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Inward FDI in India



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Abstract

The main purpose of this research is study about the Inward FDI in India and Infrastructure Development in India. Investment in various sectors of the economy is one of the most significant instruments for economic growth since it creates jobs, exports, import replacements, a favorable balance of payments, and so on. Foreign direct investment is vital not just for resource mobilization but also for bringing cutting-edge technologies. It also bridges the gap between saving and investing. India is a developing country in need of massive investment in numerous sectors of the economy in order to drive economic growth. Foreign direct investment plays an important role in the current period of globalization, liberalisation, and privatization.

The first chapter begins with an introduction. It addresses the conceptual framework of FDI, the role of FDI in capital formation, sources of capital, factors impacting foreign investment, types of FDI, theories and disadvantages of FDI, forms of FDI, and various FDI routes. The chapter two consists of review of literature about Indian Economy. These include broadly trend of FDI in India, sector wise, country wise and region wise inflows of FDI. The chapter three consists of detail study of FDI Inflows in India. The study discovered significant variances between Indian states and discovered that characteristics such as market size, infrastructure, industrial orientation, and agglomeration effects have a beneficial impact on foreign direct investment in India. The chapter four explains about Infrastructure Development in Indian, different sectors. Last chapter explains two topics FDI Date Analysis from 2003 – 2018 and also Investment which benefit India's in infrastructure sectors.

CHAPTER 1

INTRODUCTION

Multinational corporations engage in foreign direct investment to establish, acquire, or extend their overseas company in a location other than their parent country. Most foreign entities, on average, have the ability to create values and improve a country's economy more effectively and quickly than existing national firms and entities. As a result, governments and policies around the world have welcomed the entrance of foreign cash as beneficial to economic progress and the establishment of a relationship between the two countries. However, there is always a conflicting emotion concerning

After economic reform and liberalization of FDI laws in the 1990s, India opened its doors to FDI. According to the IMF's global financial stability report for April 2012, India has emerged as one of the top developing-country destinations for foreign direct investment. The majority of investments are directed towards the service sector, as shown in the sectorial distribution section, and the top six economically attracted states identified are Maharashtra, Delhi, Karnataka, Tamil Nadu, Gujarat, and Andhra Pradesh, which accounted for roughly 70% of total FDI inflows between 2002 and 2018.

Main object is to analysis FDI Inflows state wise trends, Policies and Investment opportunities in Infrastructure development.

Foreign Direct Investment

Foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise resident or foreign affiliate).

According to IMF definitions, direct investment reflects the aim of obtaining a lasting interest by a resident entity of one economy (direct investor) in an enterprise that is resident in another

economy (the direct investment enterprise). The “lasting interest” implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the latter. Direct investment involves both the initial transaction establishing the relationship between the investor and the enterprise and all subsequent capital transactions between them and among affiliated enterprise (enterprises that are in a direct investment relationship), both incorporated and unincorporated.

International Monetary Fund (IMF)

The International Monetary Fund (IMF) is a global organization with 190 member countries. It was established to promote international monetary cooperation, exchange stability, and orderly exchange arrangements; to promote economic growth and high levels of employment; and to provide countries with financial assistance and economic policies.

UNCTAD

The (World Investment Report, 2002) defines FDI “as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the FDI enterprise, affiliate enterprise or foreign affiliate.” FDI implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy. Such investment involves both the initial transaction between the two entities and all subsequent transaction between them and among foreign affiliates, both incorporated and unincorporated. Individual as well as business entities may undertake FDI.

1.1 Importance of Foreign Investment

International investment refers to investments made in a country by individuals and organizations from other countries. It is a critical factor in economic development. It creates Economic Growth, Job Creation and Employment, and Technology Transfer.

1.1.1 Different forms of Foreign Investment

The flow of international finance can be divided into two categories: equity and non-equity investments. Direct investments and portfolio investments are examples of equity investments. Direct investments can be wholly owned, majority owned, minority owned, or joint venture investments. Portfolio investment is made up of non-debt portfolio equity flows. Non-equity investments are primarily used to boost host countries' exports. It could take the form of licensing agreements, equipment manufacturing agreements, subcontracting, franchising, or turnkey contracts.

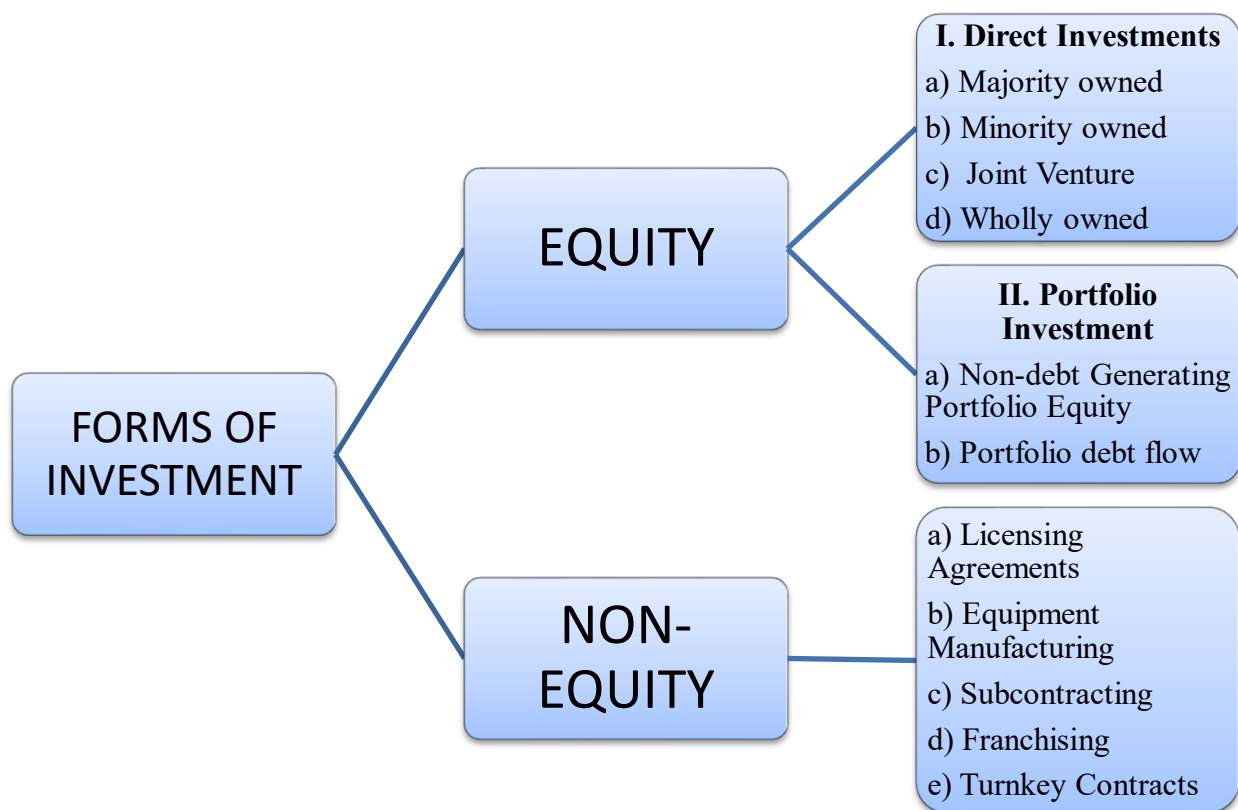


Figure 1: Forms of Investments

1.1.2 Foreign capital flows can be in three primary forms:

- Portfolio equity investments which involve buying company shares through stock markets without gaining effective control.
- Portfolio debt investment which typically covers bonds and short and long-term borrowing from banks and multilateral institutions, such as World Bank.

- Foreign Direct Investments (FDI) which involves forging long-term relationships with enterprises in foreign countries.

1.2 FDI's Scope

FDI helps in providing financial resources for investment in the host country and thereby increases the domestic saving efforts. This contribution of FDI is very important in developing and transition economies¹.

1.2.1 FDI – A Global Perspective

Globalization is a powerful economic development force. It mainly helps in the reduction of poverty in many countries. Every country has an interest in assisting developing countries in integrating into the global economy and gaining better access to rich-country markets. The size of global trade in the global market is one way to measure global integration, while the size of foreign capital flows to developing countries is another. Trade in services such as transportation, finance, insurance, communication, and so on, as well as capital flows, are becoming an increasingly important component of global integration. Foreign capital flows should be sufficient to support trade growth in economically poorer countries.

1.2.2 FDI before the 2007 financial crisis

FDI stocks, measured as a percentage of GDP, did not grow significantly due to the complex political tensions that lasted from the Second World War to the Cold War, and the uneven and uncontrollable economic climate. The general vision for FDI was therefore rather negative, and FDIs were thought to be unhelpful to target countries (Te Velde and UNCTAD, 2006). Global FDI volume took off since the mid-1980s registering an exponential increase from \$200 billion to \$1400 billion between the 1990s and 2000s, with developing countries as the highest beneficiaries of FDI flows.

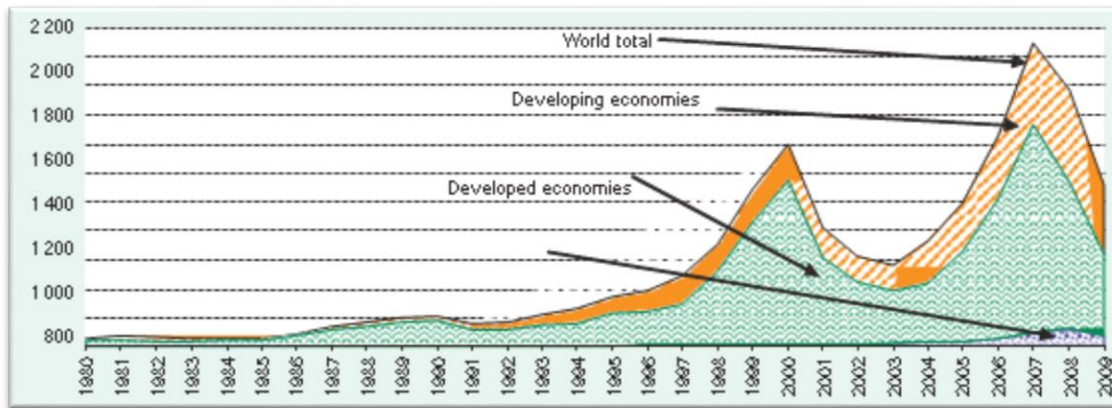


Figure 2: FDI inflows, global and by groups of economies.

(Source: UNCTAD, 2009)

The financial crisis of 2007-2008 devastated international activity, especially for developed economies. The global financial crisis led to the collapse of foreign direct investment flows worldwide. After reaching a new historical record in 2007 of 2 trillion dollars as a result of four years of continuous growth, foreign direct investment fell by 14% globally in 2008 (UNCTAD 2009). Pre-and post-crisis (2007-2009) values corresponded to 40% decrease in FDI inflows for developed economies, and only 6% overall for developing and transition economies (UNCTAD, 2008; UNCTAD, 2010).

Figure 2 graphically represents the trends of FDI collapsed in 2020, falling by 42% to an estimated \$859 billion, from \$1.5 trillion in 2019 (UNCTAD, 2020). FDI finished 2020 more than 30% below the trough after the global financial crisis in 2009. The decline was concentrated to -4 billion (including large negative flows in several countries). The decline in developing economies was relatively measured at -12% to an estimated \$616 billion. The share of developing economies in global FDI reached 72% the highest share on record. China topped the ranking of the largest FDI recipients. The fall in FDI flows across developing regions was uneven, with -37% in Latin America and the Caribbean, -18% in Africa and -4% in developing Asia. East Asia was the largest host region, accounting for one-third of global FDI in 2020. FDI to the transition economies declined by 77% to \$13 billion.

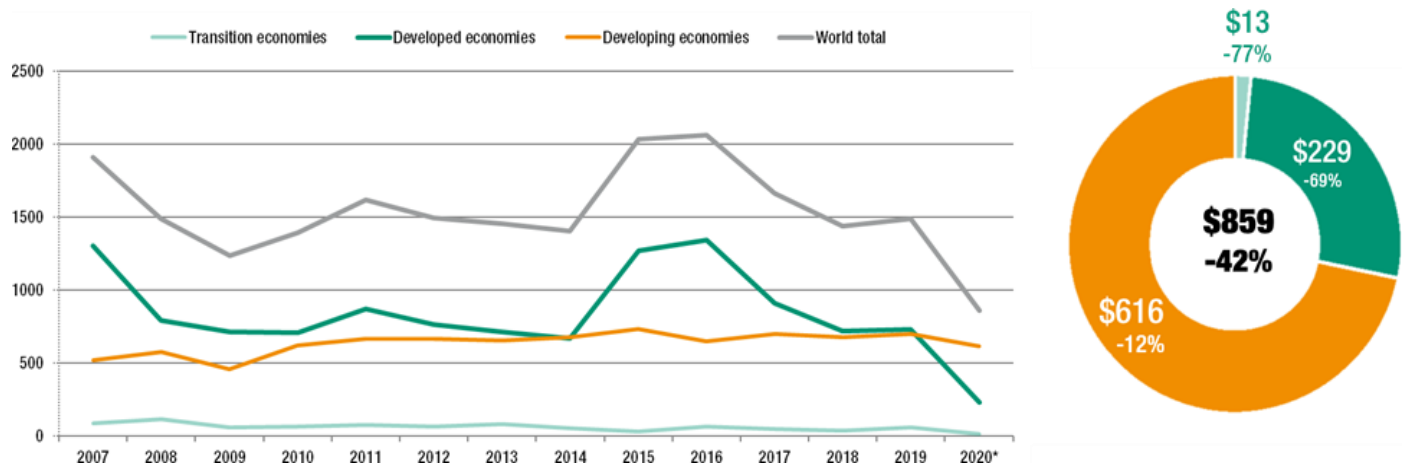


Figure 3: FDI inflows, global and by group of economies, 2007–2020 (Billions of dollars and per cent)

Source: UNCTAD 2020)

1.3 Factors Affecting Foreign Investment

Market size and growth prospects of the host country play an important role in effecting investment location since FDI is increasingly being undertaken to service domestic demand rather than tap cheap labour.

(i) Rate of Interest/ Foreign Exchange Rate

The difference in interest rates between locations is one of the most important stimuli to foreign capital movements. Other things being equal, capital tends to flow from a low-interest-rate country to a higher-interest-rate country. When foreign exchange rates are volatile and have the potential to fall in the future, foreign investment movement is very slow.

(ii) Portfolio Investment

Short-term capital movements may be influenced by speculation about expected changes in interest rates. Portfolio investment is a type of speculative activity in the host country market. Foreign investors reduce their investment if the host country's market is highly speculative. As

a result, foreign investment inflows into the host country are low.

(iii) Costs of Production

Lower production costs in foreign countries encourage private capital movements. We can distinguish two types of cost-cutting investments. The first stems from the need to obtain raw materials from other countries. Such materials may be unavailable at home or only available at exorbitant prices, but they are required for the manufacture and sale of finished goods both at home and abroad. Profit opportunities would go unexplored if they did not exist. Indeed, vast investments in the extractive industries are motivated by the fact that capital must go where the resources are, while the second type of cost-cutting investment relates to commodity costs other than materials, primarily labor.

(iv) Government Policies

Foreign investment in a country is influenced by government policies, particularly those relating to foreign investment, foreign collaboration, remittances, profits, taxation, foreign exchange control, tariffs, and monetary, fiscal, and other incentives.

(v) Political factors

Political factors such as political stability, the nature of major political parties, and relations with other countries all have an impact on capital movements. On the other hand, political influence on business practices, such as changes in taxes and industrial policies, has a negative impact on the movement of foreign investment in the country.

1.4 Different Types of Foreign Direct Investment

Foreign direct investment is an investment made to acquire a long-term stake in a business. Furthermore, foreign direct investment refers to a country's long-term investment in another. It usually entails management participation, joint ventures, and the transfer of technology and know-how. Foreign direct investment can take one of four forms: greenfield investment, brownfield investment, merger and acquisition, or joint venture.

1.4.1 Greenfield Investment

A Greenfield investment is an investment in a manufacturing, office, or other physical company-related structure or group of structures in an area with no prior facilities. Greenfield Investing is a term that is frequently used in the context of Foreign Direct Investment. When multinational corporations enter developing countries to build new factories or stores, this is referred to as green field investment. Greenfield investment is the primary goal of host countries because it creates new production capacity and jobs, transfers technology and know-how, and can lead to linkage to the global market. Prospective companies are frequently offered tax breaks, subsidies, and other types of incentives to establish green field investments in developing countries. Another popular form of foreign direct investment is joint venture. An international joint venture is one of the most effective ways to enter a new market. A joint venture can take place with a host country firm or a state institution, as well as with any foreign status host country company. In a joint venture, two or more parties agree to pool their resources in order to complete a specific task, and each participant is responsible for the profits, losses, and costs associated with it.

Advantages of a Greenfield Investment

- High level of control over business operations
- High level of quality control over the manufacturing and sale of products and services
- Creating jobs for the economy where the greenfield investment is taking place

Disadvantages of a Greenfield Investment

- An extremely high-risk investment
- Potentially high market cost (barriers to entry)

- Higher fixed costs involved in establishing a greenfield location

1.4.2 Brownfield Investment

Although the focus of brownfield investment is formally on acquisition, acquiring firms completely replace the plant and equipment, labor, and product line. This is diametrically opposed to greenfield investment. This is a strategy that is also used in foreign direct investment. The main disadvantage of Brownfield investment is the inefficiency of design and operation, which is frequently sacrificed to meet existing constraints, as well as the increased risk of cost blowout. M&A is a type of foreign direct investment. In general, a merger is the combination of two companies to form a new company, whereas an acquisition is the purchase of one company by another without the formation of a new company. Foreign firms acquire or merge with an established firm in the host country via this route. M&A has an advantage over greenfield investment because it is less expensive in the case of acquiring a loss-making company and it also aids in attracting quick access to the market.

Advantages of a Brownfield Investment

- The ability to gain to a new foreign market swiftly
- Lower *fixed costs* due to using already established facilities, infrastructure, and network
- Lower staffing and training costs

Disadvantages of a Brownfield Investment

- The facility or infrastructure may require major upgrade, which would increase the foreign investment cost
- Higher maintenance cost
- They may be *scalability* and expansion issues related to using already constructed facilities
- Location constraints

CHAPTER 2

INDIAN ECONOMY

Introduction

India is a diverse country, a fact that is visibly prominent in its people, culture and climate. From the eternal snows of the Himalayas to the cultivated peninsula of far South, from the deserts of the West to the humid deltas of the East, from the dry heat and cold of the Central Plateau to the cool forest foothills, Indian lifestyles clearly glorify the geography. India has emerged as the fastest growing major economy in the world and is expected to be one of the top three economic powers in the world over the next 10-15 years, backed by its robust democracy and strong partnerships.

The Republic of India is in Asia's southernmost region, sharing borders with China, Nepal, Bhutan, Bangladesh, and Pakistan. The official currency of India is the Indian rupee (INR). Iron, coal, manganese, bauxite, mica, barite, limestone, thorium, diamonds, titanium, and crude oil are among India's natural resources. India is one of the Indus Valley's oldest civilizations, with vast landscapes, incredible historic sites, and a vibrant culture. In India's stable democracy, Hindu's account for 80% of the population, Muslims for 14%, and Christians, Sikhs, Buddhists, and Jains for 6%. With supportive administrations, it is an appealing destination for strategic investment in a wide range of industries. Because the youth of this country are a powerful driver of demand and a plentiful supplier of employees, they are the most important factor. In India, the youth generation is striving for progress and development. Agriculture, iron, and steel industries, as well as the manufacturing sector, are the key industries.

2.1 Indian States

The top individual tax rate is 30.9 percent, including the education tax, and the top corporation tax rate is 32.4 percent. The tax burden amounts to 7.3 percent of gross domestic product. In the last three years, the Indian government spent 27.1 percent of the country's GDP. Budget deficits have reached 6.9% of GDP, with governmental debt at 69.8% of GDP.

The economic output of Indian states is based on economic surveys from 2018 to 2019.

- 60 percent economic contribution by states Maharashtra, Tamil Nadu, Uttar Pradesh, Gujarat, Karnataka, and Andhra Pradesh.

- 70 percent of exports of Indian states are Maharashtra, Gujarat, Karnataka, Tamil Nadu, and Telangana.
- 50 percent GST tax collected from states of Maharashtra, Karnataka, Gujarat, Tamil Nadu, Andhra Pradesh, and New Delhi.

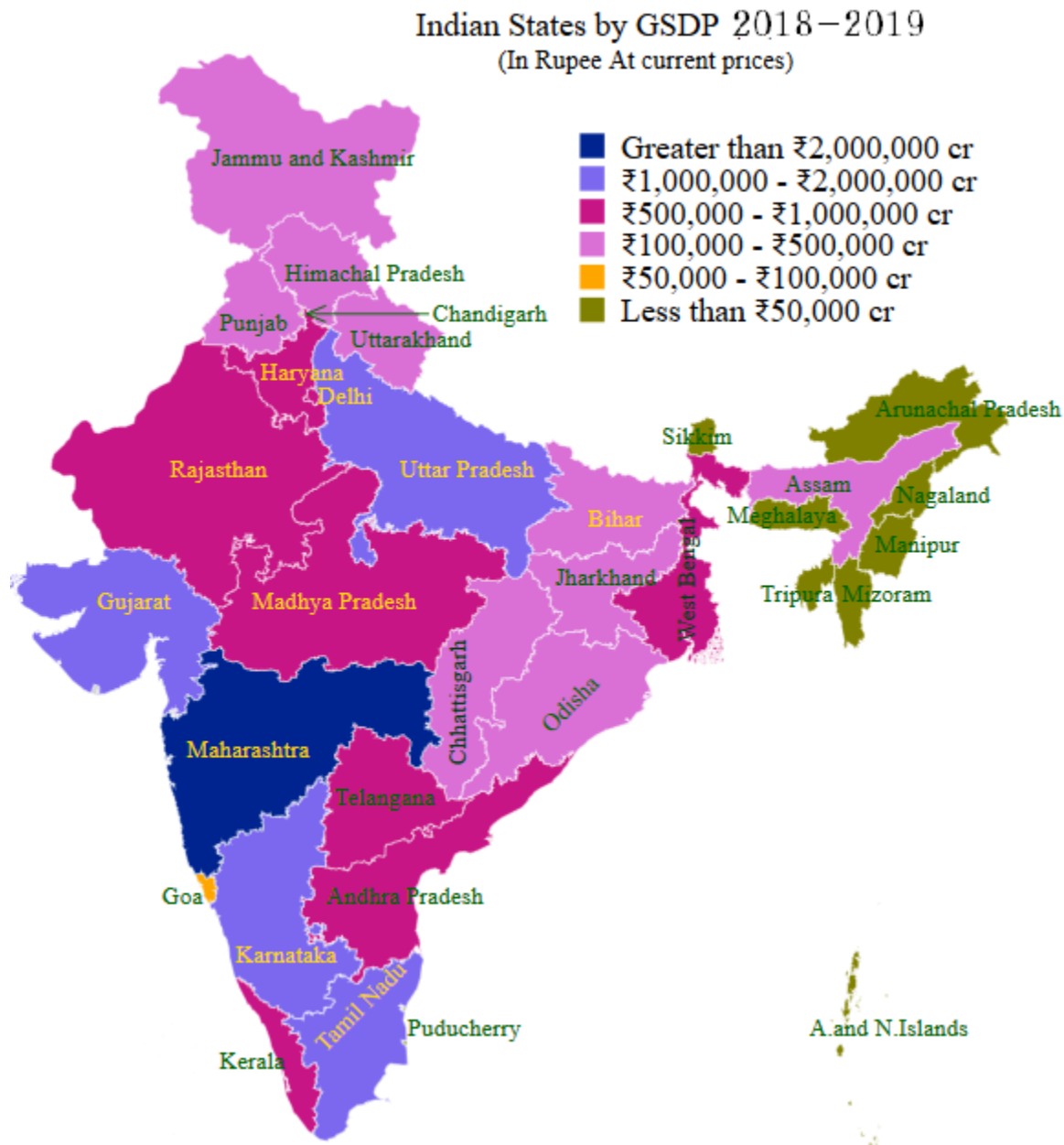


Figure 4: the geography of the Indian states

Source: Data from the Ministry of statistics and program implementation.

The country is divided into 28 states and 8 union territories. FDI inflows are concentrated in states

such as Maharashtra, Karnataka, Delhi, Gujarat, Jharkhand, Tamil Nadu, Telangana, Haryana, West Bengal, Uttar Pradesh and Andhra Pradesh. Meanwhile, Bihar, Madhya Pradesh, and Rajasthan received smaller amounts of investment.

2.2 India's top 10 states of a major role in the economy.

Andhra Pradesh:

Andhra Pradesh is the leading state in terms of business ranking and there is an 12.7% higher than the GSDP estimate for 2018-19. The attraction of the city is the construction of a greenfield capital city that attracted the majority of foreign players and offered an opportunity to metropolitan employees. The state which holds the highest per capita income and is being developed as a new fintech hub is the port city Visakhapatnam.

Delhi-NCR:

Delhi NCR is not only the central government headquarters in New Delhi. NCR has a healthy customer base-New Delhi's per capita income which is nearly three-fold the national average. It consists of a quarter of FDI inflows into India. It is also a considerable hub that holds several financial zones and industrial groups, such as the Gurugram and Noida IT services centers and the Faridabad and Alwar production hubs.

Gujarat:

Gujarat is India's fifth-largest state economy, and its strong economic execution has been primarily focused on infrastructure development, accountability for the public service, fiscal consolidation, and business regulations streamlining. It is per capita income which is 40% more than the national average, however, the home of Prime Minister Modi, receives tremendous national coverage.

Karnataka:

Karnataka is India's most technologically advanced and rapidly rising state, where it complements India's innovative capabilities in ICT, healthcare, nanotechnology, and start-ups. It also works well with urban infrastructure, biological sciences, and water management. The state capital of Bengaluru is India's Silicon Valley, with the world's fourth-largest technological cluster. It is not only the epicenter of IT-enabled services, biotechnology, and pharmaceutical sectors, but it is also the epicenter of the IT-enabled services, biotechnology, and pharmaceutical sectors.

Maharashtra:

Maharashtra is India's second most populous district and most economically developed state, therefore its Gross State Domestic Product (GSDP) increased by 9.42 percent from 2015-16 to 2019-20, and the district accounted for 31% of FDI inflows from 2000 to 2017.

Punjab:

Punjab gives vast opportunities in agricultural business, as it produces an agriculture powerhouse that produces 16% of India's wheat, 11% of rice, and a huge contribution to dairy products. More than 80% of the state is under intensive farming and commodity prices per hectare are around twice the national average.

Tamil Nadu:

Tamil Nadu is India's second most populous state, with the best economy and opportunities in industry, water supply, and urban infrastructure. Furthermore, the state is India's leading agricultural producer, with the greatest per capita income and the best health statistics. Chennai, the state capital and named the "Detroit of India," is the heart of India's automotive and product manufacturing industry and one of the world's top ten automotive hubs.

Telangana:

India's upcoming state Telangana, which is India's one the leading economies with an annual growth of 13.90% per annum ever past five years, which has capability along with its biotech, health, and energy, financial services, and innovation. However, it is the Sixth largest metropolis city of India and the home of major companies such as Google, Apple, Facebook, and Microsoft.

Uttar Pradesh:

Uttar Pradesh is India's largest state, with a population of over 220 million people, contributing to national politics and the country's third largest economy through agriculture. The cotton, dairy, and flour businesses are all based in Agra, which produces the majority of the cultivation. It is, however, the least developed state.

West Bengal:

WEST BENGAL, India's third most populous state, is designated as a regional center for mining and METS interaction, as well as a gateway to the mineral-rich states of Jharkhand, Chhattisgarh, and Odisha. Kolkata, the state capital and India's third-largest megacity, is exploding as a growth hotspot and home to Indian oil. By 2021, it is expected to be among Asia's top ten fastest growing cities.

2.3 State Intervention reforms Policies in Land

Industrial policy is a subject that falls under the Concurrent List, and state government formulate their own, in conformity with the Union government's. there are considerable disparities in industrial policy among the different states, owing to variations in social and economic infrastructure which in turn significantly influence levels of private investment. The key factors in these infrastructure developments include industrial policy, finances, and governance system. (See Table 1)

STATES	MAHARASHTRA	GUJARAT	TAMIL NADU	KARNATAKA	WEST BENGAL	UTTAR PRADESH	MADHYA PRADESH	RAJASTHAN	DELHI
STRATEGY									
Development of industrial infrastructure	✓	✓	✓	✓	✓	✓	✓	✓	✓
Human resource development through capacity building and skill up gradation	✓	✓	✓	✓	✓	✓	✓	✓	✓
Facilitation mechanism and procedural reforms				✓	✓		✓	✓	✓
Providing competitive fiscal incentives and exemptions	✓	✓	✓	✓	✓	✓	✓	✓	✓
Promoting cluster development in new industrial areas		✓		✓	✓		✓		✓
Promotion of MSMEs	✓	✓		✓	✓	✓	✓		
Encouragement to Minorities, Backward classes, physically challenged persons	✓	✓		✓					
Encouragement to Women entrepreneurs	✓	✓		✓					
Encouragement for export promotion	✓	✓		✓	✓	✓			✓
Encouragement for adoption of green and clean practices	✓	✓		✓			✓	✓	✓
Intellectual property rights initiatives				✓					
Encouragement for anchor industries/ thrust sectors	✓	✓	✓		✓	✓	✓	✓	
Incentives and concessions for Large, Megs, Ultra Mega, Super Mega enterprises	✓	✓		✓	✓				✓
Support for R&D, innovation and startups	✓	✓		✓		✓			✓
Creating land bank for industries	✓				✓		✓		✓
Promoting government, industry and academia inter-linkage	✓	✓			✓				✓
Single-window system	✓	✓			✓		✓		✓
Facilitating Ease of Doing Business initiatives	✓	✓			✓	✓	✓		✓
Promote processing of agricultural produce for enhancing farmer's income	✓	✓							
Special fiscal incentive to set up industrial parks in under-developed regions/sectors	✓	✓			✓		✓	✓	✓

Table 1: Key Land Reform by State

Source: Department for Promotion of Industry and Internal Trade

2.4 Labour, Land, and Industrial Policies

Land, labour, and Industrial policies are important in reducing the cost of doing business; as are education, health, housing, and other welfare measures.

2.4.1 Labor Reforms

The industrial sector in India witnesses frequent disputes between employers (seeking to maximise profits) and employees (demanding fair wages and fair hours of work). *See appendix table 2.*

The Indian government has begun the process of unifying various labor laws into four codes, namely

1. The Code on Wages, 2019.
2. The Occupation Safety, Health and Working Conditions Code
3. The Code on Social Security
4. The Industrial Relations Code

2.4.2 Land Reform Policies in India

The control of land ownership, service, lease, sale, and inheritance is referred to as land reform. Land resources in India are not only limited in comparison to the large population, but they are also unequally distributed. As a result, land reform policies are critical for improving agricultural productivity, reducing inequality, facilitating access to land resources for industrial setups, and creating demand in the local market, all of which stimulate private investment (both domestic and foreign). (The main acts and rules governing India's land reform policies are mentioned in Table 2.)

	Acts/Rules/Policies
1	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013
2	The Registration Act, 1908
3	Land Acquisition Act, 1894
4	RFCTLARR (Amendment) Second Bill, 2015
5	RFCTLARR (Amendment) Bill, 2015
6	Registration (Amendment) Bill, 2013
7	National Rehabilitation & Resettlement Policy, 2007
8	RFCTLARR Act 2013 (sub-section 2 of Section 109) Rules 2015
9	RFCTLARR (Compensation, Rehabilitation and Resettlement and Development Plan) Rules 2015
10	RFCTLARR (Social impact Assessment and Consent) Rules 2014
11	Land Acquisition (Companies) Rules, 1963

Table 2: Key Land Reform Acts/Rules

Source: Department of Land Resources

2.5 FDI in India

Foreign Direct Investment (FDI) has been a significant non-debt financial resource for India's economic development, in addition to being a vital driver of economic growth. Foreign companies invest in India to take advantage of lower wages and special investment benefits such as tax exemptions, among other things. It also means gaining technological know-how and creating jobs in a country where foreign investment is made. The Indian Government's favorable policy regime and robust business environment has ensured that foreign capital keeps flowing into the country. The Government has taken many initiatives in recent years such as relaxing FDI norms across sectors such as defence, PSU oil refineries, telecom, power exchanges, and stock exchanges, among others.

2.6 The FDI Entry Routes in India

Prior to 1991, all FDI proposals were reviewed on a case-by-case basis, with a total foreign equity participation cap of 40%. Since July 1991, India's foreign investment policy has been significantly liberalized. According to the rules, policies, and procedures of liberalisation, FDI enters India through four channels, as follows:

2.6.1 RBI (Automatic Route)

This route was created to help with FDI inflows. In this case, foreign investment in an Indian entity does not require prior government approval. Companies proposing foreign investment through this route may issue shares up to the prescribed limit of foreign equity capital or the foreign investors. Remittances are also available for the same. The reporting period to the RBI for this purpose is 30 days. In sixty different industries, approval is automatic.

2.6.2 Government (SIA/FIPB)

FIPB: Foreign Investment Promotion Board

SIA: Secretariat for Industrial Assistance

The routes are non-automatic route, non-automatic schemes are referred to FIPB. The chairman of the FIPB is the industry secretary in the organizational structure. Other members include the finance secretary, the commerce secretary, and the secretary (economic relations) of the Ministry of External Affairs. This apex board grants permission on a case-by-case basis. Such cases include sectors requiring industrial licenses, foreign investment exceeding 24 percent of equity in small scale industries, foreign investment where the foreign interest has an existing venture in some field in India, and all proposals falling outside the predetermined sectoral caps or in sectors where FDI is typically not permitted but may be permitted in certain cases at the discretion of the GO. The FIPB grants approval after consulting with the relevant ministries and taking into account the size of the investment. The average processing time is four to six weeks. The FIPB takes a liberal approach to all sectors and types of proposals. The rejections are almost non-existent. SIA assists FIIA in the processing of FDI proposals. FIPA (Foreign Investment Implementation Authority) assists foreign investors who have received central government approval in the resolution of state-level problems.

2.6.3 NRI's Investments

A non-resident is a person who is either an Indian citizen or of Indian origin but is not a resident of India. NRIs also include companies, partnership firms, trusts, societies, and corporate bodies in which the NRIs own 60 percent of the equity. Outside, there is a sizable Indian population. The Indian government provides a variety of opportunities to attract NRI surplus funds. They can deposit in India using bank accounts such as non-resident external rupee account NRI, foreign currency non-resident (Bank) account FCNR(S), and non-resident ordinary rupee account NRO

2.6.4 Acquisition of Share

Since January 1996, a new acquisition route has been introduced. This was previously classified as FDI under Section 29 of the FERA (foreign exchange regulation act) of 1973, but it is now classified as FDI under Section 5 of the FEMA (foreign exchange management act) of 1999. According to FEMA's new provisions, proposals for FDI involving the acquisition of shares in already existing companies are only considered if the application is made by an Indian company or the related proposal is supported by an Indian company's board resolution.

2.7 Make in India Foreign Direct Investment Programme

Make in India is a major national programme of the Government of India designed to facilitate investment, foster innovation, enhance skill development, protect intellectual property and build best in class manufacturing infrastructure in the country. The primary objective of this initiative is to attract investments from across the globe and strengthen India's manufacturing sector. It is being led by the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India. The Make in India programme is very important for the economic growth of India as it aims at utilising the existing Indian talent base, creating additional employment opportunities, and empowering secondary and tertiary sector. The programme also aims at improving India's rank on the Ease of Doing Business index by eliminating the unnecessary laws and regulations, making bureaucratic processes easier, making the government more transparent, responsive, and accountable. Since the launch of Make in

India programme, FDI inflow during the period April 2014 to March 2020 has been USD 357.35 Bn which is nearly 52% of cumulative FDI in India since April 2000.

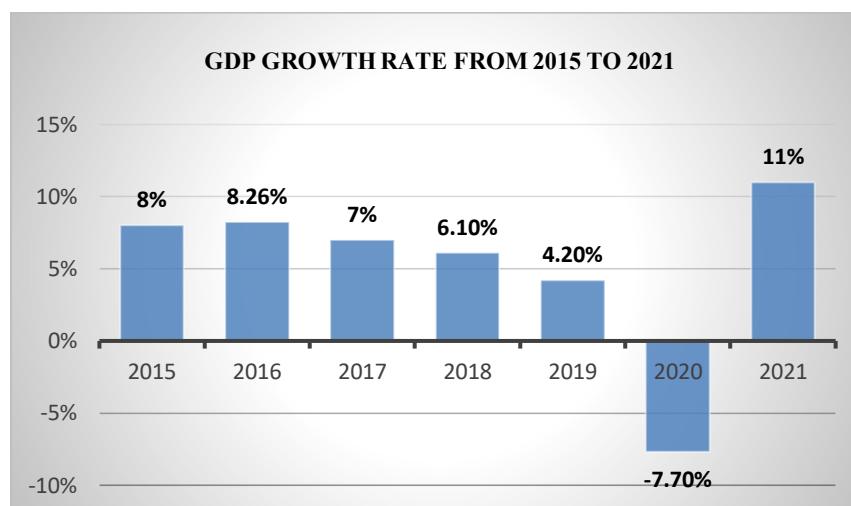


Figure 5 GDP growth rate from 2015 to 2021

2.8 Market Size and Nationwide Policy

According to the Department for Promotion of Industry and Internal Trade (DPIIT), FDI equity inflows into India totaled US\$ 500.12 billion from April 2000 to September 2020, suggesting that the government's efforts to boost ease of doing business and relaxed FDI norms has paid off.

2.8.1 Key Statistics

FDI inflow in India has witnessed a positive trend since the launch of 'Make in India' campaign. Between March 2014 and April 2019, India recorded FDI worth US\$ 286 billion, which was 46 percent of the overall FDI from April 2000 to April 2019² (See Figure 1). Together the six sectors highlighted in Figure account for more than 50 percent of all FDI in India between April 2000 to June 2019.

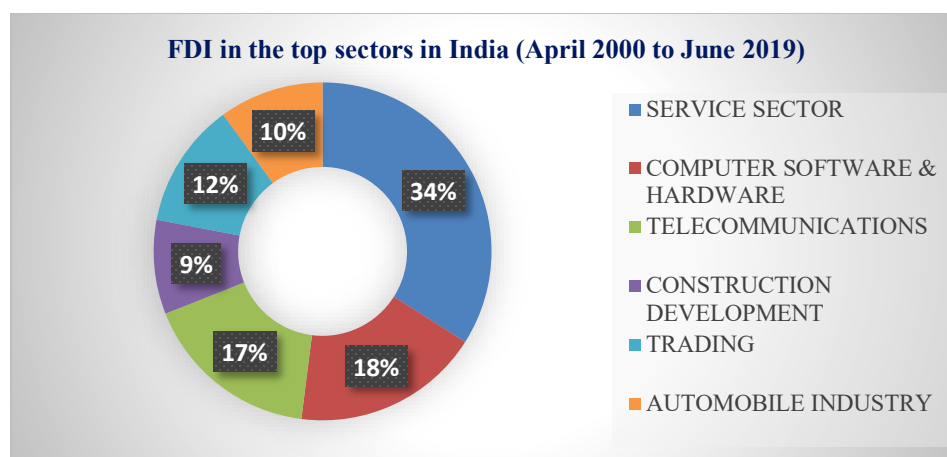


Figure 6: FDI in the top sectors in India

Source: Department for Promotion of Industry and Internal Trade (DPIIT)

Sector	FDI limit	Entry Route & Remarks
Mining	100%	Automatic
Mining (Coal & Lignite)	100%	Automatic
Mining	100%	Government
Petroleum & Natural Gas	100%	Automatic
Petroleum & Natural Gas	49%	Automatic
Defence Manufacturing	100%	Automatic up to 49%
Broadcasting	100%	Automatic
Broadcasting Content Services	49%	Government
Print Media	26%	Government
Civil Aviation-Airports	100%	Automatic
Construction Development:	100%	Automatic
Industrial Parks (new & existing)	100%	Automatic
Satellites	100%	Government
Telecom Services	100%	Automatic up to 49%
Multi Brand retail Trading	51%	Government
Asset Reconstruction Companies	100%	Automatic
Banking- Private Sector	74%	Automatic up to 49%
Infrastructure Company in the Securities Market	49%	Automatic
Insurance	49%	Automatic
Pension Sector	49%	Automatic
Power Exchanges	49%	Automatic
Pharmaceuticals (Green Field)	100%	Automatic
Pharmaceuticals (Brown Filed)	100%	Automatic up to 74%
Healthcare (Brownfield)	100%	Automatic up to 74%

Food products manufacture or produced in India	100%	Government
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Table 3: Selected Industry Sectors with FDI Thresholds

The automatic route has emerged as the most important source of foreign direct investment into the country. As shown in Figure, the majority of foreign investments (around 51%) have been in sectors that allow for automatic FDI inflow.

2.8.2 FDI is not permitted in the following sectors of the Indian economy:

- Atomic Energy Generation
- Cigars, Cigarettes, or any related tobacco industry
- Lotteries (online, private, government, etc.)
- Investment in Chit Funds
- Agricultural or Plantation Activities (although there are many exceptions like horticulture, fisheries, tea plantations, Pisciculture, animal husbandry, etc)
- Housing and Real Estate (except townships, commercial projects, etc)
- Trading in TDR's
- Any Gambling or Betting businesses

Chapter 3

FDI INFLOWS IN INDIA

Introduction:

The goal of this chapter is to examine the patterns in FDI inflows from the year 2000 to the year 2019. Following liberalisation and globalization, the government has made a number of measures to encourage foreign companies to invest in India and enhance the flow of FDI into the country. In order to quantify FDI, research was conducted to collect data on FDI inflows by route, country, and sector. The liberalisation process has enhanced investor trust, and state facilities have attracted more international investment.

However, the decentralized character of the regulatory environment has had a negative impact on FDI inflows, with less equity flowing into the country in recent years. While these issues harmed investors' confidence, the government began to focus on project-specific issues, and state governments began to support the economic reform program by participating in investment promotion missions, among other things. The government's sector-by-sector approach has changed the face of FDI inflows and started the process of infrastructure building that global corporations may use. For example, the Make in India initiative aims to improve industrial infrastructure and has attracted a large amount of FDI.

3.1 FDI Trends in Comparison:

Foreign direct investments and portfolio investments are the two types of foreign direct investments that enter into the Indian economy. With the correct policies, these two kinds can be combined to build a powerful economy. Foreign direct investment is the purchase or establishment of a firm in a foreign country for the purpose of creating value, and it might include things like warehouse installation, building purchases, and so on. The underlying process in foreign direct investment is the creation of long-term interest in a foreign country's economy. Because FDI entails large investments, international corporations and venture capitalists or large institutions. The fundamental goal of these investments is to move capital, develop plans, and gain technical knowledge.

The following are some of the major FDI announcements in India:

- Wal-Mart purchased a 77 percent ownership in India's largest online retailer, Flipkart, in May 2008, with FDI investment.
- VMware announced a USD 2 billion investment in the software business in October 2018.
- IDEA of India, India's largest telecom company, amalgamated with Vodafone in June 2018, making it India's largest telecom operator.

Foreign portfolio investment, on the other hand, is when you invest in a foreign company's financial assets in exchange for available stocks or bonds. The key underlying concept here is the purchase of securities that may then be brought or sold. FPI's main goal is to invest money in international stock markets in the hopes of making a quick profit. FPI investors in India included investment groups of foreign institutional investors (FIIs), qualified foreign investors, and subaccounts, among others.

It would be impossible to perform the actual math of FDI because of the many loopholes in the Indian government's policy structure. For the years 1989 to 2015, the estimated figures for FDI and FPI after liberalization are shown below.

(Amount in \$ Millions)

YEAR	FOREIGN DIRECT INVESTMENT	PORTFOLIO INVESTMENT(PI)	TOTAL INVESTMENT(100)
1989-90	97	6	103
1990-91	129	4	133
1991-92	315	244	559
1992-93	586	3567	4153
1993-94	1314	3824	5138
1994-95	2144	2748	4982

1995-96	2821	3312	6133
1996-97	3557	1828	5385
1997-98	2462	-61	2401
1998-99	2155	3026	5181
1999-00	2339	2760	5099
2000-01	4031	2590	6621
2001-02	6125	1952	8077
2002-03	5036	944	5980
2003-04	4322	11356	15678
2004-05	5987	9287	15274
2005-06	8901	12494	21395
2006-07	22739	7060	29799
2007-08	34729	27433	62162
2008-09	41738	-14030	27708
2009-10	33109	32396	65505
2010-11	29029	30293	59322
2011-12	32029	17170	50122
2012-13	26953	26891	53844
2013-14	30763	4822	35585
2014-15	34426	40934	75360
Total	338759	232850	571609

Table 4: Foreign direct investment and Portfolio investment after liberalisation

Source: RBI, Handbook of statistics on Indian economy 2001&2015

*Includes acquisition of shares of Indian companies by non-residents under section 5 of FEMA, 1999

During the period 1989-90 to 2014-15, foreign direct investments showed a positive trend. During the study period, a positive flow of \$97 million to \$34426 million was reported. Portfolio investing, on the other hand, has seen significant volatility and has even gone negative during times of global crisis. In the case of FPI, investors are interested in capital gains and dividends.

3.2 FDI by Route:

The equity capital of FDI includes the equity in branches, subsidiaries, and associates, as well as other capital contributions. Earnings that have been re-invested are recorded as a direct investor's share of earnings, which is not distributed as dividends. The borrowing and lending of funds between direct investors and associates and branches is covered by other capital funds.

The table below shows the FDI route breakdown by route, revealing that the major FDI routes in India are through the foreign investment promotion board, automatic route, and acquisition route. Other types of FDI routes include re-invested earnings and other capitals. The table shows that the majority of FDI inflows came through the FIPB, RBI's automatic route, and acquisition routes. The lowest level of FDI inflow was seen in 2003-04, while the highest level was found in 2017-18. The flow of re-invested earnings has been spanned between 2000-01 and 2018-19.

Financial year (April-March)	Equity		Re-Invested Earnings +	Other Capitals +	Inflow (FDI) into India	
	FIPB route/ RBI's Automatic route/ Acquisition	Equity capital of un in corporate bodies			Total FDI Flows	% Growth previous year
2000-01	2,339	61	1,350	279	4,029	-
2001-02	3,904	191	1,645	390	6,130	+52%
2002-03	2,574	190	1,833	438	5,035	-18%
2003-04	2,197	32	1,460	633	4,322	-14%
2004-05	3,250	528	1,904	369	6,051	+40%
2005-06	5,540	435	2,760	226	8,961	+48%
2006-07	15,585	896	5,828	517	22,826	+155%
2007-08	24,573	2,291	7,679	300	34,843	+53%
2008-09	31,364	702	9,030	777	41,873	+20%
2009-10	25,606	1,540	8,668	1,931	37,745	-10%
2010-11	21,376	874	11,939	658	34,847	-08%
2011-12	34,833	1,022	8,206	2,495	46,556	+34%
2012-13	21,825	1,059	9,880	1,534	34,298	-26%
2013-14	24,299	975	8,978	1,794	36,046	+5%
2014-15	30,933	978	9,988	3,249	45,148	+25%
2015-16	40,001	1,111	10,413	4,034	55,559	+23%
2016-17	43,478	1,223	12,343	3,176	60,220	+8%
2017-18	44,857	664	12,542	2,911	60,794	+1%
2018-19	44,366	689	13,672	3,274	62,001	+2%
2019-20(till June 19)	16,329	163	3,228	1,590	21,310	-

Total	439,229	15,624	143,346	30,575	628,774	-
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Table 5: Foreign inflows of direct investment comprising wise route, reinvested earnings and other capital

Source: RBI

3.3 Inflow of FDI by Sector:

Following the 1991 economic liberalisation process, several industries such as service, telecommunications, manufacturing, and others have contributed significant amounts of foreign direct investment into India. India is providing opportunities in almost every sector of the economy as the business becomes more competitive. The table shows FDI inflows by industry in the top ten industries from January 2000 to December 2019.

Ranks	Sector	Total2000-2016 (Jan-Dec)	2017 (Jan-Dec)	2018 (Jan-Dec)
1	Services sector	57,173.03	5,751.50	8,675.76
2	Computer Software & Hardware	22,855.98	6,993.81	5,993.74
3	Telecommunication	23,923.79	6,160.52	2,368.46
4	Trading	13,896.56	2,611.98	5,109.69
5	Construction Development	24,286.56	387.39	236.11
6	Automobile Industry	16,675.05	1,895.08	2,432.96
7	Chemicals	12,694.28	1,746.40	1,988.12
8	Drugs & pharmaceuticals	14,577.87	1,048.70	349.14
9	Construction Activities	9,357.70	2,999.47	2,015.53
10	Power	11,480.24	1,529.71	1,250.98

Table 6: FDI equity inflows by sector and year from January 2000 to December 2019

Source: Department of Industry and Internal Trade Promotion (FDI annual issue 2019)

3.4 Top investing countries wise break-up of FDI

Rank	Country	Total 2000-2016 (Jan-Dec)	2017 (Jan-Dec)	2018 (Jan-Dec)	2019 (Jan-Dec)	Cumulative total FDI in \$ million
1	Mauritius	107,723.48	16,256.73	8,615.61	9,516.61	142,112.44
2	Singapore	52,995.59	10,808.82	15,943.36	14,904.18	94,651.95
3	Japan	25,295.55	1,745.43	2,558.26	3,561.42	33,160.66
4	Netherland	19,834.14	3,250.52	3,368.11	4,451.03	30,903.81
5	USA	20,023.54	2,183.16	2,692.58	3,589.88	28,489.16
6	United kingdom	24,387.77	936.74	1,182.94	1,442.96	27,950.40
7	Germany	9,547.13	1,151.15	732.16	653.87	12,084.30
8	Cyprus	9,111.67	377.02	372.58	246.19	532,312.75
9	France	5,539.61	651.74	410.12	509.85	400,765.06
10	UAE	4,643.96	689.02	721.45	862.36	411,714.48

Table 7: FDI equity inflows by top investment countries

Source: Table courtesy of the Department of Industry and Internal Trade Promotion.

The table clearly shows that Mauritius is India's top source of foreign direct investment. Foreign investors are using Mauritius as a gateway to India for FDI. The Double Taxation Avoidance Agreements (DTAA) between India and the other 88 nations established an agreed tax rate and jurisdiction for specified income entering the country. The relationship between India and Mauritius has been enhanced, and it has become the country's top investor, thanks to a low 3 percent capital gain tax, a framework for quality rules, improved infrastructure, and other location decision determinants.

3.5 Factors that Influence Foreign Direct Investment

Historically, FDI inflows from developed to developing countries have showed favorable trends, which could be the result of increased investments by multinational corporations and their placement decisions. In terms of motivational considerations, MNEs would prefer to locate their factories in developing countries where infrastructure, labor, and power are readily available, which might help them reduce total costs and produce economies of scale. The importance of numerous location decision variables has been highlighted, and average values corresponding to each state have been displayed.

Consider the various determinants that have a stronger impact in the Indian context. The following location decision determinants have influenced the Indian economy, according to the State Bank of India, and their expected relationship with FDI for different states has been explored.

Major Location Decision	Selected Variables	Relationship with FDI (Expected sign)
Market size	GDP	+
Industrial orientation	Per capita manufacturing output	+
	Per capita service output	+
Infrastructure	Road route density	+
	Railway route density	+
Labour conditions	Wages per worker	-
	Literacy rates	+
Policy environment	State own tax revenue as % of NSDP (Tax)	-

Table 8: Determinants that influence Indian scenarios to a higher extent.

Size of the Market

The most important criterion for FDI in India is the size of the local market, which can be demonstrated by the scale and growth of an area. The market size has a direct relationship with potential demand for foreign enterprises' services. The appeal of local sales in a major country like India is characterized by the size of its market and is more profitable than exports. Large domestic markets are a primary factor of market seeking FDI flows from major international corporations.

A variety of parameters, such as GDP, per capita income, population density, and the number of prospective sites in a state, could be used to illustrate the market size of different regions. I looked at the Gross State Domestic Product (GSDP) of several states, which is shown below:

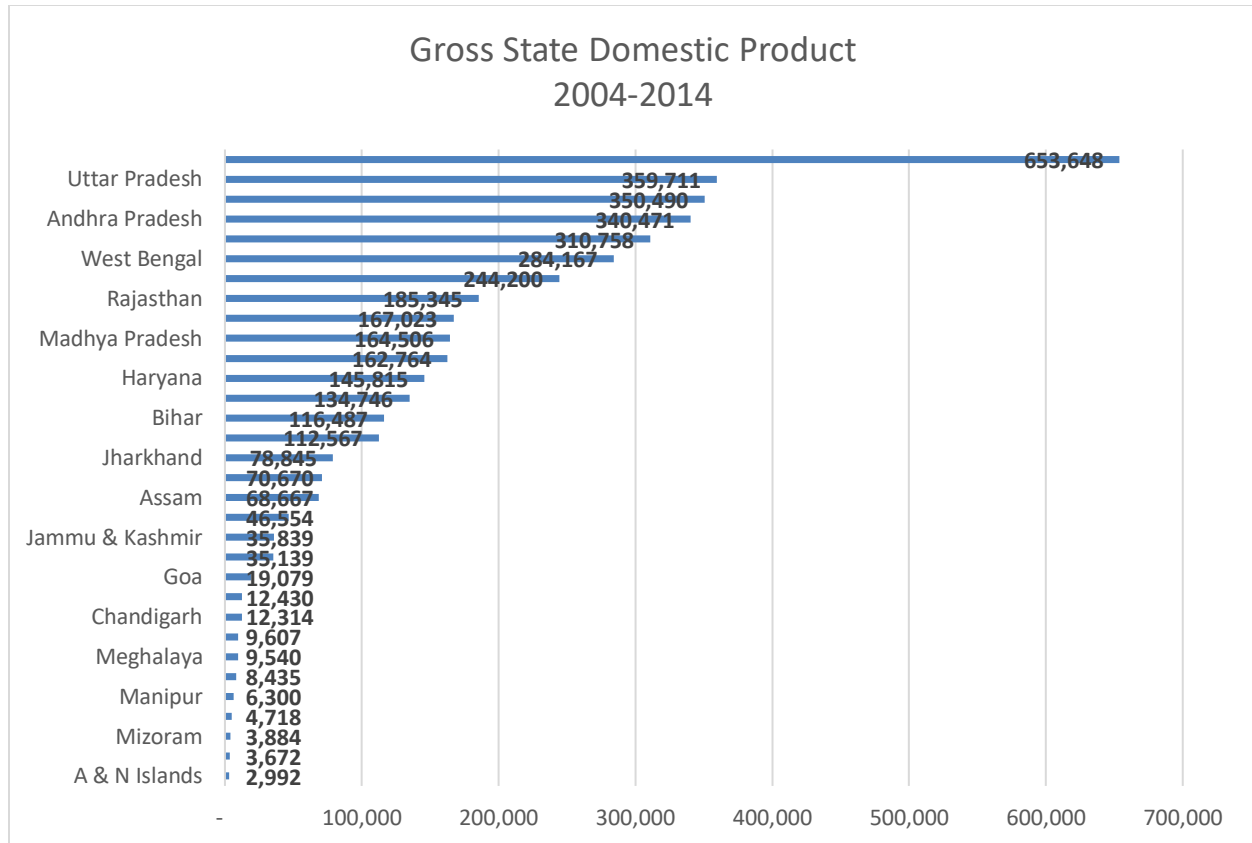


Figure 7: Gross Domestic Product in Rs Crores from 2004 to 2014

3.6 A focus on Industry

Another important driver of FDI that indicates the relevance of greater industrial outputs in states and their influence on drawing foreign funds is their influence on attracting foreign funds. When it comes to natural resource-seeking enterprises, sites that provide natural resource availability, transportation, and tax incentives, FDI inflows have been substantial. Explanatory variables such as per capita manufacturing output to reflect the industrial base and per capita service output to analyze the service activity of different states have been chosen in light of the foregoing.

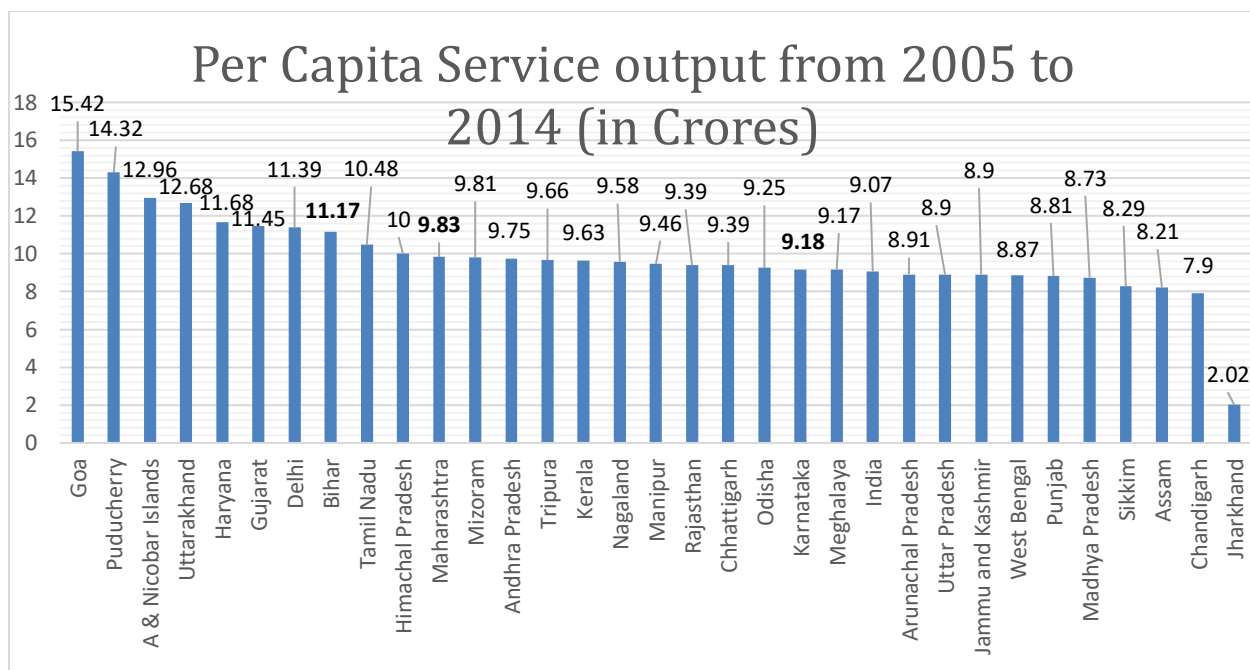


Figure 8: From 2005 to 2014, per capita service production (in Crores)

Per capita Manufacturing Output (2005-14)

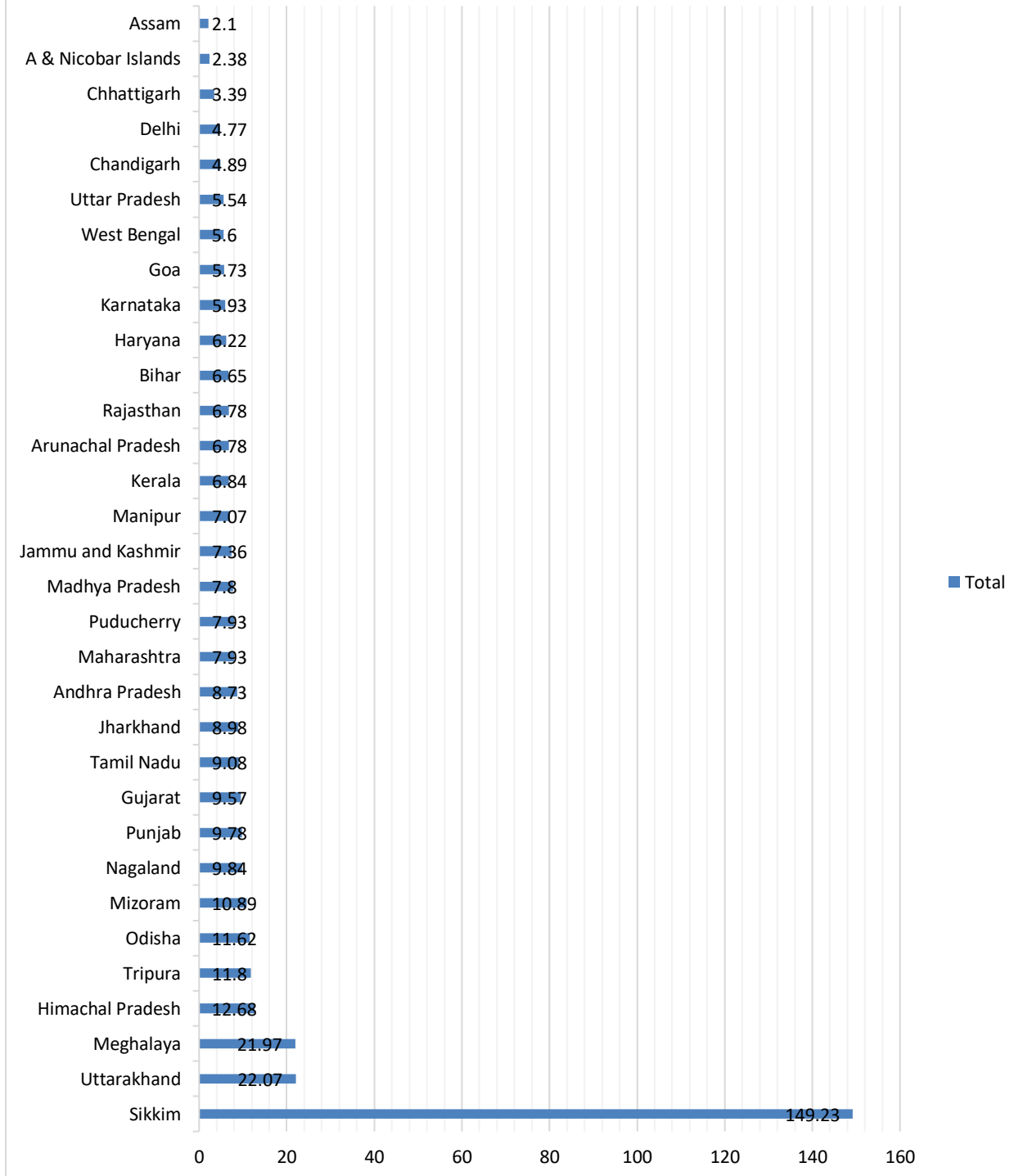


Figure 9: Manufacturing output per capita in Rs Crores from 2005 to 2014

3.7 Labour Conditions

In order to reduce manufacturing costs, efficiency-seeking international corporations hunt for regions with lower wage rates. In 1998, Dunning discovered that one of the primary location decision criteria for foreign companies considering FDI in India was labor cost, but in the 1990s, it was the availability of skilled labor. Firms are no longer examining wage rates because they used to believe that high wages equated to qualified people. Variables such as wage rate and literacy rate are evaluated in this part to portray the labor circumstances of different states from 2005 to 2011.

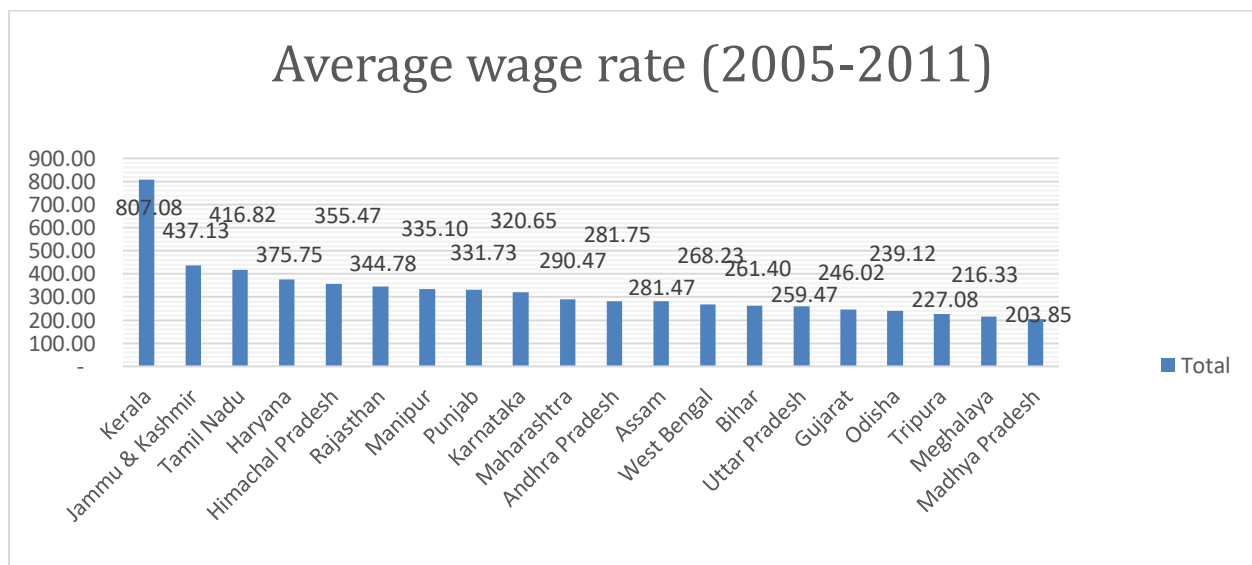


Figure 10: Annual Average Wage Rates from 2005 to 2011

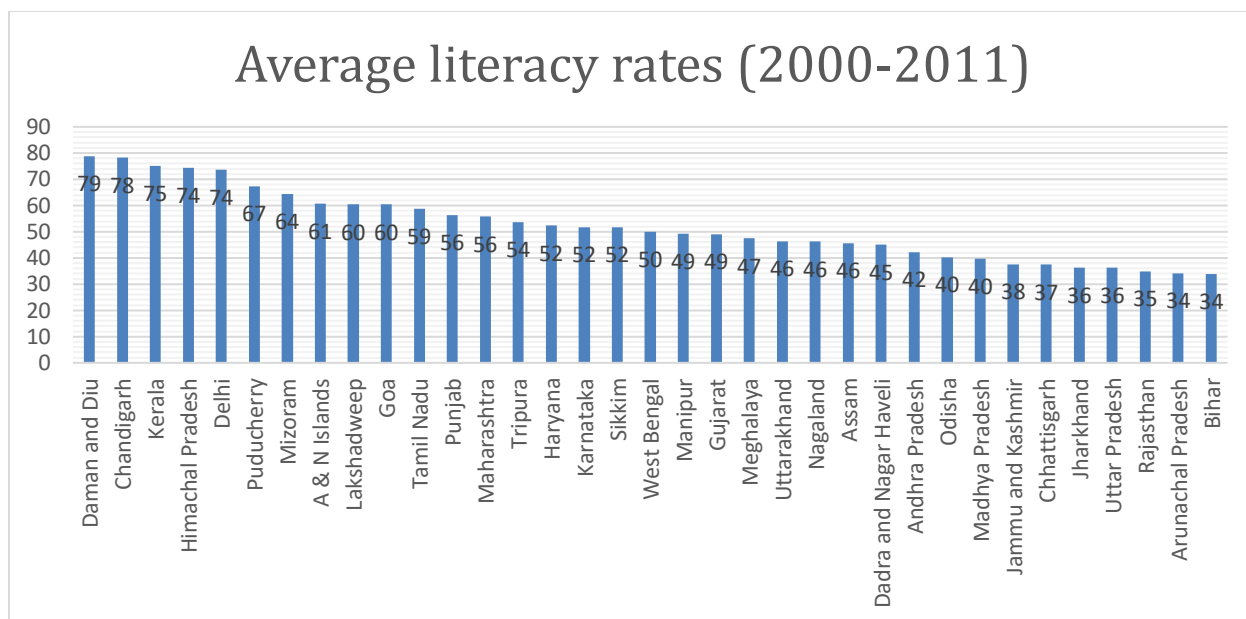


Figure 11: Average Annual literacy rates of states

The impact of policy

For foreign enterprises to invest in a particular place, local policy environment variables such as FDI rules, tax structure, and investment incentives must be considered. Most Indian governments provide sector-specific or region-specific incentives to foreign enterprises in order to entice them to new or existing industrial zones. These benefits include exemptions from stamp duty, registration fees, and power duty, among other things. Empirical evidence from the European Union shows that most overseas enterprises are concerned with the overall tax burden rather than particular company taxes. The state own tax income as a proportion of GSDP is used to examine the effect of policy environment on FDI inflows in different states.

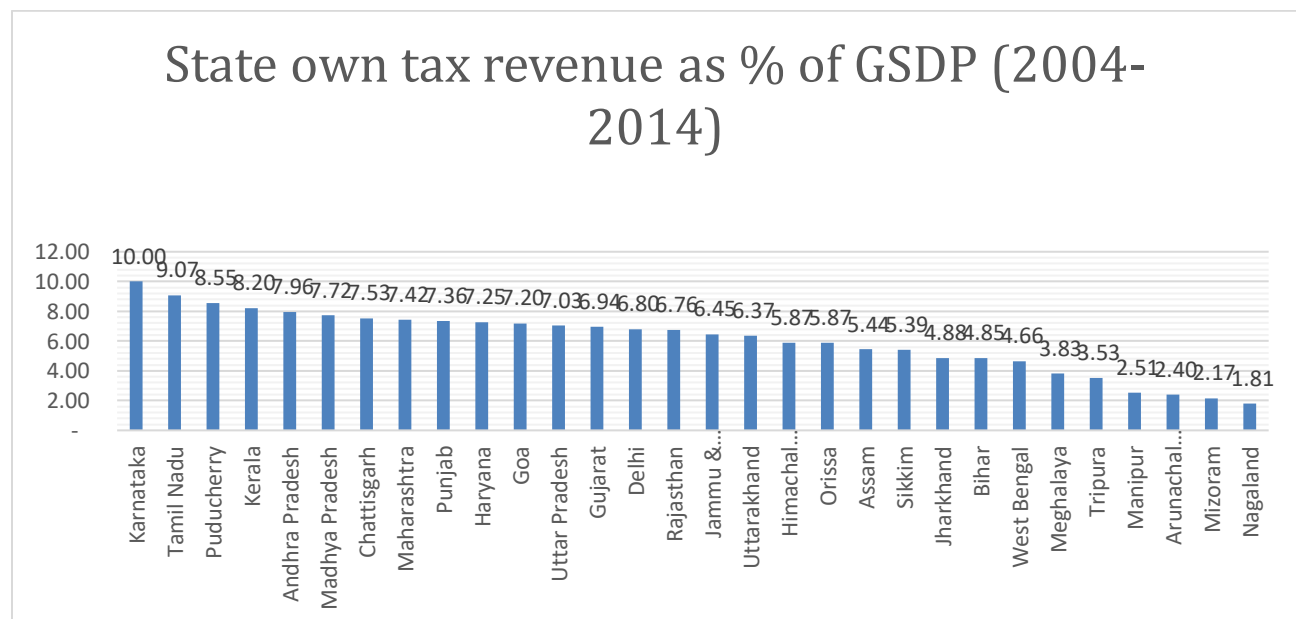


Figure 12: Tax money generated by states on their own (percent of GSDP)

Chapter 4

Infrastructure Development in India

It is a widely acknowledged fact that Infrastructure has a significant positive effect on economic growth, trade and household welfare. While the importance of infrastructure is ascertained, it can be firmly said that investment in Infrastructure becomes a primary driving edge to accomplish fast and sustained economic growth. This critical relationship between Public Infrastructure Investment and economic growth has been of immense interest to the researchers around the world from the field of economics and related areas. For Investment in Public Infrastructure, money is required and that is when the issue of Infrastructure financing comes.

What is Infrastructure?

In general terms, Infrastructure can be defined as a bunch of amenities through which goods and services are being bestowed on to the public. The installations to infrastructure do not manufacture goods and services directly but do give inputs for other socio-economic activities. Another popular definition of infrastructure defines it as the set of basic facilities and capital equipment required for the proper functioning of a nation or a particular area. Alternatively, this term refers collectively to the roads, bridges, railway lines, airports etc. and similar public works which are needed for an industrial economy to function properly.

Different economists have made use of the term with different associations; keeping the core idea same that infrastructure is the base over which the whole economy's structure is built. Tinbergen (1962) made a distinction between 'infrastructure' (roads, railways, education etc.) and 'superstructure' (manufacturing, agriculture, mining, irrigation etc.) without giving a specific definition or any certain theoretical reference to these two terms.

4.1 Infrastructure: The Indian Prospective

Looking at the Indian prospective, the concept of Infrastructure was comprehensively discoursed by the Rangarajan Commission while they were analyzing the statistical system of India. The Rangarajan Commission in their 2001 report pointed out to the importance of infrastructure saying that Infrastructure holds the key in determining the accessibility of inputs which are central to a plethora of productive activities. The non-availability of these inputs determined by infrastructure

can act as a stern restraint on the productive ability of the economy. The commission in this report also said that Infrastructure is a significant input for both industrial as well as economic development of a nation.

4.2 Sector of infrastructure composition

The composition of Infrastructure sector has always remained an intriguing issue with everyone who has thought about the question of which all sub sectors constitute this important and broad Infrastructure sector. Recognizing the complexities of this issue pertaining to Infrastructure sector's composition, different commissions/committees have been formed which have defined infrastructure as per their respective recommendations. Below mentioned are the details corresponding to all these commissions/committees:

Cabinet Committee on Infrastructure (CCI): The CCI committee led by Prime Minister was constituted on July 6, 2009. It replaced the Committee on Infrastructure which was established on 31st August 2004 under the Chairmanship of Prime Minister. The main job of CCI was to review and approve policies and supervise the making and implementation of various programmes and projects across infrastructure sectors. The secretariat for Infrastructure in the Planning Commission (now removed and replaced by 'Niti Aayog' by the Narendra Modi led Government of India) felt the utmost necessity to define infrastructure and its coverage from the prospect of policy formulation, focusing on sectoral targets and ensuring consistency and comparability in the data collection process done by varied agencies. To cater this need, the CCI reviewed the various definitions of infrastructure as used by different organizations like Rangarajan Commission, Reserve Bank of India (RBI), Income Tax Department, Dr. Rakesh Mohan Committee Report (1996), Insurance Regulatory and Development Authority (IRDA), Economic Survey, World Bank and finally recognized the following list of sectors to be mentioned under infrastructure:

- i. Electricity (including generation, transmission and distribution) and R&M (Renovation and Modernization) of Power stations.
- ii. Non-conventional energy (including wind energy and solar energy).
- iii. Water supply and sanitation (including solid waste management, drainage and sewerage) and street lighting.
- iv. Telecom
- v. Road and bridges

- vi. Ports
- vii. Inland waterways
- viii. Airports
- ix. Railways (including rolling stock and mass transit system)
- x. Storage
- xi. Irrigation (including watershed development)
- xii. Oil and gas pipeline networks

4.3 Ministry of Finance, Department of Economic Affairs:

Conforming to the advocacy of Prime Minister's office, The Ministry of Finance, Department of Economic Affairs wrote a concept paper in order to determine and finalize on the uniformity of the definition of infrastructure, thereby guiding on the selection of sub sectors to be categorized under infrastructure.

Category	Infrastructure sub-sectors
Transport	Roads and bridges; Ports; Inland waterways; Airports. Railway Track, tunnels. viaducts, bridges; Urban Public Transport (except rolling stock in case of urban road transport)
Energy	Electricity – Generation, Transmission and Distribution; Oil pipelines: Oil/Gas/Liquefied Natural Gas (LNG) storage facility; Gas pipelines
Water & Sanitation	Solid Waste Management; Water supply pipelines; Water treatment plants; Sewage collection, treatment and disposal system; Irrigation (dams, channels, embankments etc.); Storm Water Drainage System
Communication	Telecom (Fixed network); Telecom towers
Social and Commercial Infrastructure	Education Institutions (capital stock); Hospitals (capital stock); Three-star or higher category classified hotels located outside cities with population of more than 1 million; Common infrastructure for industrial parks, Special Economic Zone (SEZ), tourism facilities and agriculture markets; Fertilizer(Capital investment); Post harvest storage infrastructure for agriculture and horticultural produce including cold storage; Terminal markets; Soil-testing laboratories; Cold chain

Table 9: Classification of Infrastructure sub-sectors as per Ministry of Finance,Department of Economic Affairs

Standing Committee on Infrastructure Statistics (SCINS):

SCINS was formed by Central Statistics Office (CSO) under the Chairmanship of DG (Director General), CSO and representatives from the Secretariat of the Cabinet Committee on Infrastructure of the Planning Commission (CCoI), Ministry of Finance, RBI, Department of Industrial Policy and Promotion (DIPP) and other subject matter Ministries. The main points for this Standing Committee to focus upon were:

- i. To standardize definitions, concepts and methodology for collection and analysis of Infrastructure statistics
- ii. To describe the coverage and scope of infrastructure statistics and recommend transformations regularly
- iii. To propose enhancement in Infrastructure statistics particularly in line with the international practices, suggestions given by other expert committees and at the same time to meet the domestic requirements of policy makers.

The Standing Committee finalized the coverage of sectors and sub sectors classified under infrastructure as given in the Table 8.

Infrastructure Sector	Sub sector	Coverage
1. Transport	Road transport	Roads and bridges, Tunnels, Motor vehicles
	Rail transport	Railways, Signalling, communications systems, Rail yards, Stations, Rolling stock
	Inland water transport	Inland waterways, Inland water vessels
	Sea and coastal transport	Seaports, Ships and other vessels
	Air transport	Airports, Air crafts
2. Energy/ Power	Electricity (Thermal, Hydro, Nuclear)	Generation plants, windmills, transmission and distribution lines, electric substations, Coal Reserves, Coal fields/mines, Coal washeries
	Petroleum and Natural gas	Oil and gas pipeline networks Distribution terminals, Gas fields/wells, Refineries
3. Drinking Water Supply, Sanitation	Drinking water supply	Water supply pipelines, filtration and treatment plants
	Sanitation	Sewage treatment plants, Drainage pipelines, On site sanitation facilities, Landfills, Incinerators
4. Irrigation	Irrigation	Major and minor irrigation structures, Command area, Irrigation canals, Reservoirs, Water shed development
5. Communication	Telecom	Telephone network (landlines, mobile), Internet servers, Communication satellites, Cable television network
	Postal communication	Postal network, Courier mail service
6. Storage	Storage	Food grain Storages, Cold Storages, Warehouses

Table 10: Classification of Infrastructure sub-sectors as per SCINS

4.4 Public-Private Partnerships

India's basic infrastructure must be maintained and developed for it to continue to grow as an emerging economy at the same rate as it has since 1991. To boost the number of infrastructure projects, both the public and private sectors must invest projects in several fields. The Indian government has taken the initiative to keep things moving forward to increase infrastructure development by adopting Public-Private Partnerships (PPPs). Both foreign and indigenous corporations are investing in the private sector.

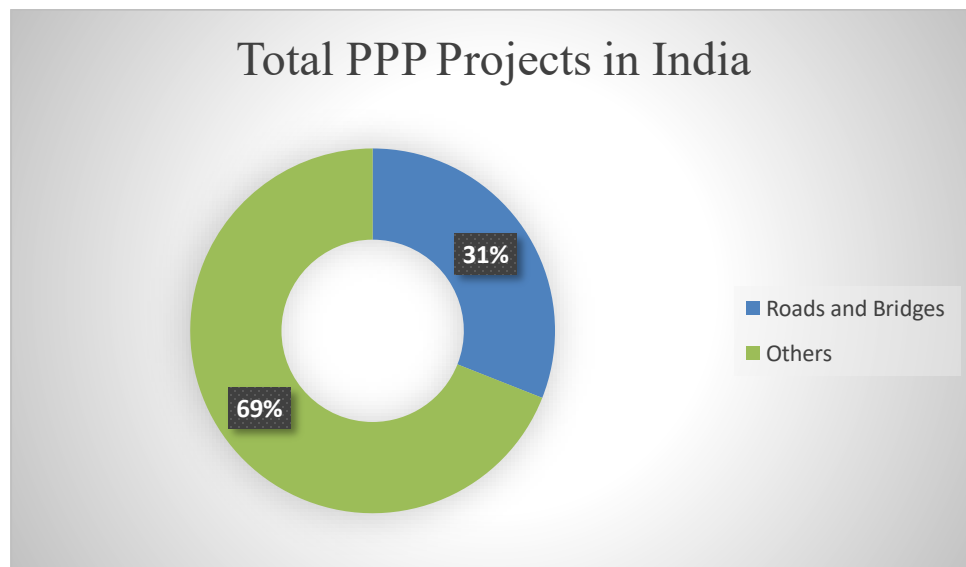


Figure 13: Total PPP Projects in India

Source: MoRTH, Department of Economic Affairs, News Article

4.5 Sub-Sectors of Infrastructure

4.5.1 Roads:

Roads and highways are valuable assets that allow the country to move. They transport around 65% of freight and 85% of passenger traffic in India, with road traffic expanding at a rate of 7-10% per year. Highways that connect various sections of the country are more significant than other types of roadways. National Highways (NH), for example, account for only approximately 2% of the overall road network but carry nearly 40% of all traffic. Roads and highways are regarded major infrastructure that has an impact on a country's economic environment and economy.

India's road network (including highways) is one of the most extensive networks with about 3.34 million km length comprising National Highways (65, 569 km), State Highways (1,30,000 km) and other roads (Major District Roads, Rural Roads and Urban Roads (3.14 million). Highways are an important segment of the road network because of their greater share of passenger and freight transport. India had neglected its highway development for a long time, but it picked up the momentum after the establishment of National Highways Authority of India (NHAI) as a nodal agency in 1997. The launch of National Highway Development Programme (NHDP) in 2001 gave a major push to highway development, especially through two major initiatives: Golden Quadrilateral (GQ) (later termed as NHDP Phase 1) and North Southeast West Corridor (NSEW) (later termed as NHDP Phase 2). Both the above initiatives added to a significant jump in the highway length.

This supported the case for extending the NHDP in future phases (phases III to VII), particularly in terms of increasing lane capacity by converting existing two and four-lane highways to four and six-lane highways. Apart from the development of national highways under the NHDP, the development and maintenance of about 41,290 km of NHs is funded by the budget. State Public Works Departments (PWDs) and Border Road Organizations are in charge of certain sections of NHs (BRO). These highways were provided with development works of: (i) Improvement of riding quality (ii) Widening to 2/4 lane (iii) Strengthening of roads (iv) Construction of bypasses (iv) Rehabilitation/construction of bridges.

State highways

While national highways connect various parts of the country, state governments undertake highway projects that connect various parts of the states with the technical and financial assistance of international lending agencies such as the World Bank, Asian Development Bank, and Japan Bank for International Cooperation. Some state governments have been at the forefront of this, including Tamil Nadu, Maharashtra, Andhra Pradesh, Kerala, and Orissa. Several states have also established State Road Development Corporations to whom this obligation has been delegated. Some states create and maintain sections of state highways on their own budgetary resources.

Rural and Urban roads

The Government of India has accorded priority to road connectivity to rural hinterlands through Prime Minister Grameen Sadak Yojana (PMGSY), which is a scheme floated to provide road connectivity to rural areas with direct funding by the Government to Panchayats. The panchayats are thus given additional funds for this purpose and progress is monitored by the Government of India. Urban roads are developed and maintained by respective local governments, but not enough concerted efforts are made to perform. The opening of some of the segments e.g., arterial roads, highway bypasses, expressways, ring roads is giving rise to a major facelift in some of the big cities.

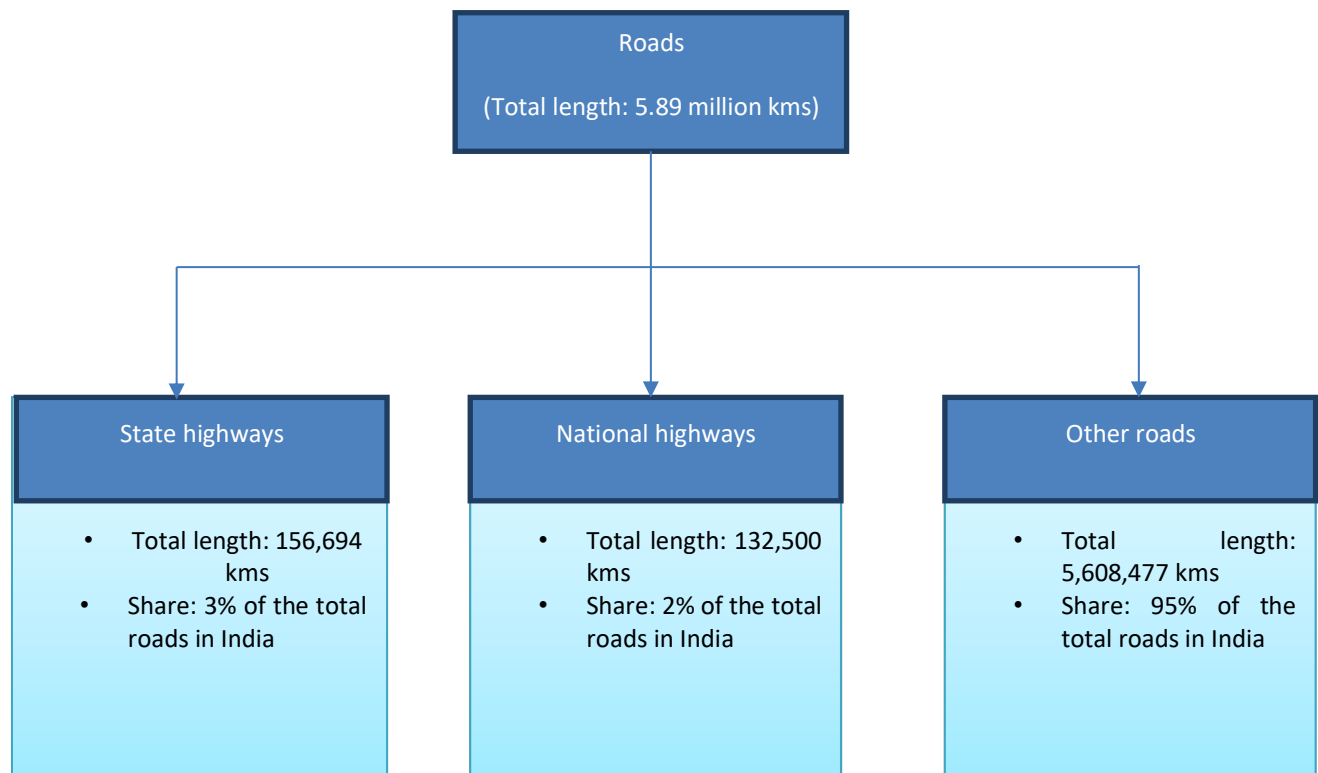


Figure 14: Classification of Roads

Private Sector Participation in Roads and Highway Development

In the early period, roads and highways were completely built by the government departments and agencies (of both Centre and State) using their funds for several decades. This arrangement gave limited results and was fraught with several operational and budgetary issues. The opening up of roads to private sector began with highway development upon the establishment of NHAI. Although the NHDP Phase I and II were publicly financed through fuel cess and federal grants and used traditional contracting model, it is undertaken in PPP mode after NHDP Phase III. Essentially, grant financing model was replaced by the revenue model based on toll collections to finance highways projects. The private developers are also provided good incentives by the Government of India (see table 1) for making road and highway development an attractive option for them.

Incentives for Private Sector

- Declaration of road as an industry and allowing 100% FDI.
- Government to carry out all preparatory work including land acquisition and utility removal. Right of way (ROW) to be made available to concessionaires free from all encumbrances.
- NHAI / GOI to provide capital grant up to 40% of project cost to enhance viability on a case-to-case basis.
- 100% tax exemption for 5 years and 30% relief for next 5 years, which may be availed of in 20 years.
- Higher Concession period allowed up to 30 years.
- Arbitration and Conciliation Act 1996 based on UNICITRAL provisions.
- In BOT projects entrepreneur are allowed to collect and retain tolls.
- Duty free import of specified modern high-capacity equipment for highway construction.

Table 11: Incentives for Private Sector

Source: GOI (2012)

The incentives for attracting private sector into road sector were followed by the adoption of various models that encourage PPP, which provided a means of accelerating private sector participation. PPPs have become an important means of investment inflows and project execution across all sectors and the Government of India has formulated a national PPP policy in 2001 to further emphasize its role.

BOT: Build operate transfer

BOOT: Build own operate transfer

EPC	BOT/BOOT	Annuity	Contracts
<ul style="list-style-type: none"> • First model that induced private sector strengths • Suitable for Greenfield Projects • Getting revived again in the wake of drying up of private investments and remote projects 	<ul style="list-style-type: none"> • Concession models are very popular, and variants also emerged • Suitable for both greenfield and brownfield projects • Several variants possible - toll, annuity, hybrid 	<ul style="list-style-type: none"> • New addition to the current development models • Suitable for operation and maintenance projects • Taking off with a large network created with several variants 	<ul style="list-style-type: none"> • Conventional development model followed by Government • Suitable for highway junctions, intersections and furniture • Performance based contracts getting focus

Table 12: PPP Models in Road Development Sector

4.5.2 Railways:

The Indian Railways (IR) is a government of India department that owns and operates most of the India's rail transportation. The Ministry of Railways is in charge of it. With a route network of roughly 64,600 kilometers spanning 7,712 stations and carrying over 30 million people daily, India's railway network is the world's third largest. Indian Railways operates around 19000 trains per day with 2.4 lakh carriages, 63,870 coaches, and 9,549 locomotives as of FY15. From a business standpoint, trains transported 1101 million tonnes of freight in FY15, with that number expected to rise to 1,186 million tonnes in FY16. The railways sector also offers a number of advantages that make it one of India's most important and vital infrastructure subsectors. The following are some of the benefits of the railways sector, as well as the causes for them:

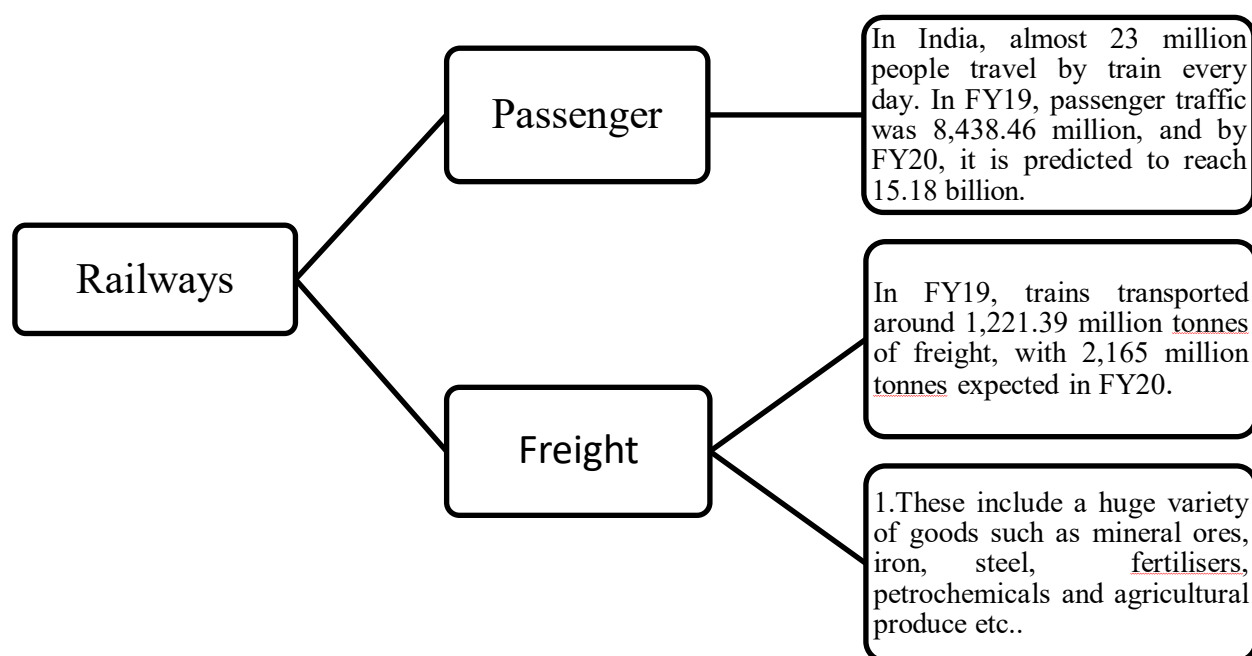
Increasing Demand: In terms of the passenger segment, rising urbanization and rising incomes (both urban and rural) are important growth drivers. Over the last decade or so, rising industrialization across the country has increased freight traffic.

Tempting Opportunities: Due to increased investments and private sector participation, freight traffic is likely to increase significantly. In addition, the start of several other metro rail projects in a variety of locations augur well for this sector.

Greater Investments: The Indian government intends to invest considerably in upgrading the country's existing railway infrastructure. According to these projections, private investment in the Mass Rapid Transit System (MRTS) will increase from 13% to 42% between 2012 and 2017.

Policy Support: PPPs' function has been expanded by the government, and they now go beyond providing maintenance and other support services. Furthermore, after the Indian government's approval, 100 percent FDI is now permitted.

The India Railways infrastructure sector can be further divided into two major segments:



Growth of Indian Railways Sector

Revenue growth has been strong over the years. Indian Railways' revenues increased at a CAGR of 6.20 per cent during FY08-FY19 and reach to US\$ 27.13 billion in FY19. In FY20P, gross revenue was Rs 85,835.05 crore (US\$ 12.28 billion) up to September 2019. By the end of FY20, the sector is expected to generate \$44.5 billion in revenue.

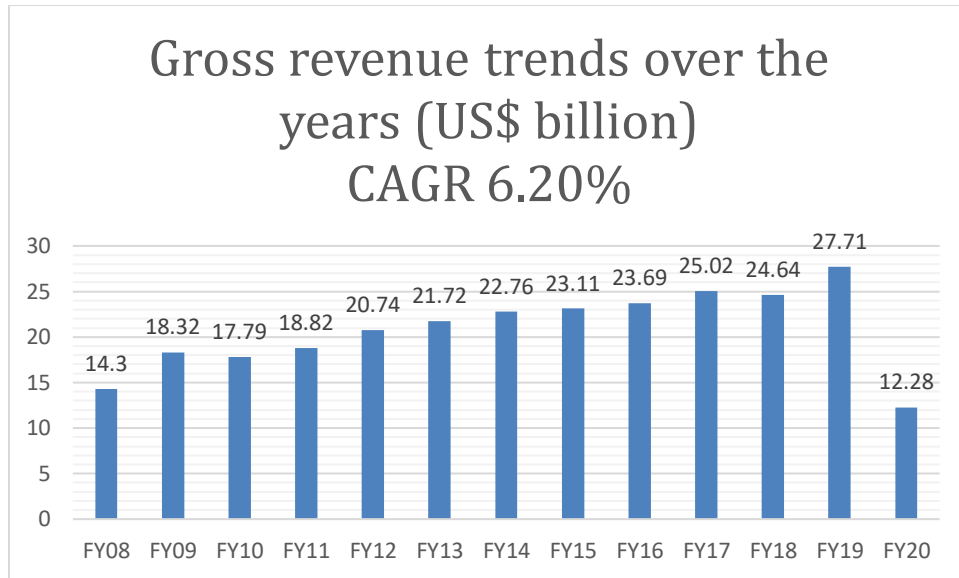


Figure 15: Gross revenue trends over the years

Note: CAGR – Compound Annual Growth Rate, E – Estimates, P-Provisional, FY – Indian Financial Year (April–March), Exchange Rates are averages of the year

Source: Ministry of Railways, Techsci Research

4.5.3 Ports

According to the Ministry of Shipping, around 95% of India's trading by volume and 70% by value is done through maritime transport. In November 2020, the Prime Minister, Mr. Narendra Modi renamed the Ministry of Shipping as the Ministry of Ports, Shipping and Waterways.

India has 12 major and 205 notified minor and intermediate ports. Under the National Perspective Plan for Sagarmala, six new mega ports will be developed in the country. The Indian ports and shipping industry play a vital role in sustaining growth in the country's trade and commerce. India is the sixteenth-largest maritime country in the world with a coastline of about 7,517 kms. The Indian Government plays an important role in supporting the ports sector. It has allowed Foreign Direct Investment (FDI) of up to 100% under the automatic route for port and harbors construction and maintenance projects. It has also facilitated a 10-year tax holiday to enterprises that develop, maintain and operate ports, inland waterways and inland ports.

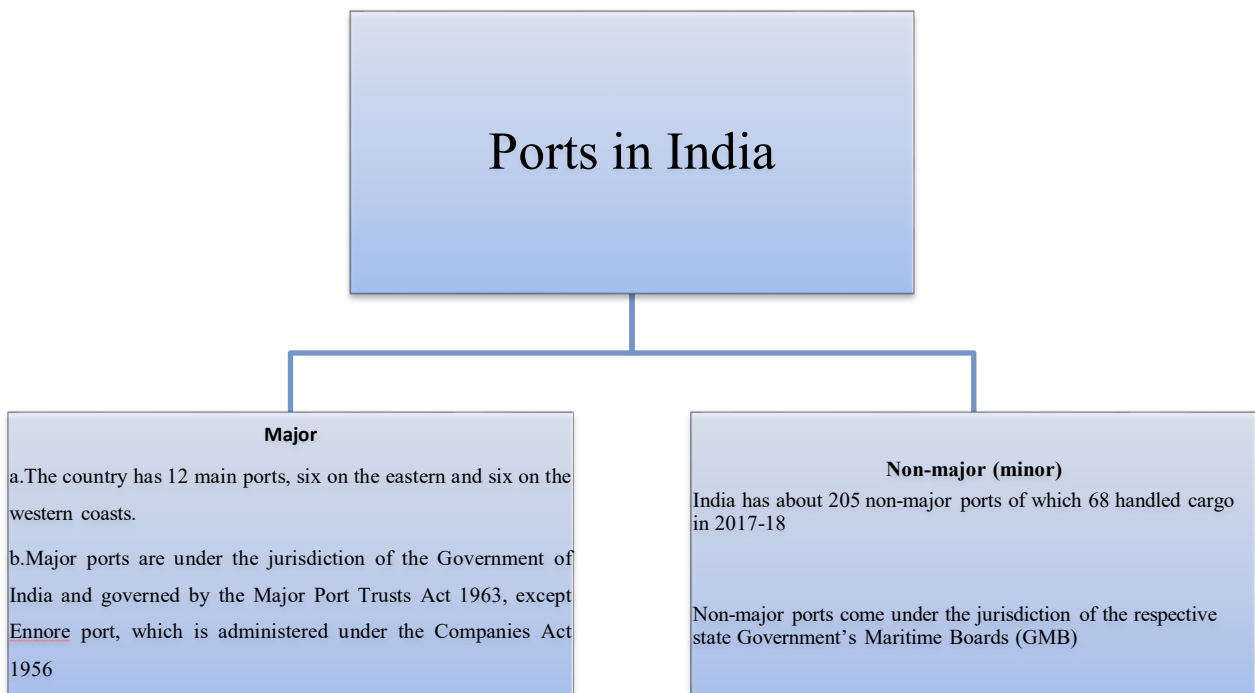


Figure 16: Classification of Ports

Source: Ministry of Shipping



Figure 17: Major ports in India

Cargo traffic at major ports in India:

Traffic at major ports reached 405.39 million tonnes in FY20T (up to October 2019), growing at a CAGR of 2.74 per cent from FY08-19.

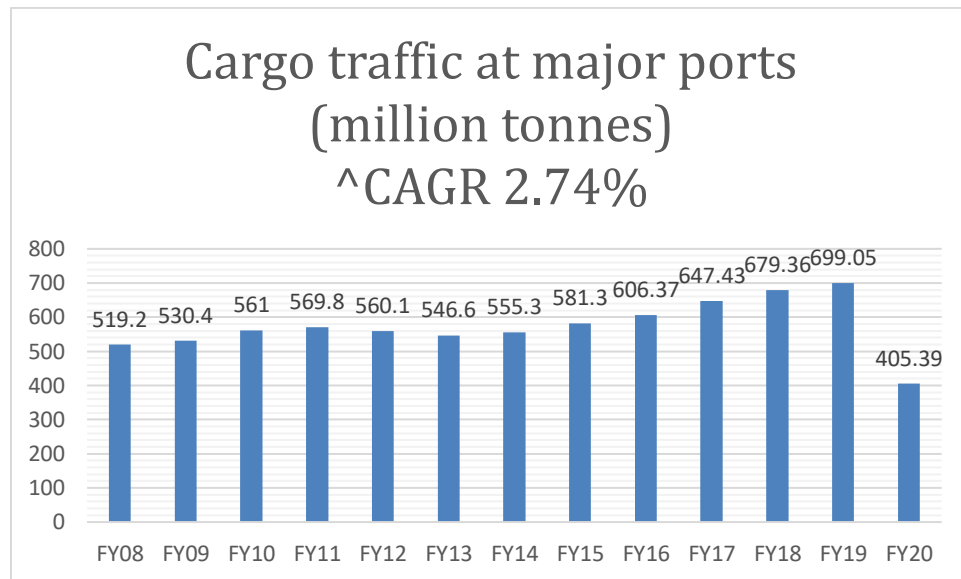


Figure 18: Cargo traffic at major ports in India

CHAPTER 5

FDI Data Analysis (2003-2018)

According to the data, foreign firms made 12206 investments that were recorded as FDI inflows between 2003 and 2018. In 2003, fewer investments were made, and in 2008, roughly 1017 investments were made (largest). As can be seen in the graph below, the number of investments decreased less from 2014 to 2018 than it did from 2003 to 2014. This could be the result of Indian policy initiatives (post MII period)

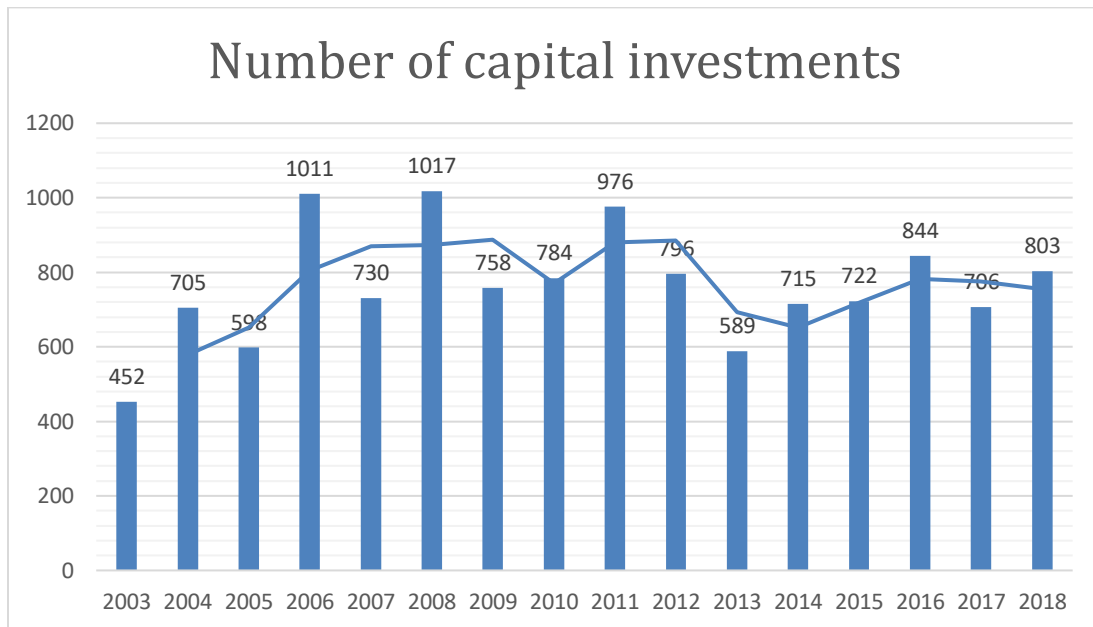


Figure 19: shows the total number of capital investments

5.1 Investment Types

In comparison to expansion projects and injections of existing investments, approximately 85 percent of total inflows are new investments. In the year 2006, a substantial number of new investments were recorded (910 new investments), whereas the year 2013 saw a significant change (only 521). Since the limits on foreign enterprises were reduced at the start of the MMI era (2014-2016), more new investments were attracted.

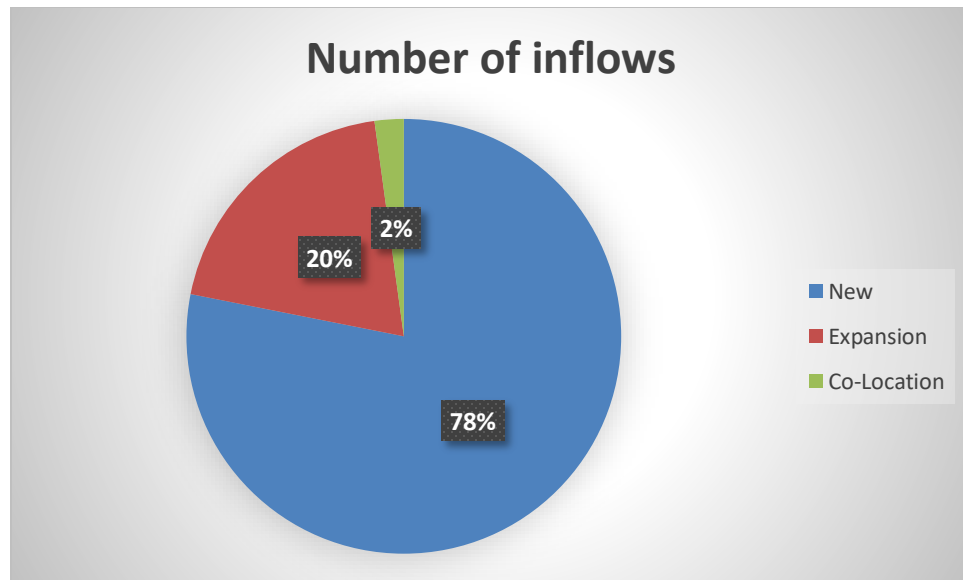


Figure 20: Investment Types (2003-2018)

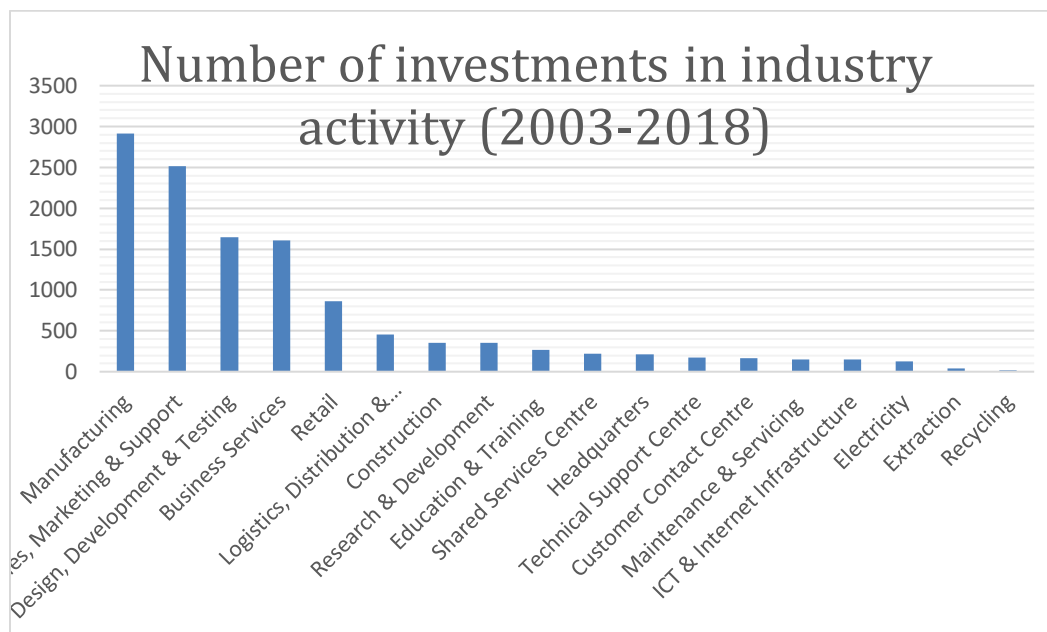


Figure 21: The total amount of money invested in industry activity

The manufacturing sector received the most inflows, followed by sales, as shown in the graph above. Marketing and customer service, design, development, and testing, and so on. This pattern coincides with the MII period's analysis of the top 10 sectors drawing FDI inflows.

In terms of FDI inflows, it is both a major contributor and a major recipient.

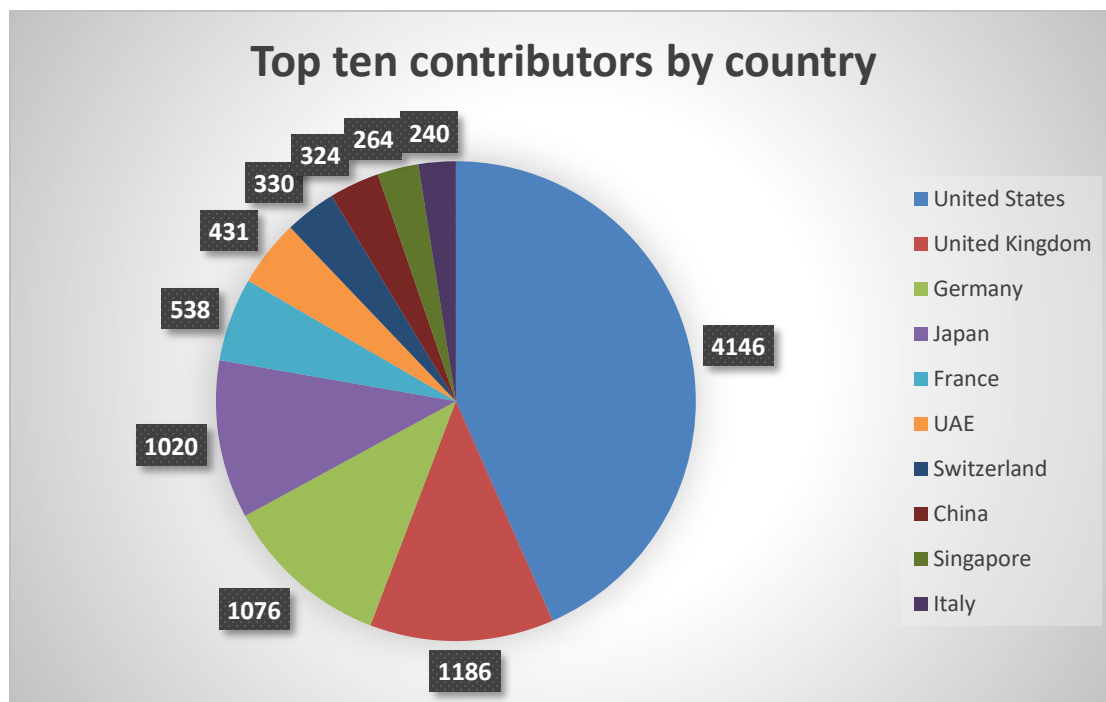


Figure 22: Top ten contributors by country

During the period 2003-2018, the United States contributed around 23.59 percent of total capital investment through 4146 investments, followed by the United Kingdom, Germany, and others.

When it comes to FDI inflows into India's major states, Maharashtra has received the lion's share of 90867 million dollars from 2380 investments.

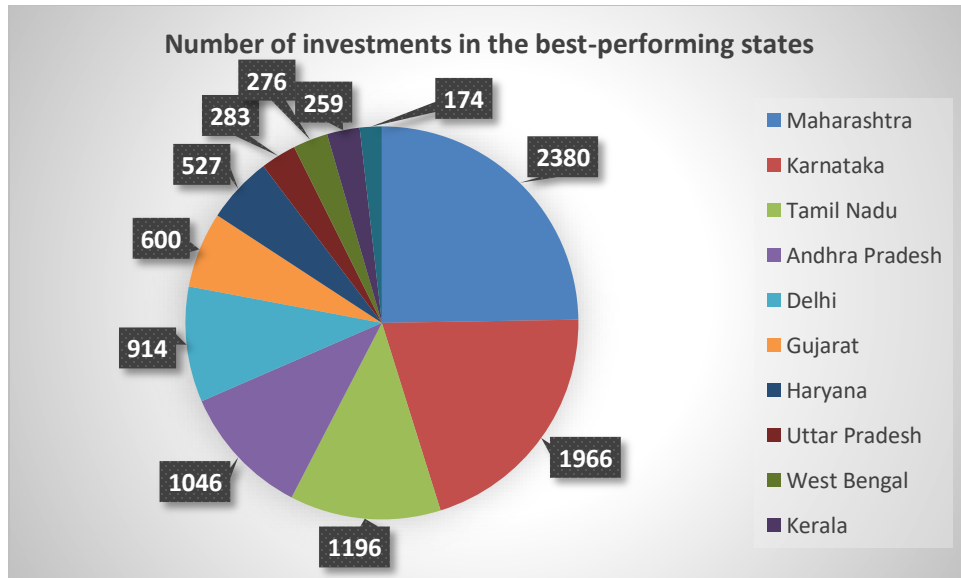


Figure 23: Number of investments in the best-performing states

Industry sector and Number of investments from excel file

Sector	Total number of investments
Software & IT services	2147
Business services	1191
Industrial equipment	913
Financial services	776
Communications	719
Automotive components	505
Chemicals	453
Transportation	445
Consumer products	388
Textiles	380
Food & tobacco	366
Automotive OEM	356
Electronic components	354
Metals	316
Real estate	300
Hotels & tourism	229
Consumer electronics	223
Semiconductors	187

Business machines & equipment	186
Pharmaceuticals	180
Plastics	173
Coal, oil & gas	155
Aerospace	138
Renewable energy	133
Non-automotive transport OEM	114
Medical devices	112
Healthcare	100
Rubber	89
Warehousing	82
Engines & turbines	75
Building materials	69
Beverages	67
Ceramics & glass	66
Biotechnology	54
Paper, printing & packaging	42
Leisure & entertainment	40
Minerals	34
Space & defence	30
Wood products	19
Grand Total	12206

Table 13: Industry sector and Number of investments

Industry Activity	Sum of Jobs Created
Business Services	301062
Construction	256363
Customer Contact Centre	86863
Design, Development & Testing	480030
Education & Training	19440
Electricity	6023
Extraction	10304
Headquarters	29885
ICT & Internet Infrastructure	13024
Logistics, Distribution & Transportation	84847
Maintenance & Servicing	20243
Manufacturing	1534798
Recycling	604
Research & Development	80576
Retail	137569
Sales, Marketing & Support	151188
Shared Services Centre	119555

Technical Support Centre	80930
Grand Total	3413304

According to financial times statistics, software and IT services have attracted the greatest number of investments, followed by business services, industrial equipment, financial services, and so on.

5.2 INVESTMENTS WHICH BENEFIT INDIA'S INFRASTRUCTURE SECTORS

Japan-India Coordination Forum on Development of North Eastern Region

In recent decades, India has experienced considerable economic growth. Rapid transport infrastructure development strengthened the link between large cities, hence contributing to economic growth. Road is, in particular, one of the most essential modes of transport, since road transit accounts for 85% of passengers and 60% of Indian cargo. However, in mountainous regions of India the development of transport infrastructure has delayed because of financial and technical constraints, resulting in increasing economic disparities between the mountainous regions and the plain sections of India benefiting fully from an enhanced network.

So, Japan works to enhance road connection in northeast, beginning with our ODA financing project NH54 in Mizoram and NH51 in Meghalaya. Japan International Cooperation Agency (JICA) inked with the Indian Government an agreement in April 2017 to provide the Phase I Connectivity Improvement project with an estimated \$67 billion (\$610 million).

Japan also supported in 6 major cities in Metro Projects:

Delhi Metro: Total Length: 349 km Project Cost: 1274 billion Completion Year: 2017	Ahmedabad Metro: Total Length: 38 km Project Cost: 246 billion Completion Year: 2020
Mumbai Metro: Total Length: 33 km Project Cost: 347 billion Completion Year: 2020	Kolkata Metro: Total Length: 14 km Project Cost: 140 billion Completion Year: 2020

Delhi Metro:	Chennai Metro:
Total Length: 42 km	Total Length: 43 km
Project Cost: 307 billion	Project Cost: 378 billion
Completion Year: 2017	Completion Year: 2020

Table 14: Six major metro projects

France

Green Railways

India's most powerful all electric locomotives

Five years of signing for the highest FDI in the rail industry are Alstom and Indian Railways

This joint venture Alstom (74% equity) and India Railways (26% equity) is one of the strongest endorsements of Make-in-India for various reason a highly localized supplier base put in place for execution and technology transfer has added to building local engineering capabilities. More than 85% of the components used to manufacture these locomotives are being sourced from India. The project envisions to create more than 10,000 direct and indirect jobs in the country, primarily in the states of Bihar, Uttar Pradesh, and Maharashtra.

Madhepura, which was one of the most backward districts of the country, has now become home of one of India's largest integrated greenfield manufacturing facilities, spread across 250 acres, with a production capacity of 120 locomotives per annum, this industrial site is built to international standards of safety and quality. To support the local communities, Alstom is actively investing in the upliftment of the community across seven villages in and around Madhepura, covering education, healthcare, women empowerment, and skilling.

Globally, Alstom is associated with almost every prominent railway organisation and Indian Railways, is one of the largest Railway entities in the world. The joint venture combines innovation with responsibility and together Alstom is committed to delivering safe, reliable and efficient solutions.

- 50 Electric Locomotives operational

- First freight e-Loco in India to be approved for speed of 120 KMPH

Renewable Energy sector (Italy)

Enel Green Power (“EGP”), through its Indian subsidiary for renewables Enel Green Power India (“EGP India”), and the Norwegian Investment Fund for developing countries Norfund, have signed a long-term agreement to jointly finance, build and operate new renewable projects in India. Aim at boosting the development of a clean energy footprint in India, which is rich in renewable sources and has ambitious green energy goals. India’s government is committed to achieve 100 GW of solar and 60 GW of wind power generation capacity by 2022, up from around 35 GW of solar and about 38 GW of wind as of today.

In Gujarat and Maharashtra, EGP India has and runs an annual production capacity of 172 MW producing roughly 320 GWh. The company recently was granted the right, under the 2 GW ninth tranche of a national solar tender issued to the government company Solar Energy Corporation of India Limited, to enter into a 25-year energy supply contract for the solar project in Rajasthan, which will be the country's first solar facility.

Conclusion:

As discussed in previous chapters, developing economies have always been appealing to host enterprises seeking outside investment. The economic structure of a country, as demonstrated by industrial orientation, contributes significantly to FDI inflows. For example, per capita service output and manufacturing production have a large beneficial influence on location decisions. The underlying data is that the charts given above have a positive association with the FDI inflows of 10 states.

In terms of labor conditions, worker wages appear to have a negative impact on FDI inflows, while literacy rates indicate a favorable relationship among states. The trend line of state tax revenue as a percentage of GSDP demonstrates that FDI prefers states with lower tax rates.

The introduction of “MAKE IN INDIA” has resulted in significant foreign investment. Prime Minister Narendra Modi feels that changing the industry's infrastructure should be a key priority because it may assist development in all sectors and increase FDI inflows. Transparent policies have resulted in the establishment of automatic channels for the majority of industries, paving the door for FDI inflows without any constraints previously encountered.

Investment in Infrastructure Like Roads, Railways and Ports sectors have created connective between rural areas to urban areas which created employment to local people.

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APPENDIX

Table 1: Selected Industry Sectors with FDI Thresholds

Sector	FDI limit	Entry Route & Remarks
Mining Mining and Exploration of metal and non-metal ores including diamond, gold, silver and precious ores but excluding titanium bearing minerals and its ores	100%	Automatic
Mining (Coal & Lignite)	100%	Automatic
Mining Mining and mineral separation of titanium bearing minerals and ores, its values addition and integrated activities	100%	Government
Petroleum & Natural Gas Exploration activities of oil and natural gas fields, infrastructure related to marketing of petroleum products and natural gas, marketing of natural gas and petroleum products etc.	100%	Automatic
Petroleum & Natural Gas Petroleum refining by the Public Sector Undertakings (PSU), without any disinvestments or dilution of domestic equity in the existing PSUs	49%	Automatic
Defence Manufacturing	100%	Automatic up to 49% Above 49% under Government route in cases resulting in access to modern technology in the country
Broadcasting <ul style="list-style-type: none"> • Teleports (setting up of up-linking HUBs/Teleports) • Direct to Home (DTH) • Cable Networks (Multi System operators (MSOs) operating at National or State or District level and undertaking upgradation of networks towards digitalization and addressability • Mobile TV • Head end-in-the Sky Broadcasting Service (HTS) 	100%	Automatic
Broadcasting Cable Networks (Other MSOs not undertaking up gradation of networks towards digitalization and addressability and Local Cable Operators (LCOs)	100%	Automatic
Broadcasting Content Services <ul style="list-style-type: none"> • Terrestrial Broadcasting FM (FM Radio) • Up-linking of News & Current Affairs TV Channels 	49%	Government
Up-linking of Non-News & Current TV Channels/ Down-linking of TV Channels	100%	Automatic
Print Media <ul style="list-style-type: none"> • Publishing of newspaper and periodicals dealing with news and current affairs • Publication of India editions of foreign magazines dealing with news and current affairs 	26%	Government

Publishing/printing of scientific and technical magazines/specially journals/periodical, subject to compliance with the legal framework as applicable and guidelines issued in this regard from time by Ministry of Information and Broadcasting.	100%	Government
Publication of facsimile edition of foreign newspapers	100%	Government
Civil Aviation-Airports Green Field Projects & Existing Projects	100%	Automatic
Civil Aviation- Air Transport Services <ul style="list-style-type: none"> Scheduled Air Transport Service/Domestic Scheduled Passenger Airline Reginal Air Transport Service (Foreign Airlines are barred for Investing in Air India)	100%	Automatic up to 49% Above 49% under Government route 100% Automatic for NRIs
Civil Aviation <ul style="list-style-type: none"> Non-Scheduled Air Transport Service Helicopter service/seaplane service requiring DGCA approval Ground Handling Service subject to sectoral regulations and security clearance Maintenance and Repair organizations; flying training institutes; and technical training institutions 	100%	Automatic
Construction Development: Townships, Housing, Built-up Infrastructure	100%	Automatic
Industrial Parks (new & existing)	100%	Automatic
Satellites- establishment and operation, subject to the sectoral guidelines of Department of Space/ISRO	100%	Government
Private Security Agencies	74%	Automatic up to 49% Above 49% up to 74% under Government route
Telecom Services	100%	Automatic up to 49% Above 49% under Government route
E-commerce activities (e-commerce entities would engage only in Business to Business (B2B) e-commerce and not in Business to Consumer (B2C) e-commerce.)	100%	Automatic
Single Brand retail trading Local sourcing norms will be relaxed up to three years and a relaxed sourcing regime for another five years for entities undertaking Single Brand Retail Trading pf products having 'state-of-art' and 'cutting edge' technology	100	Automatic up to 49% Above 49% under Government route
Multi Brand retail Trading	51%	Government
Asset Reconstruction Companies	100%	Automatic
Banking- Private Sector	74%	Automatic up to 49% Above 49% up to 74% under Government route
Banking- Public Sector	20%	Government
Infrastructure Company in the Securities Market	49%	Automatic
Insurance <ul style="list-style-type: none"> Insurance Company Insurance Brokers 	49%	Automatic

<ul style="list-style-type: none"> • Third Party Administration • Surveyors and Loss Assessors • Other Insurance Intermediaries 		
Pension Sector	49%	Automatic
Power Exchanges	49%	Automatic
Pharmaceuticals (Green Field)	100%	Automatic
Pharmaceuticals (Brown Filed)	100%	Automatic up to 74% Above 74% under Government route
Healthcare (Brownfield)	100%	Automatic up to 74% Above 74% under Government route
Food products manufacture or produced in India Trading, including through e-commerce, in respect of food products manufacture or produced in India,	100%	Government

Table 2: The Most Important Labor Laws in India

	Domain	Acts/Rules
1	Industrial Relations	The Industrial Disputes Act, 1947
2		The Plantation Labour Act, 1951
3		The Industrial Employment (Standing Orders) Act, 1946
4		The Trade Unions (Amendment) Act, 2001
5	Industrial Safety & Health	The Factories Act, 1948
6		The Mines Act, 1952
7		The Dock Workers (Safety, Health & Welfare) Act, 1986
8	Child & Women Labour	Equal Remuneration Rules, 1976
9		
10	Social Security	The Payment of Gratuity Act, 1972
11		Employees Compensation (Amendment) Act, 2017
12		Maternity Benefit (Amendment) Act, 2017
13		The Personal Injuries (Emergency) Provision Act, 1962
14		The Personal Injuries (Compensation Insurance) Act, 1963
15		Employee's liability act 1938
16		The Employee's Provident Fund & Miscellaneous Provisions (Amendment) Act, 1996
17		The Employee's State Insurance Act, 1948
18		The Employee's Compensation Act, 1923
19		The Payment of Wages (Amendment) Act, 2017
20		The Payment Bonus (Amendment) Act, 2007
21	Wages & Bonus	The Working Journalists and Other Newspaper Employee's (Conditions of Services) and Miscellaneous Provisions Act, 1995
22		The Working Journalist (Fixation of Rates of Wages) Act, 1958
23		The Minimum Wages Act, 1948
24		The Unorganised Workers Social Security Act 2008

25		The Bonded Labour System (Abolition) Act, 1976
26		The Cine Workers Welfare Fund Act, 1981
27		The Cine Workers and Cinema Theatre Workers (Regulation of Employment) Rules, 1984
28		The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979
29	Labour Welfare	The Contract Labour (Regulation & Abolition) Act, 1970
30		The Beedi & Cigar Workers (Conditions of Employment) Act, 1966
31		The Employment of Manual Scavengers and Construction of Dry latrines Prohibition Act, 1993
32		The Iron Ore Mines, Manganese Ore Mines & Chrome Ore Mines Labour Welfare Fund Act, 1976
33		The Limestone & Dolomite Mines Labour Welfare Fund Act, 1972
34		The Mica Mines Labour Welfare Fund Act, 1946
35	Employment	The Employment Exchange (Compulsory Notification of Vacancies) Rule, 1960