used

This paper uses time series data for analysis. Quarterly data from 1996-2018 has been collected for all variables from official sources listed below.

- The dependent variable is quarter-wise GDP from 1994 to 2018. The data has been obtained from the RBI handbook.
- The main explanatory variable is quarterly FDI inflows from 1991 to 2018 measured in Rupees Billion. The data has been obtained from RBI handbook.
- The second explanatory variable is quarter-wise Gross Fixed Capital Formation (GFCF) from 1994-2016. The data has been obtained from the RBI handbook.
- The third explanatory variable is quarter-wise Private Final Consumption Expenditure (PFCE) from 1994-2016. The data has been obtained the RBI handbook and is in Rupees Billion.
- The final explanatory variable is quarter-wise Gross Fixed Capital Formation (GFCF) from 1994-2016. The data has been obtained from the RBI handbook and is in Rupees Billion.

The summary statistics of the data is present below in table:

Table 5.1

Variables	Mean	Standard Deviation	N
FDI Inflows	297.3574	344.9071	110
GDP	16417.72	12261.96	89
PFCE	9691.294	7131.477	89
GFCE	1733.916	1386.46	89
GFCF	4462.019	3408.93	89

Empirical Strategy:

$$gdp_t = \alpha + \beta_0 fdi_t + ... \beta_4 fdi_{t-4} + \gamma_0 gfce_t + ... \gamma_4 gfce_{t-4} + \delta_0 pfce_t + \therefore \delta_4 pfce_{t-4} + \eta_0 gfcf_t + ... \eta_4 gfcf_{t-4} + \mu_t$$

This is a finite distribution lag model. Here, the dependent y_t variable is affected by one or more variables with a lag. A lag model is used in this case primarily for two reasons. The first is that we are dealing with time series data and, say GDP of a particular quarter might not just be explained by the FDI inflows of the current quarter but also of that of the previous quarters. Second reason is that FDI inflows and other form of investments affect the GDP with lags (some time delay).

In this model the dependent variable is quarterly gdp_t, the main explanatory variable is quarterly fdi_t inflows. Other variables included are quarterly calculated government fixed consumption expenditure $gfce_t$ quarterly calculated private final consumption expenditure $pfce_t$ and finally the quarterly calculated gross fixed capital formation $gfcf_t$. All the explanatory variables have been allowed for four lags. Further μ_t is the error term capturing all unobserved factors that can affect the explanatory variable and α is the constant.

Regression Results:

The output of the OLS regression of all the explanatory variables together is presented in the tables below:

Table 5.2: Regression Output

	(1) loggdp	(2) loggdp	(3) loggdp	(4) loggdp
logfdi	0.0170			
	(0.00940)			
loggfce	0.0765***			
	(0.0193)			
logpfce	0.661***			
	(0.0366)			
loggfcf	0.236***			
	(0.0314)			
L.logfdi		-0.0224	0.00288	-0.00100
		(0.0252)	(0.0189)	(0.0178)
L2.logfdi		0.0411	-0.0135	0.0105
		(0.0245)	(0.0212)	(0.0204)
L3.logfdi			0.0330	0.0180
			(0.0178)	(0.0198)
L4.logfdi				0.00120
				(0.0173)
L.loggfce		-0.0544	0.0158	0.000664
		(0.0379)	(0.0291)	(0.0313)
L2.loggfce		-0.162***	-0.111***	-0.0663*
		(0.0405)	(0.0304)	(0.0324)
L3.loggfce			0.0756*	0.0702*
			(0.0302)	(0.0301)
L4.loggfce				0.0295
				(0.0317)
L.logpfce		0.772***	0.622***	0.405***
		(0.0870)	(0.0686)	(0.0988)
L2.logpfce		0.156	-0.263**	-0.253**
		(0.0980)	(0.0932)	(0.0867)
L3.logpfce			0.335***	0.0971
			(0.0875)	(0.0975)
L4.logpfce				0.384***
				(0.0956)
L.loggfcf		-0.0268	0.189	0.184
		(0.135)	(0.116)	(0.106)
L2.loggfcf		0.295*	-0.294*	-0.0260
		(0.137)	(0.135)	(0.138)
L3.loggfcf			0.389***	0.103
			(0.102)	(0.139)
L4.loggfcf				0.0225
				(0.112)
_cons	0.998***	0.477	1.021***	1.181***
	(0.108)	(0.254)	(0.226)	(0.299)
N	89	87	86	85
R^2	0.998	0.995	0.998	0.998

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Graphs have been generated to find the trends in the explanatory variables across time and are presented below. It is important to note that all the explanatory variables are presented as percentage of GDP to get a sense of the magnitude of the investment.

Chart 5.1

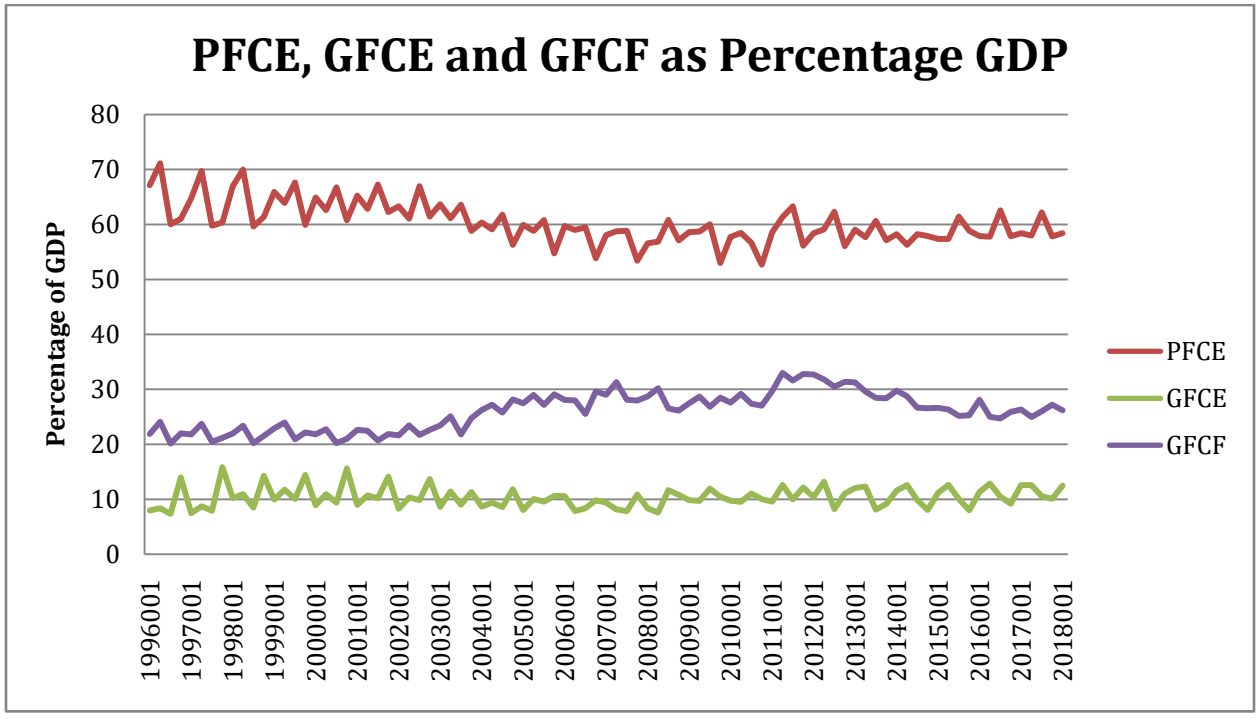
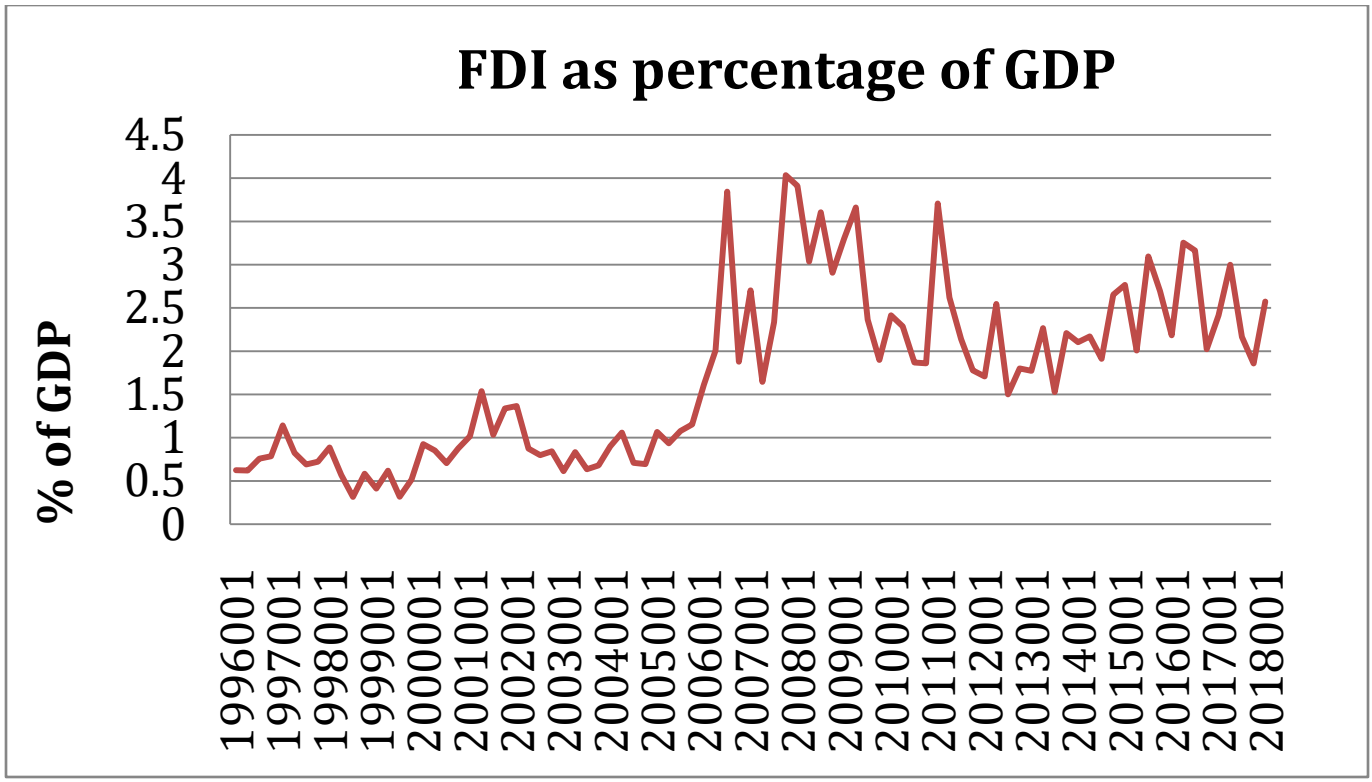


Chart 5.2



Unit root test has been performed for all the above variables to check for stationary. The results have been presented below:

Table 5.3

Unit Root Test Results		
Variables	Test Statistics	P-Value
GDP	2.307	0.999
FDI Inflows	-1.418	0.5738
GFCE	-0.394	0.9111
PFCE	1.686	0.9981
GFCF	1.272	0.9964

Regression Results Explained:

The results in table 5.3 contain the regression results after OLS has been performed on the regression model. The main aim of the model is to find the effect of FDI inflows on GDP while allowing for four lags. The results of this regression can be found in the fourth column of the table. The other three columns contain results after regression has been performed without any lags, with two lag and three lags. Log has been applied to all the variables as it can alter the scale and help in getting a good best fit line using the Ordinary Least Square Method.

Since our main model is a four lagged one we restrict our analysis to it only. After performing the regression on four lagged model we find that the FDI inflows are not statistically significant as the t-statistic is less than 2 or greater than -2 (thumb rule) for all the four cases (-0.6, - 0.51, 0.91, 0.07). It is also not economically significant as unit increase in FDI inflows leads to reduction in GDP by 0.1% in the immediate year, and then in period two and three it has a positively contributes by 1.05%, 1.8% and 0.12% respectively. This is very less compared to all the other investments like GFCF, GFCE and PFCE.

GFCE is statistically significant in period two and three as the t-statistic is greater than 2 (or greater than -2) in all these periods (-2.04, 2.34). It is not statistically significant in period 1 and 4 as the t-statistic is 0.02 and 0.93 respectively. It is economically significant in period three as 1 unit increase in GFCE increase in GDP by 7.02% in the fourth period. In the other three periods the result is not economically significant as the effect of GFCE on GDP is less.

PFCE is statistically significant in period one, two and four as t-statistic is greater than 2 (or greater than -2) in all these periods (4.10, -2.92, and 4.02). It is also economically significant in as all three periods as a 1 unit increase in PFCE results in 40% increase in GDP in period one, 25% reduction in GDP in period two, 38% increase in GDP in period four. In the third period it is not economically significant as a unit increase in PFCE increases GDP only by 9.07% which is less than the impact of PFCE on GDP in all the other periods.

GFCF is also not statistically significant in all the periods as the t-statistic is less than 2 in these periods (1.73, -0.19, 0.74, and 0.20). However, it is economically significant in period one and three as per unit increase in GFCF results in increase in GDP by 18.4% and 10.5% respectively.

Since the type of data is time series, we run a unit root test to find if the data is stationary. The results of the unit root test have been presented in table 5.3. Here we can find, except for GDP all the other variables are not statistically significant as their t-statistic less than 2. Since most of the variables are non-stationary, there can be high possibility of a random walk which causes spurious regressions.

Discussion:

Thus from the above result we can find that FDI inflows are neither statistically nor economically significant. This implies that the effect of FDI inflows in GDP is very less. Other forms of investment both public and private represented by the variable GFCF are at least economically significant though not statistically significant. Private consumption expenditure has a greater impact on GDP figures compared to all the other variables. GFCE, though only has a limited impact on GDP it is statically significant in period two and three.

From the graphs we can also observe that PFCE, GFCE AND GFCF are greater than FDI as a percentage of GDP. In fact, FDI on an average is around 2% of the GDP, this is very less compared to other forms of investments.

Given all these facts, it is important to question the importance given to FDI. Though FDI provides non-debt creating capital and new technology to the economy, it does not play a large role like other forms of investments/injections. Consumption, private and government investment are major injections in the Indian Economy as seen in the results. Thus, the government must priorities these forms of injections into the economy. In the aim of prioritizing FDI it must not affect the other forms of investments. For instance inflation targeting policies result in fiscal prudence and reduce government investments to vital sectors like public infrastructure, health and education.

Chapter 6

Conclusion

In this paper we have carried out a Macroeconomic Diagnosis of FDI in India. The main aim behind doing this is to critically evaluate the effect of FDI on growth, development and employment by looking at various factors like history, theories of investment, trade and firm, policy documents, contemporary issues and secondary data.

The second chapter of this paper took a close look at various contemporary issues affecting FDI in India. Here we analyzed the history of FDI India and found out the constant dilemma Indian policy makers faced with respect to the treatment of FDI in India. Before the 1980s Indian policymakers had placed strict controls on FDI, as they wanted to protect Indian industries from external competition. Post 1980's this policy slowly started changing and the BoP Crisis ushered a new era where all controls on movement of foreign capital was removed. The main argument for doing this is to strengthen Indian manufacturing through technological transfers, external competition and by getting additional capital in the manufacturing sector. Thus, in order to attract more of FDI India started developing SEZs. These enclaves offer a wide range of benefits to foreign investors, like quality infrastructure, tax exemptions and subsidies. These SEZs fared well in attracting IT related FDI. On the flipside, it lead to real estate led urbanization and caused a lot of rural displacement (section 2.3). Apart from SEZs, international treaties were also signed with various countries in order to protect the interest of foreign investors. These treaties contain a lot legal provision regarding protection of the foreign investors' technology and assets. In the context of this we also saw the role of tax havens in movement of foreign capital. They use loopholes in taxation laws across the world to round trip capital.

In the third chapter we looked at the theories of firm, trade and investment. Here, we discovered that foreign investors gain internalization advantage by organizing production across internationally. This advantage helps them to save a lot of transaction costs. Secondly, we also extended the Marx's capitalistic circuit to MNCs. Here, we concluded that MNCs will invest abroad only when the return they get from investing in the host country is greater than the investment in the home country. In the theories of trade section we visited Dunning's OLI paradigm. The OLI paradigm explains that MNCs will be attracted to invest in a country only when it either poses ownership, location and internalization advantage. Finally, in the theories of investment section we analyzed the role played by expectations in influencing FDI. We also concluded that both FDI and private investment have the same motive of profit maximization. Thus, theories on private investment also apply on foreign investments.

In the fourth chapter, we performed the sector-wise analysis of FDI in India by using secondary data from various official sources. The main result of this section is that India receives a lot of FDI in the service sector rather than the manufacturing sector. This is a cause of concern as the

intent behind incentivizing FDI was to get more investment in manufacturing. Also, a lot of FDI has flown into Red category industries which have high pollution potential. This raises questions on whether we are incentivizing the right kind of FDI. FDI's performance in employment generation is also dismal as only a little amount of FDI has flown into the labor intensive sector. In the second section of this chapter we evaluated the regional distribution of FDI. Here, too the results were not satisfactory as a large part of FDI goes only to rich parts of the country. Poorer regions which are unable to exhibit the location advantage get very less FDI. Finally, we analyzed the sources of FDI. Tax havens like Mauritius, Switzerland and Luxembourg are the leading contributors of FDI to India. This raises serious doubts as tax havens facilitate in round tripping of capital in order to save taxes. Foreign investors through their subsidiaries located in the tax havens can also siphon profits without paying any taxes.

In the last chapter we construct an econometric model to find out the effect of FDI on the GDP by constructing a multiplier. In this process we also could compare FDI with other forms of investment/injections such as PFCE, GFCF and GFCE. The results of regression show us that effect of FDI on GDP is neither economically nor statistically significant. In fact other forms of injection/investment play a greater role in affecting GDP rather than FDI. Thus, this raises question about prioritization of FDI.

Through these four chapters I have carried out a Macroeconomic Diagnosis of FDI in India. After this critical examination, it is evident that India is not getting the right kind of FDI. To meet the policy objectives of using FDI to develop a strong industrial base India must prioritize Greenfield FDI in manufacturing sector, especially in labor intensive sectors. The policy makers must not blindly priorities FDI and must be also concerned about its negative effects to. FDI in form of strategic asset seekers and natural resource seekers is of no use for development of the nation. Finally, given the effect of FDI on the GDP, Indian policy makers must realize that FDI alone is not enough for enough for India's economic development and must encourage other forms of investment too.

References:

Aggarwal, Aradhna (2012). "SEZ-led Growth in Taiwan, Korea and India: Implementing a Successful Strategy". *Asian Survey*. California: University Of California. Vol. 52 (No. 5)

Bhaduri, Amit and Nayyar, Deepak (1995). *The Intelligent Person's Guide to Liberalization*. New Delhi: Penguin Original

B.M (1985). "Red Carpet for Foreign Capital". *Economic and Political Weekly*. February, Vol. 20, Issue No. 8

Buthe, Tim and Milner, Helen V (2008). "The Politics of Foreign Direct Investment into Developing Countries: Increasing FDI through international Trade Agreements". *American Journal of Political Science* 52(4): 747-762.

Chandra, N K (1977). "Role of Foreign Capital in India". *Social Scientist* 5(9):3-20

Chenoy, Kamal A M (2015). *The Rise of Big Business in India.* New Delhi: Aakar Books

Coase, Ronald H (1937). "The Nature of the Firm". *Economica* 4(16): 386-405

Dunning, J. H. and S.M. Lundan (2008). *Multinational Enterprises and the Global Economy.* Cheltenham: Edward Elgar Publishing Limited

Frankel, Frankel R (2006). *India's Political Economy: The Gradual Revolution.* Princeton*:* Princeton University Press

Kantha, Sharmila (2008). "Mega-Trading blocs: Where does India stand?". *Ideas for India*, retrieved July 07, from http://www.ideasforindia.in/topics/trade/mega-trading-blocs-where-does-india-stand.html

Kathuria, Rajat and Jaju, Manas Kedia (2013). *A Study of India's Investment Environment, Major FDI Inflows and Suggestions for Taiwan's Businessmen.* New Delhi: Academic Foundation and Indian Council for International Economic Relations (ICRIER)

Keynes, John M (1936). *The General Theory of Employment, Interest and Money.* Marxists.org 2002. Retrieved from https://www.marxists.org/reference/subject/economics/keynes/general-theory/

Kohli, Kanchi (2015). "Another SEZ exemption". Retrieved from https://www.civilsocietyonline.com/column/fine-print/another-sez-exemption/ on 5.05.19

Ranjan et al (2018). "India's Model Bilateral Investment Treaty: Is India Too Risk Averse?". *Brookings India IMPACT Series* No. 082018. https://www.brookings.edu/research/indias-model-bilateral-investment-treaty-are-we-too-risk-averse/

Rodrik, Dani (2018). "What Do Trade Agreements Really Do?" *Journal of Economic Perspective* 32(2): pp. 73-90

Minsky, Hyman P (1980). "The Financial Instability Hypothesis: The Behavior of a Sophisticated Capitalist Economy". *Hyman P. Misnky Archive*. Paper 466. http://digitalcommons.bard.edu/hm_archive/466

Marx, Karl (1887). *Capital* (Vol. 1). Moscow: Progress Publishers

Pant, Manoj and Srivastava, Deepika (2015). *FDI in India: History Policy and Asian Perspectives*. Hyderabad: Orient Blackswan.

Ranjan, Prabhash (2018). "Barring Select Sectors, Nehru Was Not Opposed to Foreign Investment". *The Wire*. Retrieved from https://thewire.in/business/barring-select-sectors-nehru-was-not-opposed-to-foreign-investment on 10.12.18

Razin, Assaf and Tsadḳah, Efrayim (2016). *Foreign Direct Investment: Analysis of Aggregate Flows*. Oxford: Princeton University Press

Ricardo, David (1817*). On the Principles of Political Economy and Taxation*. Kitchner: Batosche Books

Sampat, Preeti (2008). "Special Economic Zones in India". *Economic and Political Weekly,* July, Vol.43, Issue No.28

Sharma, Naresh K (2009). "Special Economic Zones: Socio- Economic Implications"*. Economic and Political Weekly*, May, Vol. 44, Issue No. 20

Smith, Adam (1776). *The Wealth of Nations*. Adam Smith Reference Archive (marxists.org)

Subrahmanian, K. K (1973). "Role of Foreign Aid and Investment". *Social Scientist* 1(6):3-29

Sundaram, Jomo Kawame and Chowdhury, Anis (2017). "Coping with Foreign Direct Investment". *Inter Press Service*. Retrieved from http://www.ipsnews.net/2017/11/coping-foreign-direct-investment/

Thomas, Alex M (2015). "The foreign hand isn't enough". *The Hindu.* Retrieved from https://www.thehindu.com/opinion/op-ed/The-foreign-hand-isn%E2%80%99t-enough/article14626733.ece on 06.05.19

Tomlinson B. R (1978). "Foreign Private Investment in India 1920-1950". *Modern Asian Studies* 12(4): 655-677

Tyson, Geoffrey (1955). "Foreign Investment in India*". Royal Institute of International Affairs* 31(2): 174-181

Vikraman Shaji (2017). “Express Economic history series- 3: How ‘draconian’ FERA clause triggered flush of retail investors”. *Indian Express.* Retrieved from https://indianexpress.com/article/explained/express-economic-history-series-3-how-draconian-fera-clause-triggered-flush-of-retail-investors/ on 10.12.18

Vudayagiri, Balasubramanyam N. and Mahambare, Vidya (2003). “Foreign Direct Investment in India”. *Working Paper 2003/001.* Lancaster University Management School. https://www.researchgate.net/publication/5161822_Foreign_direct_investment_in_India

Zucman, G (2015). *The Hidden Wealth of Nations.* Chicago: University of Chicago

Reports and Documents:

Planning Commission Documents: First Plan (1951-1956), Second Plan (1956-1961) and Third Plan (1961-1966). Accessed from http://planningcommission.nic.in

National Council of Applied Economic Research (2009). *FDI in India and its Growth Linkages*. Retrived from https://dipp.gov.in/sites/default/files/FDI_NCAER_0.pdf on 10.12.18

Ministry of Commerce & Industry, Department of Commerce. *Facilities and Incentives*. Retrieved December 6, 2018, from http://sezindia.nic.in/cms/introduction.php on 10.06.18

RBI report (2018). *Measuring Productivity at the Industry Level – The India KLEMS Database.* Retrieved from https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/KLEMS27032018E6B6C80028604EBCAFDA3A82ACDE9B10.PDF on 06.05.19

United Nations Conference on Trade and Development (2017). *World Investment Report.* Accessed from https://unctad.org/en/Pages/publications.aspx on 10.12.18

Central Pollution Control Board Final Document (2016). *Final Document on Revised Classification of Industrial Sectors Under Red, Orange, Green and White Categories.*

Centre for Sustainable Employment (2018). State of Working India

Appendix:

Chapter 4

Section 4.1

Some Foreign Investing companies in each of these top sectors are listed below:

- Service Sector: AIA Insurance (Hong Kong), Softbank (Japan)
- Construction and Development: Hines (USA), Emaar Properties (UAE), Veolia (France)
- Computer Software and Hardware: Cognizant (USA), Intel (USA), Accenture (Ireland)
- Telecommunications: American Tower Corporation (USA), Vodafone (UK)
- Automobile Industries: Hyundai Motors (Korea), Nissan (Japan), BMW (Germany)

Section 4.2

A short Note on the Ease of Doing Business Ranking of Indian States

The Business Reform Action Plan (BRAP), popularly known as the Ease of doing Business ranking for Indian states is an initiative the Department of Industrial Policy and Promotion (DIPP) and the World Bank. The main aim of this exercise is to push states to simplify the current regulatory environment. The current regulatory environment makes it very difficult for investors because of lengthy bureaucratic procedures. The average time that takes to set up a business is very high because of the slow and inefficient administrative system. Hence, in order to improve this particularly at the state level, the DIPP along with World Bank prepares a list of administrative reforms which have to be undertaken at the state level every year. Based on the reforms undertaken, states are given scores and a list containing the ranks is prepared. The idea behind ranking is to promote both "cooperative and competitive federalism among the states" (http://eodb.dipp.gov.in/AboutUs.aspx). Reforms undertaken at the state level will also help the country as a whole and improve the ease of doing business world ranking for India.

The last edition of BRAP was carried out at 2017 and the south Indian state of Andhra Pradesh topped the list followed by Telengana, Haryana and Jharkhand. All these states were classified as Top achievers and had a score of above 95%. Punjab, Kerala and Jammu and Kashmir

performed poorly in the assessment. These rankings have become increasingly important as they are often used by media and political parties to assess the governments' performance.

Section 4.3

Some popular investors from selected Countries:

Mauritius	
Name of the Company:	Head Quarters:
PRIME METALS LTD	U.K
HOLDERIND INVESTMENTS LTD	Switzerland
TMI MAURITIUS LTD	Mauritius
Japan	
Name of the Company:	Head Quarters:
NTT DOCOMO INC	Japan
SUZUKI MOTOR CORPORATION	Japan
DAIICHI SANKYO CO. LTD.	Japan
USA:	
Name of the Company:	Head Quarters:
Essar Logistics Holdings Limited	Mauritius
FORD MOTOR COMPANY	USA

PETRONAS INTL CORPN LTD	Malaysia

Source: Compiled from DIPP country-wise factsheets and Blomberg.com