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# A Study on FDI with Reference to Infrastructure

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**Abstract:** Foreign direct investment (FDI) in India is a major monetary source for economic development in India. Foreign companies invest directly in fast growing private Indian businesses to take benefits of cheaper wages and changing business environment of India. Economic liberalisation started in India in wake of the 1991 economic crisis and since then FDI has steadily increased in India, which subsequently generated more than one crore (10 million) jobs. According to the Financial Times, in 2015 India overtook China and the United States as the top destination for the Foreign Direct Investment. In first half of the 2015, India attracted investment of \$31 billion compared to \$28 billion and \$27 billion of China and the US respectively. The Government of India has amended FDI policy to increase FDI inflow. Infrastructure, Automobiles, Pharmaceuticals, Service, Railways, Chemicals, Textiles, Roads and Highways are few of the major Sectors for FDI. India has second largest road networks in the world, spanning a total of 5.5 million kilometers (kms).

The private sector has emerged as a key player in the development of road infrastructure in India. Increased industrial activities, along with increasing number of two and four wheelers have supported the growth in the road transport infrastructure projects. The government's policy to increase private sector participation has proved to be a boon for the infrastructure industry with a large number of private players entering the business through the public-private partnership (PPP) model.

With the Government permitting 100 per cent foreign direct investment (FDI) in the road sector, several foreign companies have formed partnerships with Indian players to capitalise on the sector's growth. Cumulative FDI in construction development since April 2000 stood at US\$ 25.05 billion as of March 2019. MAIF 2 became the first largest foreign investment in Indian roads sector under TOT mode worth Rs 9,681.5 crore (US\$ 1.50 billion). As of November 2018, total length of projects awarded under Bharatmala Pariyojana (including residual NHDP works) was 6,460 kms for a total cost of Rs 1.52 trillion (US\$ 21.07 billion). The total amount of investments\* are estimated to reach Rs 1.58 trillion (US\$ 2.25 billion) in FY19.

This paper would highlight on the various opportunities in India for FDI, trends, Government regulations, initiatives etc. with emphasis on Roads and highways infrastructure sector. This paper would also attempt to suggest few steps to optimise FDI in this particular sector.

## I. INTRODUCTION

Foreign Direct Investment is the investment made in production or business by the country in another country by either means of buying a company or expanding its business in the foreign country. It is usually by means of bonds and shares. Generally speaking FDI refers to capital inflows from abroad that invest in the production capacity of the economy and are "usually preferred over other forms of external finance because they are non-debt creating, non-volatile and their returns depend on the performance of the projects financed by the investors. FDI also facilitates international trade and transfer of knowledge, skills and technology." According to the Financial Times, "Standard definitions of control use the internationally agreed 10 percent threshold of voting shares, but this is a grey area as often a smaller block of shares will give control in widely held companies. Moreover, control of technology, management, even crucial inputs can confer de facto control."

FDI was introduced in the year 1991 under Foreign Exchange Management Act (FEMA), by then finance minister Dr. Manmohan Singh. It started with a baseline of \$1 billion in 1990. India is considered as second important destination for foreign investment. The major sectors that attracted FDI are services, telecommunication, construction activities and computer software and hardware.

## II. REVIEW OF LITERATURE

- 1) Rudra Prakash Pradhan, ICAFI Journal of Financial Economics, June 2008, Vol.6 Issue 2- The paper investigates the determinants of Foreign Direct Investment (FDI) In India, with particular reference to infrastructure. Covering the period from 1970 to 2004, the empirical investigation confirmed that infrastructure has a significant negative impact on FDI inflows in India. This is mostly due to stagnant infrastructure investment in the economy. On the other hand, FDI inflows are positively determined by trade openness in the country. The paper suggests that to make our economic policy more effective towards integrating inflows of FDI must be well- integrated with the policy of globalization and infrastructural development.

- 2) Tien Quang Tran, ASEAN Economic Bulletin, April 2009, Vol. 26 Issue 1- Through examining trends and patterns of foreign direct investment (FDI) in Vietnam over the twenty years of reform (1986-2008), this paper found a big increase in registered FDI recently. This is not in accordance with the increase in actual capital disbursement because of low absorptive capacity of the economy in terms of poor infrastructure, restricted and unstable policy, and weak competitive capacity of the domestic firms. Moreover, newly massive flows of FDI brought an explosion to infrastructure development in the form of office buildings, hotels, industrial zones, resident parks and ports.
- 3) Chaturvedi Ila (2011) analysed the sector wise distribution of FDI to know the dominating sector which has attracted the major share of FDI in India. It also finds out the correlation between FDI and Economic Development. The relevant secondary data are collected from various publications of Government of India, RBI and World Investment Report 2009, published by UNCTAD. Therefore the study concluded that FDI provides an opportunity for technology and upgradation, access to global managerial skills and practices, optimum utilization of human capabilities and natural resources, making industry internationally competitive, access to international goods and services and augmenting employment opportunities.
- 4) Azeem Ahmad Khan (2014) evaluated the FDI flows in India through Mergers and Acquisitions (M&As), a composite view of effective practices that have been emerged from inbound investors' experience conducting M&As in India. The study suggested that FDI has a beneficial impact on developing countries but recent work also points out some potential risk. Mergers & Acquisitions help in increasing the FDI inflows in India and the result of the study shows that a large amount of FDI comes through Mergers and Acquisitions in India. However the relationship between FDI inflows (Inward) and GDP of India are not significant for the reason that they fail to attract the foreign Investors. But the difference between FDI through FIPB /Acquisitions Route and Equity Capital of Unincorporated Bodies is statistically significant and it leads to conclusion that other sources of Investment rather than mergers and acquisitions are least effective and still efforts are required for attracting foreign Investors.
- 5) Arjun Singh Sirari et al. (2011) attempted to analyze the significance of FDI inflows in Indian service sector since 1991 and relating the growth of service sector FDI in generation of employment in terms of skilled and unskilled. The main source of data are various Economic Surveys of India and Ministry of Commerce and Industry data, RBI bulletin, online data base of Indian Economy, journals, articles, news papers, etc. The study concluded that at the sectoral level of the Indian economy, FDI has helped to raise the output, productivity and employment in some sectors especially in servicesector.

#### A. *Scope of the Study*

- 1) To investigate the flow of FDI in Roads data have been collected for the period 2014-2018.
- 2) FDI in Roads plays a major role in developing countries like India. They act as long term source of capital as well as a source of advanced and developed technologies. The investors also being along global practices of management. As large amount of capital comes in through these investments more and more industries are set up. This helps in increasing employment. FDI in Roads also helps in promoting international trade. This investment is non-debt, non-volatile investment and return received on these are generally spent on the host country itself thus helping in the development of the country

#### B. *Objectives of the Study*

- 1) To study the FDI scenario of Highways Infrastructure.
- 2) To know the impact of FDI on Indian economy with reference to Highways Infrastructure.
- 3) To study the Indian government initiatives and schemes on Highways Infrastructure.
- 4) To examine the present cash flows of FDI on Highways Infrastructure.
- 5) To know the countries investment of FDI in India.
- 6) To Identify the investment of FDI in terms of change in Rupees.

### III. RESEARCH METHODOLOGY

Research methodology is the method of collecting, analysing and interpreting the data to diagnose the problem and read the opportunity in a such a way where the costs can be minimized and the desired level of accuracy can be achieved to arrive at a particular conclusion.

#### A. Secondary Data

Data is collected through secondary source like research reports and websites. The required data have been collected from various sources i.e. Asian Development Bank's Reports , Various bulletins of Reserve Bank of India, Publications from Ministry of Commerce, Government of India, Economic and social survey of Asia and the Pacific, United Nations, Asian Development Outlook , Country reports on Economic Policy and Trade Practice- Bureau of Economic and Business Affairs, U.S , IBEF, IMF, WTO,RBI, Press Trust of India. The study is based on published sources of data collected. The data was done using the Excel with the use of line, bar graphs. The graphs are used to analyse the year by year inflows study for comparison. Primary Data cannot be taken because of limited resources.

#### B. To Study the FDI Scenario of Highways Infrastructure

India has the one of largest road network across the world, spanning over a total of 5.5 million km. This road network transports 64.5 per cent of all goods in the country and 90 per cent of India's total passenger traffic uses road network to commute. Road transportation has gradually increased over the years with the improvement in connectivity between cities, towns and villages in the country. The Indian roads carry almost 90 per cent of the country's passenger traffic. In India sales of automobiles and movement of freight by roads is growing at a rapid rate. The transport infrastructure sector is one the fastest expanding components of the country's infrastructure sector. India has the one of largest road network across the world, spanning over a total of 5.5 million km.

According to FDI policies for roads-highways sector, 100% FDI for roads and highways allowed under the automatic route.95% of the total share of this length is covered under District and Rural roads. State highways cover close to 3% of the road length while the remaining 2% comes under National Highways. The construction of highways reached 9,829 km during FY18 which was constructed at an average of 26.93 km per day. The Government of India has set a target for construction of 10,000 km national highway in FY19 The GOI has given a massive push to infrastructure by allocating about \$100 bn for infrastructure in the Union Budget 2018-19. The government plans on investing \$22.4 bn towards road framework in the North-East region of India during 2018-2020. The highways sector in India has been at the forefront of performance and innovation. The government has successfully rolled out over 60 projects worth over \$10 bn based on the Hybrid Annuity Model (HAM)

#### C. To Know The Impact Of FDI On Indian Economy With Reference To Highways Infrastructure

- 1) *Better Connectivity To Domestic And International Markets And Increase In Income:* Connectivity to urban markets and trade centres are crucial for increase in income and poverty reduction. The NHDP is in the process of connecting the major urban and trade centres (ports, etc.) of India. Between 2000 and 2005, about 11 per cent of unconnected habitations were provided connectivity under PMGSY and other schemes. These roads are now being linked to national highways providing opportunities to farmers to access international markets. In the absence of proper road connectivity, farmers in remote areas often find it difficult to sell agricultural goods in bigger markets located at a distance from their village. They have to sell their agricultural products to the middlemen and due to a large number of intermediaries they often get a low price for their products while consumers have to pay a high price. Also, due to the lack of connectivity they do not have access to farm inputs as and when required. Poor connectivity along with lack of cold storage facilities leads to wastage. In India, 5-7% of food grains and 25-30% of the fruits and vegetables get wasted in the supply chain
- 2) *Increased Access To Social Sector:* Road connectivity enables better access to basic services such as schools and healthcare facilities and improves the quality of life. The development of rural roads has increased school enrolment and attendance. It has increased attendance in middle and high schools and colleges. Those in connected areas have better access to public healthcare centres and health workers and there have been increase in childbirth in medical institutions. Road connectivity has increased the frequency of visits by Government functionaries. This has led to an improvement in the implementation of various development schemes and programmes.

#### D. To Study the Indian Government Initiatives and Schemes on highways Infrastructure

##### 1) Rural Development

- a) The Prime Minister's Gram Sadak Yojana (PMGSY) is a scheme for development of rural roads in India. The Government of India has succeeded in providing road connectivity to 85 per cent of the 178,184 eligible rural habitations and all villages are expected to be connected through a road network by 2019. Total length of roads constructed were 47,447 km in 2017-18.
- b) In April 2018, the Government of India signed a US\$ 210 million deal with World Bank to improve rural roads at a stretch of 10,510 km in Madhya Pradesh under the Gram Sadak Yojana programme.

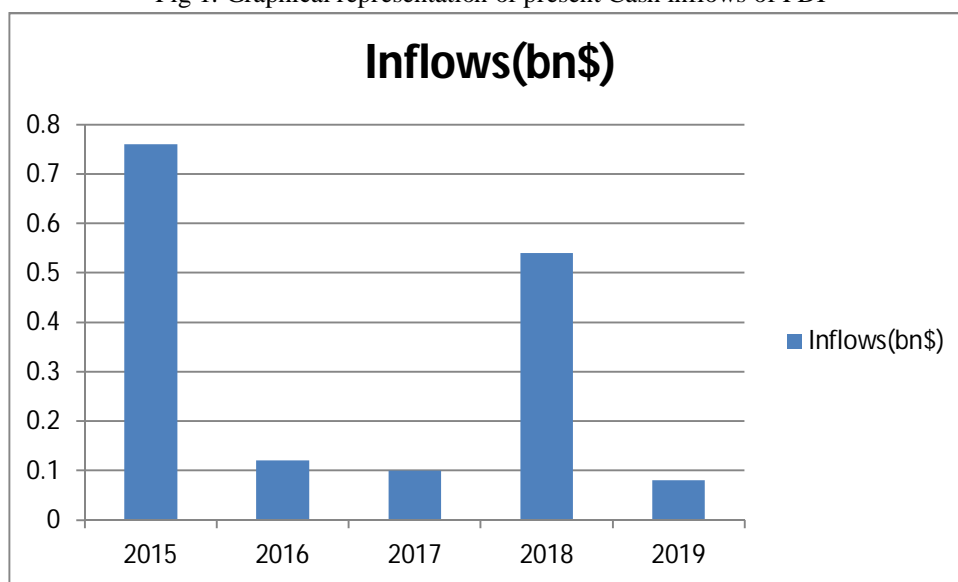
- c) Construction of roads under PMGSY increased to 48,719 km in 2017-18 from 25,316 km in 2013-14. Road construction in 2018-19 (up to January 2019) stood at 24,368 km.
- 2) *Central Road Fund (CRF)*
  - a) In 2018-19 Rs 46,636 lakhs (US\$ 66.73 million) worth of amount has been released Under Central Road Fund (CRF).
  - b) The Central Road Fund (Amendment) Bill, 2017 has been passed by the Lok Sabha, Government of India which would result in revenues of Rs 2,300 crore (US\$ 358.7 million) .
- 3) *Goods and Services Tax (GST):*
  - a) The GST on construction equipment has been reduced to 18 per cent from 28 per cent, which is expected to give a boost to infrastructure development in the country.
- 4) *Investment in Roads and other Infrastructure*
  - a) Under the Union Budget 2019-20, the government has allocated Rs 1.12 trillion (US\$ 15.48 billion) under the Ministry of Road Transport and Highways.
  - b) The total amount of investments\* are estimated to reach Rs 1.58 trillion (US\$ 2.25 billion) in FY19.

E. To Examine the Present Cash flows of FDI on Highways Infrastructure

Table 1: Present Cash inflows of FDI

Years	Inflows(bn\$)	CF
2014		23.31
2015	0.76	24.07
2016	0.12	24.19
2017	0.10	24.29
2018	0.54	24.83
2019	0.08	24.91

Fig 1: Graphical representation of present Cash inflows of FDI



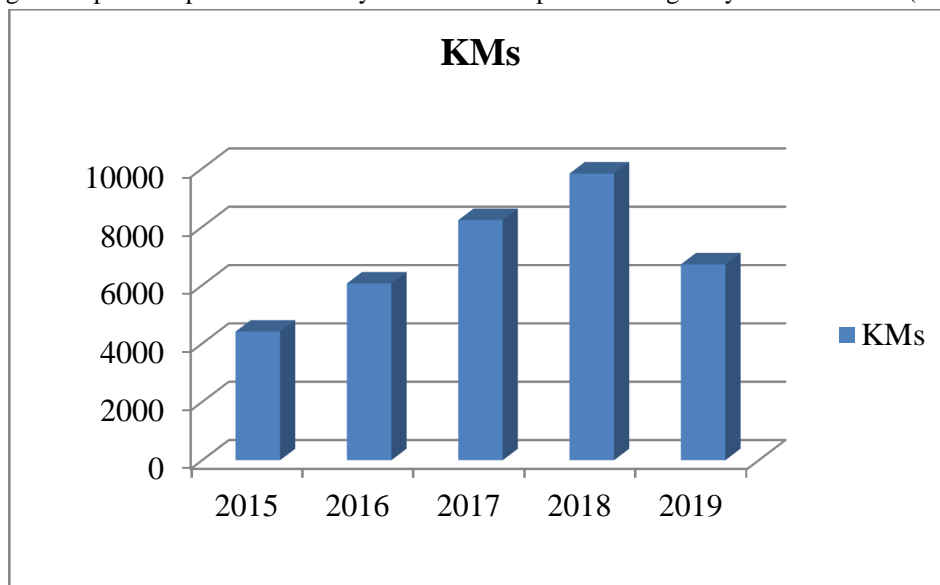
Interpretation

- 1) In the above graph represents present Cash inflows of FDI for 5 years.
- 2) In the above graph x axis represents no of years and y axis represents inflows.
- 3) As we observe we have high highest inflows of FDI in 2015 with 0.76(bn\$).
- 4) As we observe in above graph we have lowest inflows of FDI in 2019 with 0.08(bn\$).

Table 2: Year wise development of Highways Infrastructure(KMs):

Years	KMs
2015	4410
2016	6061
2017	8231
2018	9829
2019	6715

Fig 2: Graphical representation of year wise development of Highways Infrastructure (KMs)



*Interpretation*

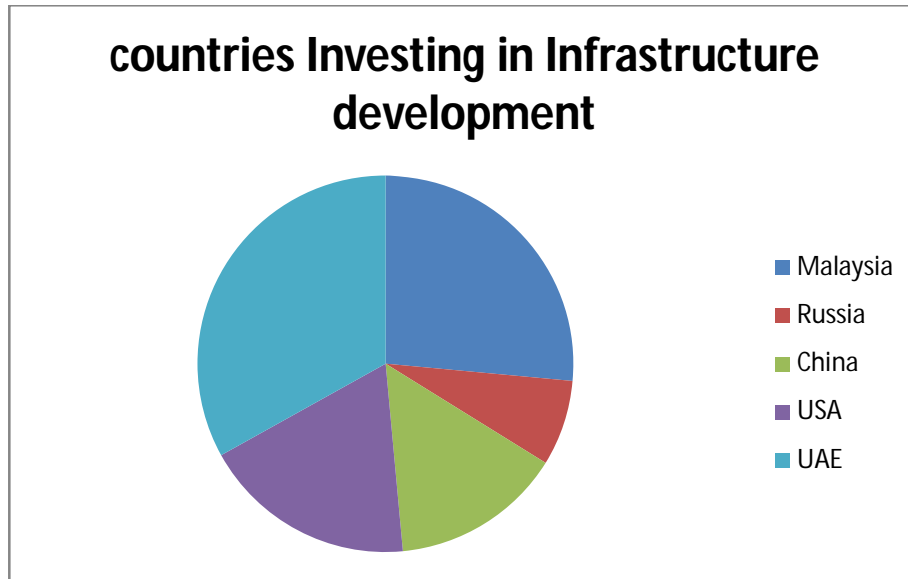
- 1) Highway constructions in India increased at 23.25 percent CAGR between FY 14-18. In FY18, 9,829 km of highways were constructed with an expenditure of Rs 1.16 trillion (US \$18.05 billion). The Government of India aims to construct 65,000 Km of national highways at the cost of Rs 5.35 lakh crore (US \$741.51 billion) by 2022.
- 2) The Government of India has set a target for construction of 10000 km national highway in FY 19. During April-December 2018 a total of length of 6715 km of national highways were constructed.
- 3) Highway construction revenues is forecasted to grow at a CAGR OF 20 percent by 2020.
- 4) Increasing industrial activity, increasing number of 2 and 4 wheelers would support the growth in the road transport infrastructure projects.
- 5) In March 2019, National Highway projects worth Rs 110154 crore were inaugurated.

*F. To know the Countries Investment of FDI in India*

Table :3 Countries investing in infrastructure development

Countries	Values (\$ )
Malaysia	36bn
Russia	10bn
China	20bn
USA	25bn
UAE	45bn

Fig 3: Graphical Representation of countries investment of FDI in India:



*Interpretation*

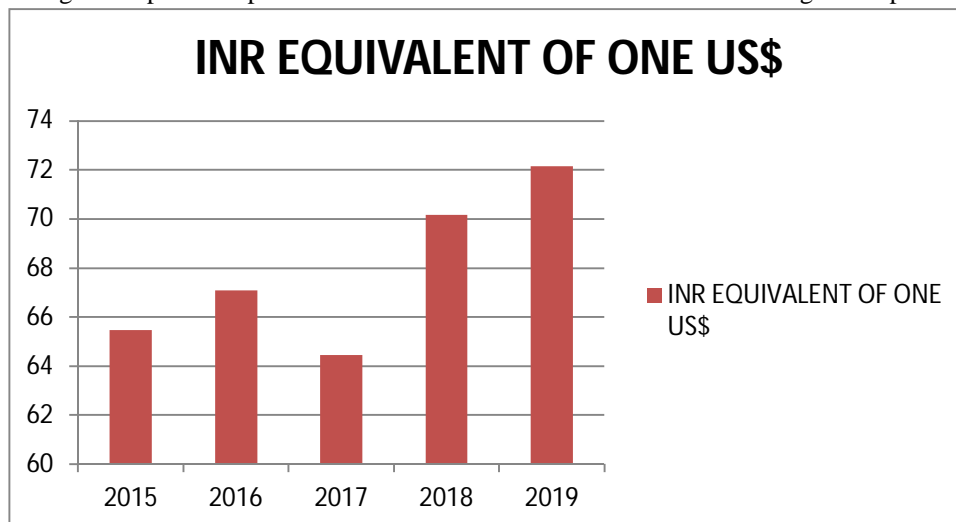
- 1) In above Pie Diagram it represents about the countries that are investing in infrastructure development.
- 2) As we observe we have highest value for UAE for investing on infrastructure development with 45 bn.
- 3) As we observe Russia has lowest value invested country in infrastructure development with 10 bn.

*G. To identify the Investment of FDI in terms of change in Rupees*

Table 4: FDI Exchange Rate

Year	INR Equivalent of one US\$
2015	65.46
2016	67.09
2017	64.45
2018	70.18
2019	72.15

Fig 4: Graphical Representation the investment of FDI in terms of change in Rupees:



### *Interpretation*

- 1) In above graph it represents the INR Equivalent of one US\$ for 5 years.
- 2) In above graph X axis represents the year INR and Y axis represents INR Equivalent of one US \$.
- 3) As we observe in 2019 it has highest exchange value of 72.15.
- 4) As we observe in 2017 it has lowest exchange value of 64.45.

### *H. Findings*

- 1) Malaysia, UAE are the top countries to invest in the development of infrastructure of FDI in India.
- 2) Cumulative inflows of FDI are high in FY-19 with 24.91 was high generating flows period compared to other years.
- 3) Year wise development (KMs) are high in 2018 with 9829, compared to other years FY-18 is high year wise development (KMs).
- 4) From other countries wise UAE stands first place in which its companies are investing and more on Indian roads.
- 5) The GST on construction equipment has been reduced to 18 per cent from 28 per cent, which is expected to give a boost to infrastructure development in the country.
- 6) To go from Beijing to Shanghai via road, as per Google Maps, it takes around 12.5 hours for a distance of 1213km but To go from Delhi to Mumbai, it takes around 22.5 hours for a distance of 1414 km.

### *I. Suggestions*

- 1) Corporate taxation in India is a dense thicket of frequently changing exemptions, deductions, rates, surcharges and cesses. The system is unstable, hard to implement and difficult to comply with. Even so, finance minister Arun Jaitley's proposal to extend the cut in basic corporate tax rate from 30% to 25% was a bright spot in the recent Budget.
- 2) The analysis of this study reveals that India's performance regarding attraction of FDI inflows is very poor as compared to other countries. India should improve its regulatory system through better and effective monetary and fiscal reforms. There is need to strengthen infrastructure network, reforms in marketing structure and strong political will to improve international trade relations.
- 3) FDI has found to be influenced by trade openness of country which implies that a more liberalised foreign investment policy framework is required in India to decrease the gap in FDI inflows of India. Reserves are also playing important role in influencing FDI inflows in India. There should be favourable economic environment in terms of increasing efforts like provision of subsidised raw material, power, land and tax concession for the development of export oriented manufacturing units, which in turn helps to escalate foreign exchange reserves position in India.

## **IV. CONCLUSION**

- A. During the past two decades, FDI has become increasingly important in developing countries. Among the developing countries, the Asian countries have large share of FDI inflows in the last three decades. The study can be further expanded by comparing economic performance of more Asian countries with longer time span for the analysis
- B. The relationship of FDI with macroeconomic indicators and the trends of GDP, exports and total factor productivity in India till 2017 suggest that FDI is responsible for fostering the Indian economic growth. India enjoys relative advantages in attracting FDI compared to other countries due to its cheap labor resulting from low inflation rate and geographical proximity to OECD countries. On one hand, the high growth rate of GDP in the post-reform period raised the return from investment. This helped to attract foreign investors and bring FDI which, on the other hand, impacted the growth rate of GDP.
- C. According to recent reports, inward FDI in the developing countries outweighs that in the developed countries. To a large extent, it is attributed to the developing economies of Asia, including India. In India, new foreign direct investment policies announced by the Department of Industrial Policy and Promotion (DIPP) are important steps in boosting the morale of foreign investors. Therefore, the increasing trend of FDI is expected to continue in the coming years.
- D. India has become the most attractive emerging market for global partners (GP) investment for the coming 12 months, as per a recent market attractiveness survey conducted by Emerging Market Private Equity Association (EMPEA).
- E. Annual FDI inflows in the country are expected to rise to US\$ 75 billion over the next five years, as per a report by UBS. The Government of India is aiming to achieve US\$ 100 billion worth of FDI inflows in the next two years. The World Bank has stated that private investments in India is expected to grow by 8.8 per cent in FY 2018-19 to overtake private consumption growth of 7.4 per cent, and thereby drive the growth in India's gross domestic product (GDP) in FY 2018-19.





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