



## Role of Foreign Direct Investment on Industrial Growth in India

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### Abstract

The research study examines the role of Foreign Direct Investment (FDI) in India's industrial growth, employing a simple linear regression model to analyze the relationship between FDI and the Index of Industrial Production (IIP). The analysis reveals a statistically significant positive correlation between FDI and IIP, with a regression coefficient of 0.245, suggesting that a one-unit increase in FDI is associated with a 0.245-unit increase in IIP. The model explains approximately 45.61% of the variation in IIP, as indicated by an R-squared value of 0.4561. While these findings provide evidence for a positive link between FDI and industrial growth in India, it is crucial to acknowledge the limitations of this model. The analysis accounts for only one independent variable (FDI) and thus does not capture the influence of other potentially significant factors on IIP. Furthermore, the study demonstrates correlation, not causation. It also studied the trends of FDI inflows into Telangana state, which fluctuated between 2015 and 2024. After a steady rise from ₹8,326 crore in 2015 to ₹14,767 crore in 2017, inflows dipped to ₹8,037 crore in 2018 before surging to ₹23,882 crore in 2019. Subsequent years saw further volatility, with a low of ₹8,447 crore in 2020 and a peak of ₹25,094 crore in 2024. This inconsistent pattern suggests that FDI inflows are influenced by various factors, requiring further investigation into sectoral trends, policy impacts, and global economic conditions to understand the underlying drivers and long-term implications for Telangana's economy.

**Keywords:** Foreign Direct Investment, Index of Industrial Production, FDI, IIP, Economic Growth

### 1. Introduction

The Indian economic growth rate is significant, and it is the fastest-growing economy among other developing economies. When measured by the nominal gross domestic product of all countries, the Indian economy ranks as the fifth-largest globally. The world has seen a significant impact from globalisation, which has entirely changed traditional business methods. Globally, foreign direct investment (FDI) has increased significantly due to globalisation. Foreign Direct Investment (FDI) plays a crucial role in driving India's economic growth by attracting capital, promoting industrial expansion, and creating employment opportunities across various sectors. It enhances productivity, modernizes industries, and strengthens key sectors, including manufacturing, IT, banking, and telecommunications, thereby improving efficiency and competitiveness. FDI also significantly strengthens India's infrastructure by facilitating investments in roads, railways, ports, and power generation, thereby accelerating urbanization and industrialization. Government

initiatives, such as Make in India, Digital India, and Startup India, have liberalized policies, creating an investor-friendly environment by reducing bureaucratic hurdles and simplifying regulatory procedures.

In addition to stimulating economic growth, FDI has significantly enhanced India's export competitiveness, particularly in sectors such as automobiles, pharmaceuticals, textiles, and electronics. These industries have leveraged foreign investments to expand production capacities and explore new international markets. FDI also supports financial inclusion and digital transformation by driving the growth of fintech startups, digital payment platforms, and banking innovations, making financial services more accessible. However, challenges such as over-reliance on foreign capital, profit repatriation, and regulatory uncertainties remain. Addressing these challenges through stable policies, transparent governance, and improved ease of doing business will be crucial for maximising the benefits of FDI.

FDI inflows in India vary significantly across states, with

regions such as Maharashtra, Karnataka, Gujarat, Tamil Nadu, and Delhi consistently attracting substantial foreign investment due to their favourable infrastructure, skilled workforce, and business-friendly policies. With Mumbai as its economic hub, Maharashtra remains the top recipient of FDI, while Karnataka, particularly Bengaluru, is a key destination for technology and startups. Gujarat's focus on manufacturing and renewable energy, and Tamil Nadu's strength in the automobile and electronics sectors further enhance their FDI appeal—Delhi-NCR benefits from strong connectivity, a growing service sector, and a vibrant real estate market.

Telangana, ranked 7th in FDI inflows, has gained prominence due to its proactive policies, such as TS-iPASS, as well as investments in IT, pharmaceuticals, and aerospace. Hyderabad, a key FDI hub, is home to global giants such as Google, Amazon, and Microsoft. Other emerging states like Uttar Pradesh, Rajasthan, and West Bengal are actively improving their investment climate by implementing policy reforms and infrastructure development to attract more FDI. Government efforts such as Ease of Doing Business rankings, industrial corridors, and continued policy support enhance India's appeal as a global FDI destination, fostering balanced economic growth.

## 2. Review of Literature

Foreign Direct Investment (FDI) has been extensively studied for its impact on economic growth, job creation, technology transfer, and industrial development. Research highlights how FDI contributes to capital formation, enhances productivity, and strengthens key manufacturing, IT, and finance sectors. Several studies examine the role of government policies, such as FDI liberalization and initiatives like Make in India, in attracting foreign direct investment. While many scholars emphasize the benefits of FDI, others highlight challenges such as profit repatriation, regulatory barriers, and dependency on foreign capital. This review synthesises key findings from past research to assess trends, challenges, and policy implications of FDI in India. Several studies have explored the impact of Foreign Direct Investment (FDI) on economic growth across various countries, including India. Eatzaz Ahmad and Anis Hamdani (2003) [2] found that domestic private investment made a more reliable contribution to growth than FDI, with profit repatriation being a challenge. Andreas (2006) [4] suggested that FDI has a positive impact on growth in developing countries through technology spillovers and capital influx. Research by Gaurav Agrawal *et al.* (2011) [5] indicated that FDI contributed more to China's GDP growth than India's. Roli Raghuvanshi (2015) [6] and S. Harish Babu (2012) [7] highlighted the role of FDI in enhancing India's industrial sector and integrating with global production chains. Meanwhile, studies by Eldin Mehic *et al.* (2013) [1] and Mohammad Iftekhar Khan and Amit Banerji (2014) [3] emphasized the positive impact of FDI on economic growth and industrial production, highlighting the need for policy reforms to maximize its potential.

## 3. Objectives of the study

1. To examine the impact of FDI inflows on Industrial growth in India.

2. To analyse the trends of FDI inflows in Telangana State.

## 4. The hypothesis of the study

- H<sub>0</sub>:** There is no significant impact of FDI inflows on Industrial growth in India
- H<sub>1</sub>:** FDI inflows have a substantial effect on industrial growth in India.

## 5. Materials and Methods

The research data for the present study were collected from the official websites of the RBI, DPIIT, and CMIE Prowess database. The data set consists of FDI inflow in India and the Index of Industrial Production (IIP), a proxy variable for industrial growth. The data were collected year-wise, spanning the periods 2014-15 and 2023-2024.

**5.1 Statistical Tools Used:** A simple regression analysis is employed to gain a deeper understanding of the relationship between independent and dependent variables. IIP is the dependent variable in simple regression, and the model specification is given below.

$$IIP = \beta_0 + \beta_1 FDI + \epsilon$$

Where FDI inflows in India are the Independent Variable, and IIP is the dependent variable.

## 6. Results and Discussion

**Table 1:** Representing FDI inflows and IIP index values during 2014-15 to 2023-24

Year	FDI inflows (in rupee crores)	IIP
2014-15	1,81,682	111.0
2015-16	2,62,322	114.7
2016-17	2,91,696	120.0
2017-18	2,88,889	125.3
2018-19	3,09,867	130.1
2019-20	3,53,557	129.0
2020-21	4,42,569	118.1
2021-22	4,37,188	131.6
2022-23	3,67,435	138.5
2023-24	3,67,899	146.7

**Source:** Compiled by author from DPIIT and RBI statistics

Table 1 data shows a general upward trend in Foreign Direct Investment (FDI) inflows and the Index of Industrial Production (IIP) in India from 2014-15 to 2023-24, indicating the positive impact of foreign investments on industrial growth. FDI inflows increased significantly from ₹1,81,682 crore in 2014-15 to a peak of ₹4,42,569 crore in 2020-21 before slightly declining in the following years. Similarly, the IIP rose from 111.0 to 146.7 over the period, reflecting industrial expansion. However, a decline in IIP in 2019-20 and a sharp drop in 2020-21, despite the highest FDI inflow, suggests the adverse impact of the COVID-19 pandemic on industrial output. The post-pandemic recovery is evident as IIP rebounded in subsequent years. The overall trend reveals a positive correlation between FDI and industrial growth; however, external factors, including economic disruptions, policy changes, and global uncertainties, also play a significant role in this relationship.

Sustained policy support, ease of doing business reforms, and infrastructure development will be essential to maintaining FDI inflows and driving industrial expansion.

**Table 2:** Regression results of FDI and IIP in India

Dependent Variable	Independent Variable	Regression Co-efficient	T-Statistic	Probability Value
IIP	FDI	0.245	2.59	0.032
	Constant	1.722	1.43	0.19
R-Square	0.4561			

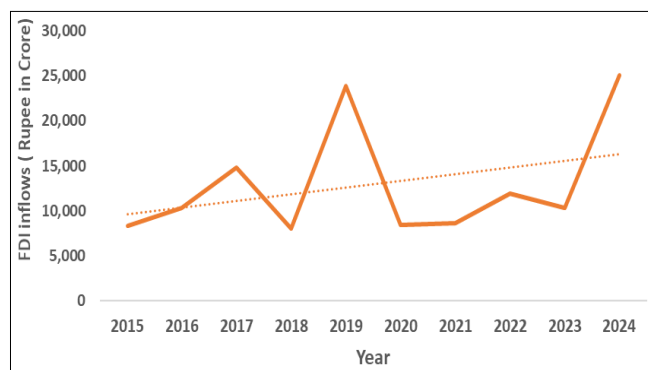
Source: Compiled by the author

The regression analysis indicates a positive relationship between Foreign Direct Investment (FDI) and the Index of Industrial Production (IIP), with a regression coefficient of 0.245, meaning a 24.5% increase in IIP for every unit increase in FDI. The T-statistic of 2.59 and p-value of 0.032 confirm statistical significance at the 5% level, suggesting a substantial impact of FDI on industrial growth. However, the constant term is not statistically significant, implying that other factors contribute to IIP. The R-squared value of 0.4561 shows that 45.61% of the variation in IIP is explained by FDI, indicating a moderate model fit, with other variables also influencing industrial production.

**Table 3:** FDI inflows in Telangana state during 2014-15 to 2023-24

Year	FDI inflows in Telangana state (Rupees Crores)
2014-2015	8,326
2015-2016	10,315
2016-2017	14,767
2017-2018	8,037
2018-2019	23,882
2019-2020	8447
2020-2021	8,618
2021-2022	11,964
2022-2023	10,319
2023-2024	25,094

Source: Compiled by author from DPIIT and RBI statistics



Source: Compiled by the author

**Graph 1:** Trends of FDI inflows in Telangana State

Foreign Direct Investment (FDI) inflows into Telangana have fluctuated over the past decade. Following a period of growth from 2014-15 to 2016-17, culminating in ₹14,767 crore, the state experienced a significant dip in 2017-18 before rebounding strongly in 2018-19 to ₹23,882 crore. While inflows have generally remained above ₹8,000 crore in subsequent years, they haven't followed a consistent

upward trajectory. Notably, the 2023-24 fiscal year saw a substantial surge to ₹25,094 crore, indicating a renewed interest from investors.

**7. Conclusion**

In conclusion, this study has examined the crucial role of Foreign Direct Investment (FDI) in India's industrial growth. Using a simple linear regression model, the analysis revealed a statistically significant positive correlation between FDI inflows and the Index of Industrial Production (IIP), supporting the hypothesis that FDI has a significant impact on industrial growth. While the model explains a moderate portion of the variation in IIP, it is essential to acknowledge that other influential factors are at play, highlighting the complex nature of industrial development. Furthermore, the study of FDI inflows into Telangana reveals a volatile trend, indicating that various economic and policy-related factors influence FDI. This underscores the need for continuous policy adjustments and improvements to ease the business process to attract and retain foreign investment. Future research could delve deeper into the specific sectors attracting FDI, the sources of these investments, and the interplay of other macroeconomic factors to provide a more comprehensive understanding of FDI's contribution to India's industrial landscape and individual states like Telangana. Ultimately, while FDI is a vital catalyst for industrial growth, a holistic approach considering various economic drivers is essential for sustainable and inclusive development.

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