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THE IMPACT OF FOREIGN DIRECT INVESTMENT (FDI) ON INDIA'S GDP GROWTH: AN ANALYSIS OF SECTORAL SHIFTS AND ABSORPTIVE CAPACITY (2000-2025)

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ABSTRACT

The analysis in this study looks at the factors that influence FDI inflows to India, the movement of FDI within the sectors, and the absorption of FDI in different regions of the country during a 25-year period. The research aims to answer three related hypotheses related to the macroeconomic determinants of FDI inflows, relative contribution of the services and manufacturing sectors, and the moderating effect of Absorptive Capacity on FDI-led growth at the state-level. The findings validate the previous studies and research which hold that the main national drivers of FDI are trade openness and macroeconomic stability and confirm that the services sector accounts for the largest proportion of the total FDI inflows, but that the manufacturing sector has seen an increased relative indexed growth rate. In addition, the results suggest that state level of infrastructure and human capital are independent drivers of economic performance.

KEYWORDS: *Foreign Direct Investment (FDI), GDP Growth, Sectoral Analysis, Indian Economy, Capital Inflows.*

INTRODUCTION

Foreign Direct Investment (FDI) has become a key element of global economic integration, serving as a catalyst for the transfer of capital, technology, management capabilities and specialized skills across national boundaries. FDI plays a very important role for developing countries such as India, not only as a source of non-debt finance, but also as a major source of industrial modernization and infrastructural development. India has gradually opened up its investment environment from a closed economy to one of the most favourable investment climates in the world since the economic liberalization process started in the early 1990's.

FDI and Gross Domestic Product (GDP) are both mutually dependent. Foreign Direct Investment (FDI) offers the capital required to increase production and employment; and a consistently rising GDP indicates that foreign investors have a healthy and less risky investment environment. The government's desire to attract foreign investment to make India a global manufacturing hub was further reinforced with schemes like " Make in India" and " Production Linked Incentive (PLI)" in recent years. But these inflows can be concentrated in different industries, such as services, telecommunication and manufacturing.

This project aims at understanding this effect in the modern times. Although India has seen unprecedented levels of FDI inflows in the past decade, it is important to explore if this is the capital that is helping to drive the nation's real growth or if it's going into concentrated pockets of high-yield sectors. This research is focused on the period 2000 to 2025, and seeks to give a holistic view of the extent to which foreign investment is congruent with India's vision for the period to become a "Viksit Bharat" (Developed India) by 2047".

REVIEW OF LITERATURE

Foreign Direct Investment (FDI) has since become an integral part of the Indian economy's transformation since the liberalization reforms of 1991, and is crucial to the building of capital, the transfer of technology, job and employment creation and the overall GDP growth in the emerging market environment. With cumulative FDI inflows surpassing US $1.09 trillion from April 2000 to June 2025, India has positioned itself as a leading destination in South Asia, through challenges like repatriations, regional disparities, and net inflow volatility persists amid global uncertainties. The aim of this literature review is to combine the results of 20 studies that have been published between 2003 and 2025, considering the trends, sectoral effects, causality relationships with GDP and exports, moderating factors and policy implications. The review underlines the widespread agreement that FDI has had positive effects on economic development and that there are mixed causality links, differences across sectors and a need for ongoing reform to achieve the maximum benefits from FDI.

Early micro-level approach to foreign investment was given by **Bhaumik et al. (2003)**. With the support of the UK Department for International Development, the study drew on questionnaire responses to conclude that entry methods for foreign companies were significantly dependent on local institutional structures and on the policy climate. Their findings indicated that in the early reform years, institutional issues in India were very big relative to other emerging markets, such as South Africa and Vietnam.

Hooda (2011) has provided one of the earliest detailed analysis of inflows of FDI after liberalization. Using secondary sources from RBI and government, she traced changes in policies and their impact on capital formation, employment and technology transfer. It highlighted that FDI had started to plug domestic savings-investment gap and had exhibited positive indications in manufacturing and services, and paved the way for further empirical studies.

Using a VAR framework, **Sarode (2012)** analysed annual data from 1997 to 2011 using the Granger causality tests and impulse response functions. He estimated the current account (CA) and capital & financial account (KA) account balances as functions of FDI and GDP. The result of the regression analysis indicated that the coefficient of FDI in the CA equation was negative while the coefficient for FDI in the KA equation was positive. Sarode argued that during the period, FDI inflows had improved India's capital account position, but also put pressure on the current account. Simultaneously, **Ray (2012)** used data from 1990-91 to 2010-11. The results revealed a positive "relationship between FDI and GDP with uni-directional causality FDI to GDP". Ray believed that India should concentrate on improving infrastructure and human resources for the FDI to really take off and aid the country's growth. Moreover, **Goel et al. (2012)** noted that the amount of FDI inflows grew significantly from US$ 129 million in 1991-92 to more than US$ 100 billion in 2010. They observed a trend from the traditional industries such as food processing to the new industries such as electronics and software, and said that FDI flows and economic growth are directly proportional.

Teli (2014) analysed the inflows of FDI during the period 1991 to 2012 and found that FDI increased considerably; specifically, Mauritius and Singapore were the two major sources of FDI. He said that these inflows had a positive impact on jobs and exports. **Ibrahim and Muthusamy (2014)** traced the history of FDI back to the era of the East India Company and came to the conclusion that FDI had a positive impact on the economy after the reforms. Similarly, **Kumar (2014)** analysed data from 2000 to 2014, showing that inflows rose to US$ 36,396 million in 2013. He was able to compute simple correlations that revealed positive correlation among FDI, FII and GDP.

Vyas (2015) has investigated and analyzed the trend of FDI in the period 2000 to 2015, Mauritius being the leading investor because of the Double Taxation Avoidance Agreement. He pointed out that FDI played a role in filling the savings-investment gap, but added that some industries such as mining continued to be closed. **Bhasin and Gupta (2017)** used data from 1980 to 2012. They detected strong long run cointegration when GDP is dependent variable while export is taken as exogenous variable, however, in the long run FDI had a negative effect on exports.

Sengupta, Puri (2018) have compared FDI-GDP linkages between India and its neighbouring countries and found there is a definite linkage between FDI inflows and GDP growth in India. **Talwar and Srivastava (2018)** conducted a study on six countries in various stages of development also in the same year. From the India perspective, they reached long-run equilibrium between FDI and GDP growth rate and concluded that India can use FDI to boost the long-term growth of the economy; however, the relationship between the development stage and the integration of FDI-GDP is complicated.

Kumari et al. (2021) employed Johansen cointegration analysis and VAR techniques, using data (1985-2018). They found that there was bi-directional causality between FDI and GDP- that is, FDI leads to growth and growth leads to FDI. **Lingaiah (2021)** adopted a country-wise perspective and observed that the countries with "high and statistically significant" effect on GDP for India were Mauritius, Singapore, USA and UK.

In 2024, the research focused on institutional and sectoral aspects. **Pentkar (2024)** focused his analysis on the service sector, and concluded that service FDI can enhance domestic production but does not necessarily increase exportables. **Bobek et al. (2024)** demonstrated that the link between FDI and GDP is moderated by governance quality and the rule of law, with a stronger positive impact of FDI on GDP where governance is good.

The review is completed in 2025 by four major studies. For the data up to 2023-24, **Barot (2025)** revealed that there is a significant positive correlation between FDI and GDP, but the effect of FDI on stability is not statistically significant over the long term without a change in infrastructure. **Gobbilla and Mallikharjun (2025)** found that the value of FDI is not in rapid changes of the macroeconomic factors but in sectoral development in the period 2017-2024. **Singh and Roy (2025)** pointed out the role played by FDI in the growth of startup ecosystem after the launch of Startup India in the quarterly data till 2023. Finally, **Singh (2025)**, Singh concluded that there exists strong long-run interdependence between FDI, exports and GDP, urging for the continuous policy support to sustain this virtuous circle. The literature created from the synthesizing process has shown an almost unanimous academic view that Foreign Direct Investment has been a significant enabler for the economic modernization of India, especially in the post-1991 period. The development of the research and studies shows clearly the evolution from the early descriptive studies to more advanced econometric analyses that provide empirical evidence supporting the long-run interdependence between FDI, GDP growth and sectoral development. Despite the widespread view of a "virtuous cycle" between inflows and economic output, the current evidence shows that this effect is dampened by institutions and the digital and startup ecosystem. Overall, it has been emphasized in the literature that, while FDI is crucial for capital and technology, it can contribute to the development of the economy only if accompanied by the right domestic policies and structural changes.

OBJECTIVES OF THE STUDY

The key objective of the present research is the critical analysis of the contribution made by Foreign Direct Investment (FDI) in India's growth dynamics. The following specific objectives would be used in order to conduct an exhaustive analysis of the issue under discussion:

1. To identify the effect of total FDI flows on the level of GDP in India taking into consideration the role played by macroeconomic variables including inflation and trade openness;
2. To examine the differential impact of foreign direct investment by comparing the contribution made by service and manufacturing sectors to India's economic growth;
3. To analyze the absorptive capacity of ten major states of India selected according to the volume of received FDI flows during the period of analysis.

MATERIALS AND METHODS

For the purposes of this study, a systematic search was undertaken in official government sources and in international economic portals, compiling specific, year-by-year figures both nationally and by state. The main source has been **Reserve Bank of India (RBI)** website, from which the Gross State Domestic Product (GSDP) of selected states was taken from Handbook of Statistics on Indian States from the database on Indian economy (DBIE). The **Department for Promotion of Industry and Internal Trade (DPIIT)** archives have been examined in detail to obtain FDI factsheets for quarters and years containing sector-wise breakup (Services vs. Manufacturing) of the amount of equity funds that were received into various RBI offices. Finally, to account for macroeconomic variables like inflation rates and trade openness, percentage growth rates and trade ratios were collected from the Open Data section of **The World Bank** and the Indian Economic Surveys.

This study is designed to analyze the link between Foreign Direct Investment (FDI) and the economic path of India from three different perspectives.

1) Multivariate Analysis of the Factors Influencing Foreign Direct Investment in India:

This part uses a multivariate analysis to assess the combined effect of important macroeconomic factors on the total foreign investment in India.

- **Null Hypothesis (H_{01}):** GDP Growth Rate, Inflation Rate, and Trade Openness of India do not significantly affect the total amount of Foreign Direct Investment (FDI).
- **Alternative Hypothesis (H_{a1}):** GDP Growth Rate, Inflation Rate, and Trade Openness of India significantly affect the total amount of Foreign Direct Investment (FDI).

  $FDI = \beta_0 + \beta_1(GDP) + \beta_2(INF) + \beta_3(OPEN) + €$

Where,

- **FDI (Dependent Variable):** This is the "Effect." To investigate how the total flow of foreign money changes based on the other factors.
- **β_0 (Constant/Intercept):** This represents the predicted level of FDI if all other factors (GDP, Inflation, Openness) were zero.
- **GDP, INF, OPEN:** Independent variables.
- **€ (Error Term):** Represents all other factors in the world that might affect FDI but are not included in this specific model (like political stability or global oil prices).

Rationale for the Model

The choice of the multivariate regression model is due to the fact that FDI does not take place independently but depends on the complex interaction of internal and external economic factors. Using this formula, the analysis will be able to go beyond correlation and measure the impact of each factor separately. The mathematics behind it enables the study to calculate the influence of both GDP and Inflation, taking into account the "openness" of the Indian economy.

2) Sector-Specific Impact: The "Sectoral Shift" Analysis

This particular section of the study will assess the comparative significance of the two sectors, Services and Manufacturing, in India's economic output. Instead of applying a statistical test for probability, the trend and pattern in FDI flow will be traced to establish if there is a "Sectoral Shift" in the Indian economy.

Analytical Framework:

Sectoral Share (%) = (FDI_Sector / FDI_Total) × 100

Indexed Growth = (FDI_Year / FDI_Base Year) × 100

Where,

- **FDI_Sector:** Annual FDI inflow into the Services or Manufacturing sector respectively (USD Million), sourced from DPIIT FDI Factsheets.
- **FDI_Total:** Combined annual FDI inflow across both sectors.
- **FDI_Year:** The total FDI inflow recorded for a specific sector in the current year being analyzed.
- **FDI_Base Year:** The FDI inflow recorded in the starting period of this study (2000-01), serving as the benchmark (100) to track long-term growth trajectories.

3) The State-Level Moderation of Absorptive Capacity

In this part, a moderated hierarchical regression analysis will be performed to ascertain whether absorptive capacity at the state level influences "the association between foreign investments and regional economic development".

- **Null Hypothesis (H03):** Foreign Direct Investment (FDI) influence on State-level Gross Domestic Product (GSDP) is not affected by the state's absorptive capacity in terms of Infrastructure and Human Capital.
- **Alternative Hypothesis (Ha3):** Positive effects of FDI on the economy are considerably greater in states with high absorptive capacity in terms of infrastructure and human capital than in those with low absorptive capacity.

$$Y = \beta_0 + \beta_1(X) + \beta_2(M) + \beta_3(X \times M) + €$$

Where:

- **Y (Dependent Variable):** State-level Economic Growth (GSDP Growth %).
- **X (Independent Variable):** FDI Inflow (USD Million) for the state.

- **M (The Moderator):** Absorptive Capacity Score (Infrastructure/Human Capital Index).
- **X × M (The Interaction Term):** The product of FDI and Absorptive Capacity.
- **β_1:** The direct effect of FDI on growth.
- **β_2:** The direct effect of State Capacity on growth.
- **β_3:** The **Moderation Effect**. It tells how much the impact of FDI changes as the state's capacity increases.
- **€:** The error term.

Rationale for the Model

The "Interaction Term" (X × M) is the mathematical heart of this study since it provides an opportunity to rigorously test the validity of the "Absorptive Capacity" hypothesis. Although β_1 indicates the basic effect of capital, it is precisely this mathematical construct that will determine whether there is a "multiplier" role of a country's current level of development (infrastructure, literacy of the labor force) in attracting foreign investments. Through such mathematical modeling, it will be possible to understand the reasons for the differential effects of equal amounts of FDI.

Tools used for analysis

The data analysis is executed in two stages, focusing on organization and subsequent statistical testing:

1. Data Processing and Visualization (Microsoft Excel)

The Excel sheet will be used to organize the data received from the RBI and DPIIT for 25 years. The process includes:

- **Organizing Data:** Organizing year-wise and state-wise flow of investments for obtaining a consistent timeline between 2000 and 2025.
- **Metrics:** Computation of average and growth rate of FDI and GDP.
- **Mapping Trends:** Construction of graphs to depict changes in investments across various sectors and regions.

2. Statistical Analysis (SPSS)

- **Correlation:** To determine the direction and strength of the link between FDI and economic growth.
- **Multiple Regression:** To quantify the impact of foreign investment on GDP while accounting for variables like **Inflation** and **Trade Openness**.

- **Moderation Analysis:** To test "Absorptive Capacity" by examining if a state's infrastructure level influences the effectiveness of foreign capital in driving growth.

RESULTS & DISCUSSION

The results of the study, from a statistical perspective, in the context of the three major research objectives of this study are presented in this chapter. The analysis is organized in a way to cover the multi-faceted nature of Foreign Direct Investment (FDI) in India, starting from the macro-economic level of the country to the micro-economic level of the states. The first stage of analysis employs a multivariate regression model to detect the crucial factors affecting the inflows of FDI, that is, the joint effects of the growth of GDP, inflation and the level of trade openness. Then there was a sectoral evaluation of the "Sectoral Shift" (also referred to as "transitions" or "sectoral shifts") between the Manufacturing and Service sectors to determine which economic environment would permit greater growth efficiency. Finally, the paper analyses the "Absorptive Capacity" of the top ten states which receive FDI in India using a moderated regression framework. The research uses state-wise information for states like Maharashtra, Gujarat and Karnataka to examine if internal infrastructure and human capital functions as a critical catalyst for maximising benefits of foreign capital. The next sections provide a thorough analysis of the research data, using multivariate statistical testing for the objectives at the national and state levels, and a detailed comparative trend analysis for the sectors' distributions, to give a solid, data-based basis for the conclusions that follow.

I: Analysis of FDI Determinants in India

TABLE 1: Multivariate Analysis of FDI Determinants in India (2000-01 to 2024-25)

Regression Model: $FDI = \beta_0 + \beta_1(GDP\_Growth) + \beta_2(Inflation) + \beta_3(Trade\_Openness) + \varepsilon$

Financial Year	FDI Inflows (USD Million) [Dependent Variable]	GDP Growth Rate (%) [Independent Variable - β_1]	Inflation Rate (CPI, %) [Independent Variable - β_2]	Trade Openness (Exports+Imports as % of GDP) [Independent Variable - β_3]
2000-01	4029	4	4	26.8
2001-02	6130	5.5	3.8	27.5
2002-03	5035	3.9	4.4	29
2003-04	4322	8	3.8	31
2004-05	6051	7.1	3.8	36.4
2005-06	11362	9.5	4.4	40
2006-07	22826	9.6	6.4	43.5
2007-08	34843	9.3	6.4	46.7

2008-09	41873	6.7	9.1	52.8
2009-10	37745	8.6	12.4	46.5
2010-11	34847	8.9	10.5	48.4
2011-12	46556	6.7	8.9	55.8
2012-13	34298	5.5	9.9	54
2013-14	36046	6.4	9.5	53
2014-15	44208	7.4	5.8	48.9
2015-16	55559	8.2	4.9	42.8
2016-17	60222	8.3	4.5	40.2
2017-18	61960	6.8	3.6	40.8
2018-19	64375	6.5	3.4	43.5
2019-20	73156	4	4.8	39.8
2020-21	81973	-6.6	6.2	36
2021-22	83571	8.7	5.5	43.8
2022-23	71001	7.2	6.7	51.2
2023-24	70955	8.2	5.4	48.5
2024-25	76002	6.8	4.8	46
Sources: FDI — DPIIT FDI Factsheets (dpiit.gov.in) | GDP Growth — MOSPI / RBI Database on Indian Economy (rbi.org.in) | Inflation — Reserve Bank of India / World Bank WDI | Trade Openness — World Bank Open Data / Economic Survey of India				

1.1 Descriptive Statistics

Table 1.1 presents the descriptive statistics for all variables included in the regression model. The mean FDI Inflow over the study period was 42,757.80 (SD = 26,525.863), reflecting considerable variability across observations. GDP Growth Rate averaged 6.608% (SD = 3.210), Inflation Rate averaged 6.116% (SD = 2.503), and Trade Openness averaged 42.916% (SD = 8.280). All statistics are based on 25 complete observations obtained through listwise deletion.

Table 1.1: Descriptive Statistics.

Variable	Mean	Std. Deviation	N
FDI Inflows	42,757.80	26,525.863	25
GDP Growth Rate	6.608	3.2096	25
Inflation Rate	6.116	2.5029	25
Trade Openness	42.916	8.2801	25

1.2. Correlation Analysis

In Table 1.2, the Pearson correlation matrix for the dependent and independent variables can be observed. Trade Openness correlated most positively with FDI Inflows ($r = .450$, $p < .05$), indicating that an increase in trade openness was related to higher FDI inflows; however, GDP Growth Rate had a small negative correlation (r = -.200) with FDI Inflows, whereas the Inflation Rate had a very small positive correlation (r = .049). The independent variables showed moderate correlations amongst themselves, especially between the Inflation Rate and Trade Openness (r = .677).

Table 1.2: Pearson Correlation Matrix.

Variable	FDI Inflows	GDP Growth Rate	Inflation Rate	Trade Openness
FDI Inflows	**1.000**	-.200	.049	.450
GDP Growth Rate	-.200	**1.000**	.094	.318
Inflation Rate	.049	.094	**1.000**	.677
Trade Openness	.450	.318	.677	**1.000**

1.3. Model Summary

The multiple linear regression model (Table 1.3) with Trade Openness, GDP Growth Rate, and Inflation Rate as predictors explained a considerable amount of variance in FDI Inflows. The multiple correlation was R = .713. The coefficient of determination R^2 = .508 shows that about 50.8% of the variation in FDI Inflows is explained by the three predictors. However, when we adjust R^2 to consider the number of predictors and sample size, we obtain Adjusted R^2 = .438. The stability of the Adjusted R^2 (.438) means that our model maintains its ability to explain a considerable amount of variance even after the number of independent variables has been adjusted according to the sample size. Unlike R^2, Adjusted R^2 provides a better estimate of how well the model explains the data since Adjusted R^2 cannot be increased artificially by increasing the number of predictors in the model. Therefore, Adjusted R^2 shows that the variables we chose to include in the model are effective and useful predictors of FDI Inflows.

Table 1.3: Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.713	.508	.438	19,888.311

1.4. ANOVA

Analysis of Variance was performed on Table 1.4 to determine whether the regression model is statistically significant. It was found to be significant since $F(3, 21) = 7.231$, $p = .002$ meaning that the predictors [i.e., Trade Openness, GDP Growth Rate, and Inflation Rate] together account for a significant amount of the variation in FDI Inflows. The regression sum of squares was 8,580,470,122 with 3 degrees of freedom, whereas the residual sum of squares was 8,306,443,586 with 21 degrees of freedom.

Table 1.4: ANOVA.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	8,580,470,122	3	2,860,156,707	7.231	.002
Residual	8,306,443,586	21	395,544,932.7		
Total	16,886,913,708	24			

1.5. Regression Coefficients

Table 1.5 shows the values for the unstandardized (B) and standardized (β) coefficients, as well as the level of statistical significance of those variables. The constant was statistically insignificant ($B = -30,462.330$, $p = .185$). The GDP Growth Rate coefficient was statistically significant in the negative direction ($B = -3,800.974$, $\beta = -.460$, $t = -2.805$, $p = .011$), which implies that high growth rates were linked to low levels of FDI. The Inflation Rate coefficient also had a negative influence on the dependent variable ($B = -6,104.225$, $\beta = -.576$, $t = -2.727$, $p = .013$), pointing at the fact that macroeconomic instability discourages foreign investments. Trade Openness turned out to be a strong and highly significant predictor ($B = 3,161.301$, $\beta = .987$, $t = 4.449$, $p < .001$).

Table 1.5: Regression Coefficients.

Variable	B	Std. Error	Beta (β)	t	Sig.
(Constant)	-30,462.330	22,218.055	—	-1.371	.185
GDP Growth Rate	-3,800.974	1,355.120	-.460	-2.805	**.011***
Inflation Rate	-6,104.225	2,238.197	-.576	-2.727	**.013***
Trade Openness	3,161.301	710.580	.987	4.449	**.000*****

1.6. Collinearity Diagnostics

To ensure the reliability of the regression estimates, collinearity diagnostics were examined (Table 1.6). All Tolerance values exceeded the commonly used threshold of .10, and all Variance Inflation Factor (VIF) values remained well below the threshold of 10, indicating that multicollinearity was not a concern in the present model. GDP Growth Rate had the lowest collinearity concern (Tolerance = .871, VIF = 1.148). While Inflation Rate (VIF =

1.904) and Trade Openness (VIF = 2.100) showed slightly higher VIF values, these remain within acceptable limits and do not threaten the stability of the regression estimates.

Table 1.6: Collinearity Statistics.

Variable	Tolerance	VIF
GDP Growth Rate	.871	1.148
Inflation Rate	.525	1.904
Trade Openness	.476	2.100

Summary and Interpretation

It can be seen from the results of the multiple linear regression analysis that there is support for Hypothesis 1 on the determinants of FDI Inflows. The overall model was statistically significant ($F(3, 21) = 7.231$, $p = .002$) and explained 50.8% of the variance in FDI Inflows ($R^2 = .508$; Adjusted $R^2 = .438$). Among the three predictors, Trade Openness emerged as the most influential determinant ($\beta = .987$, $p < .001$), followed by Inflation Rate ($\beta = -.576$, $p = .013$) and GDP Growth Rate ($\beta = -.460$, $p = .011$). The results indicate that more open trading policies have a positive impact on FDI, but also that macroeconomic instability (measured by inflation) and high growth rates of GDP can have a negative effect on foreign capital inflows, possibly due to the fact that a high growth rate of GDP provides ample investment possibilities at home. There was no indication of multicollinearity problems. The findings have policy implications for attracting sustainable FDI via trade liberalisation and macroeconomic stability. For Hypothesis 1, therefore **the Null Hypothesis (H_{01}) is rejected**: $p = 0.002$ which is far less than the significance level of 0.05; thus GDP growth, inflation, and openness of trade **do** collectively have a significant impact on FDI inflows.

II: Sectoral Shift Analysis

Data Table: Sector-Specific FDI and GDP Growth (2000-01 to 2024-25)

Table 2 provides the entire annual dataset for this analysis, including GDP Growth Rate, Foreign Direct Investment inflow in both sectors, total Foreign Direct Investment, and percentage contribution by each sector. Rows are colored according to five-year phases for better visual interpretation.

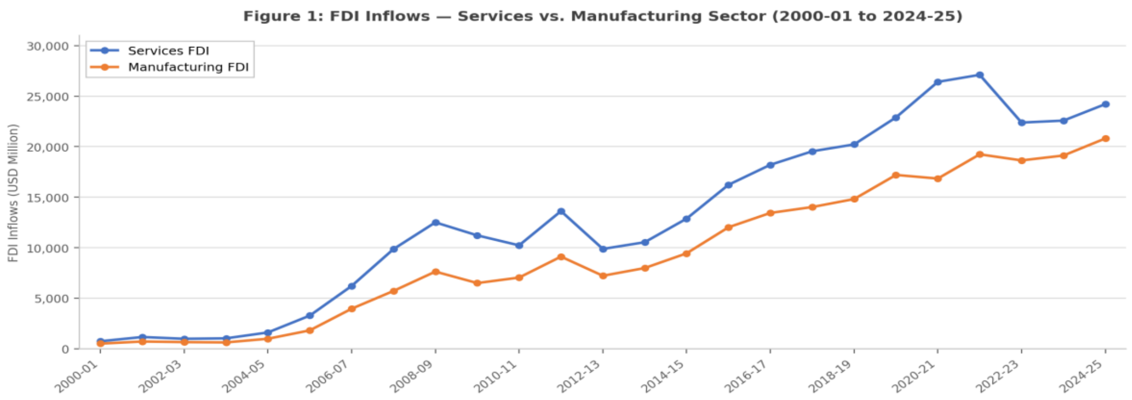
Table 2: Year-Wise Sectoral FDI Data — Services vs. Manufacturing.(2000-01 to 2024-25)

Financial Year	GDP Growth (%)	Services FDI (USD Mn)	Manufacturing FDI (USD Mn)	Total FDI (USD Mn)	Services %	Manufacturing %
2000-01	4.0	738	501	1,239	59.5%	40.5%
2001-02	5.5	1,159	712	1,871	61.9%	38.1%
2002-03	3.9	983	654	1,637	60.1%	39.9%
2003-04	8.0	1,027	622	1,649	62.3%	37.7%
2004-05	7.1	1,608	987	2,595	61.9%	38.1%
2005-06	9.5	3,275	1,814	5,089	64.3%	35.7%
2006-07	9.6	6,211	3,958	10,169	61.1%	38.9%
2007-08	9.3	9,861	5,718	15,579	63.3%	36.7%
2008-09	6.7	12,505	7,632	20,137	62.1%	37.9%
2009-10	8.6	11,219	6,498	17,717	63.3%	36.7%
2010-11	8.9	10,231	7,042	17,273	59.2%	40.8%
2011-12	6.7	13,621	9,115	22,736	59.9%	40.1%
2012-13	5.5	9,877	7,220	17,097	57.8%	42.2%
2013-14	6.4	10,541	7,985	18,526	56.9%	43.1%
2014-15	7.4	12,875	9,441	22,316	57.7%	42.3%
2015-16	8.2	16,225	12,019	28,244	57.4%	42.6%
2016-17	8.3	18,205	13,441	31,646	57.5%	42.5%
2017-18	6.8	19,543	14,025	33,568	58.2%	41.8%
2018-19	6.5	20,221	14,812	35,033	57.7%	42.3%
2019-20	4.0	22,893	17,201	40,094	57.1%	42.9%
2020-21	-6.6	26,415	16,842	43,257	61.1%	38.9%
2021-22	8.7	27,112	19,241	46,353	58.5%	41.5%
2022-23	7.2	22,384	18,641	41,025	54.6%	45.4%
2023-24	8.2	22,578	19,124	41,702	54.1%	45.9%
2024-25	6.8	24,210	20,812	45,022	53.8%	46.2%
AVERAGE	**6.2%**	**13,013**	**9,441**	**22,454**	**~59.5%**	**~40.5%**

Note. FDI in USD Million. Colour bands: Blue = Phase 1 (2000-04) | Green = Phase 2 (2005-09) | Gold = Phase 3 (2010-14) | Orange = Phase 4 (2015-19, Make in India) | Green = Phase 5 (2020-24). Sources: DPIIT; MOSPI; RBI.

2.1 FDI Trend Analysis: Services vs. Manufacturing

Figure 1 illustrates the flow of FDI inflows year-wise in both sectors. There are three main conclusions that can be drawn from the above graph: (i) the FDI inflow into services sector exceeds that of the manufacturing sector in all years; (ii) peak in both sectors occurred simultaneously in 2021-22; and (iii) the difference between the two curves has been gradually narrowing since 2015-16, clearly highlighting the ongoing Sectoral Shift phenomenon.



Note. Blue line = Services FDI; Orange line = Manufacturing FDI. Coloured bands indicate five-year phases. Source: DPIIT FDI Factsheets.

The sustained dominance of the service sector in attracting Foreign Direct Investment is primarily due to its alignment with India's comparative advantages in high-skill, knowledge-based industries. Unlike the manufacturing sector, which often requires extensive land acquisition, complex environmental clearances, and long-gestation periods for physical infrastructure, the service sector—particularly IT, financial services, and telecommunications—offers greater scalability and lower entry barriers. Furthermore, the global shift toward digitalization has positioned India as a premier offshore hub for business process management and software development, allowing foreign capital to be absorbed rapidly into existing urban service clusters. This sector's ability to provide immediate returns on investment, coupled with a vast pool of English-speaking professionals, makes it the preferred destination for global investors seeking efficiency and digital integration over traditional industrial assets.

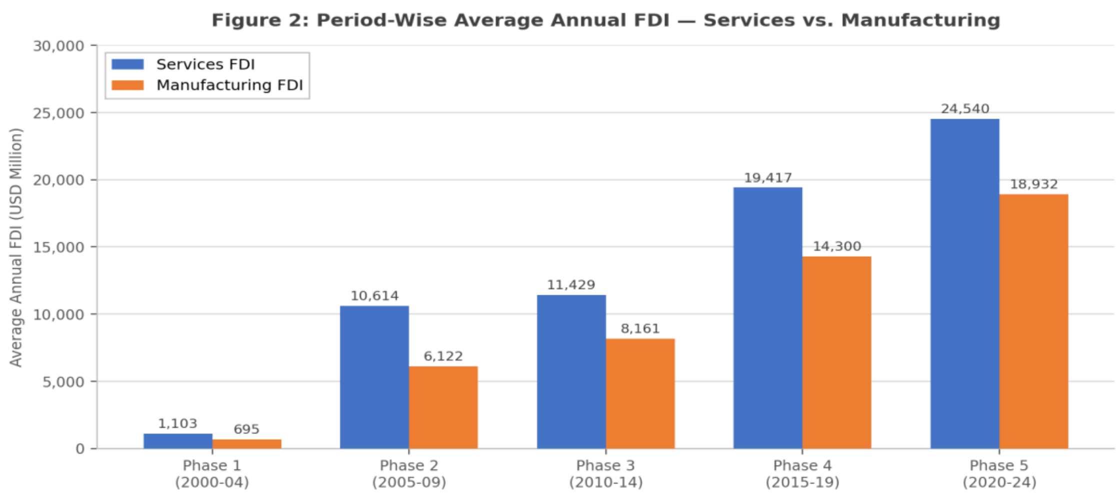
2.2 Period-Wise Comparative Analysis

Table 2.1 groups the 25-year dataset into five five-year phases. The data clearly shows that while Services FDI leads in all phases, Manufacturing has closed the gap significantly — from a ratio of 1:1.6 in Phase 1 to nearly 1:1.3 by Phase 5. Figure 2 makes this visual convergence unmistakable.

Table 2.1: Period-Wise Summary — Average Annual FDI by Sector and Phase.

Phase / Period	Avg GDP (%)	Avg Services FDI (USD Mn)	Avg Mfg FDI (USD Mn)	Total Phase FDI (USD Mn)	Services Share
Phase 1: 2000-01 to 2004-05	5.7	1,103	695	8,990	61.3%
Phase 2: 2005-06 to 2009-10	8.1	10,614	6,122	69,691	62.4%
Phase 3: 2010-11 to 2014-15	6.5	11,429	8,161	97,948	58.3%
Phase 4: 2015-16 to 2019-20 (Make in India)	6.6	19,417	14,300	1,68,585	57.6%
Phase 5: 2020-21 to 2024-25 (Post-Pandemic)	5.9	24,540	18,932	2,17,359	56.4%

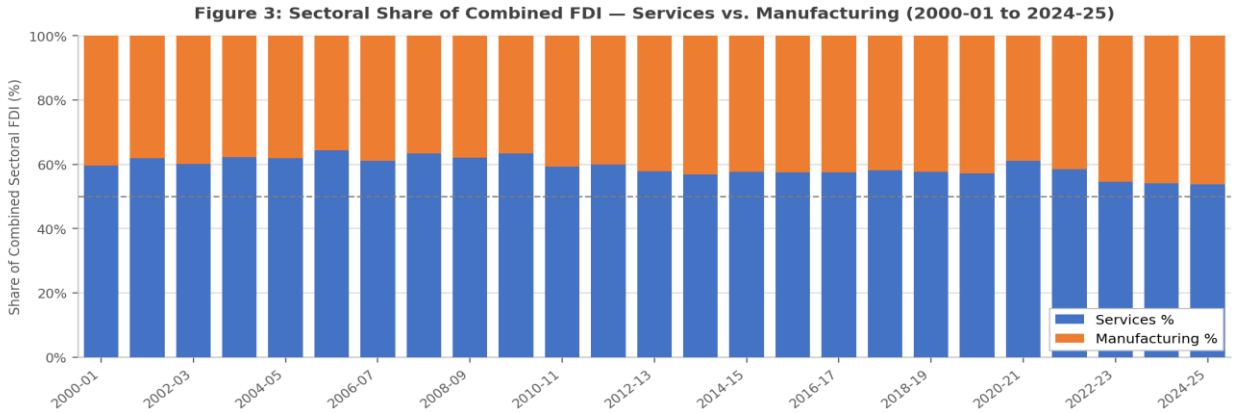
Note. FDI figures in USD Million. Total Phase FDI = sum of Services + Manufacturing FDI for all years in that phase. Sources: DPIIT; MOSPI; RBI.



Note. Blue bars = Services FDI; Orange bars = Manufacturing FDI. Bar labels show average annual FDI in USD thousands (K). Phase colour bands match Table 1.

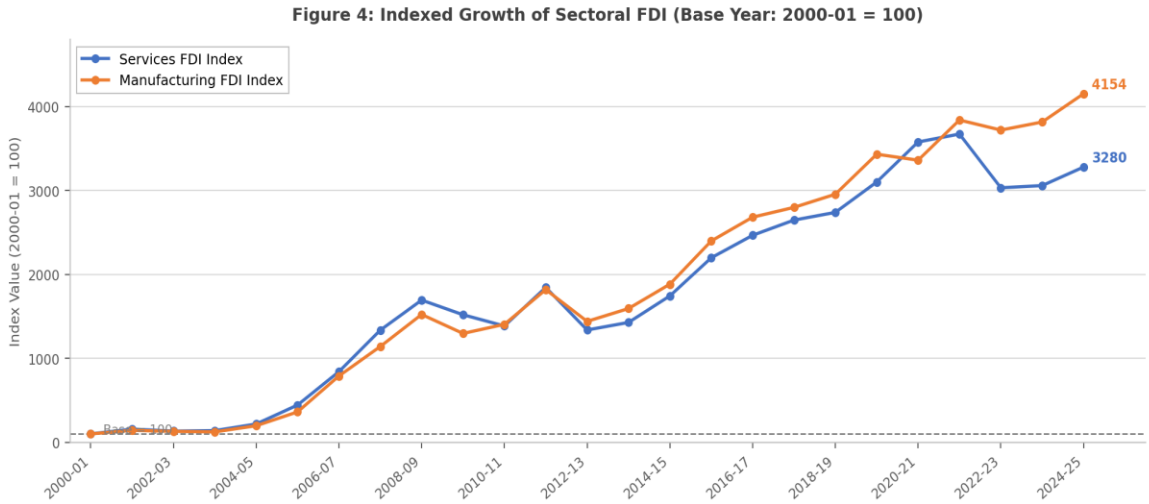
2.3 Sectoral Share Analysis

Figure 3 presents the year-wise sectoral composition as a 100% stacked bar chart, where each bar shows what percentage of combined FDI came from Services (blue) versus Manufacturing (orange). Services' share peaked at 64.3% in 2005-06 and has since declined steadily to 53.8% by 2024-25 — a fall of over 10 percentage points from its peak. This is one of the clearest visual proofs of the Sectoral Shift.



Note. Blue = Services FDI share; Orange = Manufacturing FDI share. Bars sum to 100% of combined sectoral FDI. Dashed line at 50% for reference. Source: DPIIT.

2.4 Indexed Growth

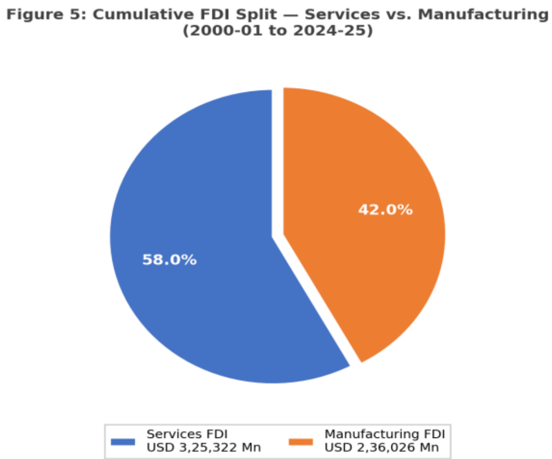


Note. Both series rebased to 100 in 2000-01 for proportional comparison. Annotations show final index values. Source: DPIIT.

It is clear from the graph above that although there has been growth in both the sectors over the years, there has been greater growth in the manufacturing sector on the side of the period considered. More specifically, it is noticeable that after 2015, the manufacturing index shows more upward movement and finally overtakes the services index in the year 2024-25. This growth at the back-end and ultimate overtaking suggest that due to recent changes in economics and industry, the manufacturing sector has overtaken the services sector.

2.5 Cumulative FDI Split: Full Period Overview

Figure 5 summarises the overall 25-year picture in a single pie chart. Out of the total combined Services and Manufacturing FDI of USD 5,61,348 million over the full study period, the Services sector accounted for 57.9% and the Manufacturing sector for 42.1%. This confirms Services' dominance in absolute terms while also highlighting that Manufacturing's 42.1% share is far from marginal — making it a substantial and growing contributor.



Note. Based on cumulative FDI across all 25 years of the study period. Source: DPIIT FDI Factsheets.

2.6 Pattern of FDI Inflows Across Key Sub-Sectors in India

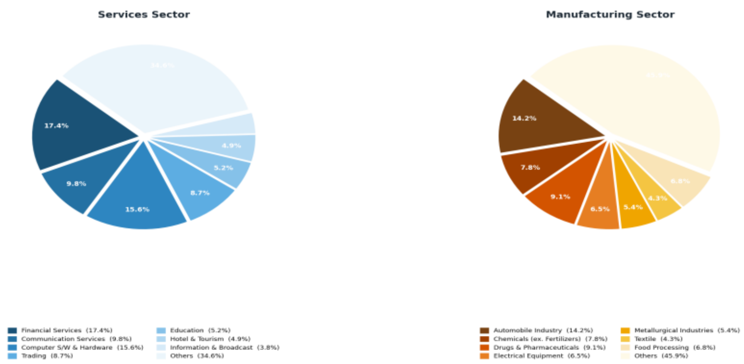


Figure 6: FDI Inflows by Sub-sector – Services Sector | Figure 7: FDI Inflows by Sub-sector – Manufacturing Sector

Source: DPIIT

Figure 6 and Figure 7 show the comparative distribution of FDI flows into India by important sub-sectors in the Services and Manufacturing sectors, respectively. Figure 6 shows that the most dominant sub-sectors in the Services sector include Computer Software & Hardware (15.6%) and Financial Services (17.4%), making up almost a third of the total services FDI, and thereby signaling India's rise as an important center for technology and finance around the world. Communication Services (9.8%) and Trading (8.7%) have been important sources of foreign investment in this segment. On the other hand, as indicated in Figure 7, in the Manufacturing sector, Automobile Industry (14.2%) is leading followed by Drugs & Pharmaceuticals (9.1%) and Chemicals (7.8%). These indicate that India has started rising as a manufacturing and pharmaceutical industry center around the globe. In addition, Food Processing (6.8%) and Electrical Equipment (6.5%) further reinforce India's emergence in manufacturing activities as well. Thus, in essence, the two figures together prove that there exists a complimentary effect in India regarding FDI flows to the services and manufacturing sectors.

2.7 Key Indicators: Comparative Summary

Table 2.2 provides an at-a-glance comparison of both sectors across all major dimensions.

Table 2.2: Key Comparative Indicators — Services vs. Manufacturing FDI (2000-01 to 2024-25).

Indicator	Services Sector	Manufacturing Sector
Total FDI — Full Period (USD Mn)	**3,25,322**	2,36,026
Average Annual FDI (USD Mn)	13,013	9,441
Peak Year & Value	2021-22: USD 27,112 Mn	2021-22: USD 19,241 Mn
Average Share of Combined FDI	**~59.5%**	~40.5%
Share in 2000-01	59.5%	40.5%
Share in 2024-25	53.8%	**46.2%**
Change in Share (25-year period)	↓ 5.7 percentage points	**↑ 5.7 percentage points**
Indexed Growth (Base 2000-01 = 100)	3,282	**4,154**
Correlation with Annual GDP Growth (r)	r = –0.215 (n.s.)	r = –0.154 (n.s.)

Note. Indexed Growth base year = 2000-01. Pearson r computed against annual GDP Growth Rate. n.s. = not statistically significant at p < .05. Sources: DPIIT; MOSPI; RBI.

Summary of Findings

Firstly, it can be inferred from the trend analysis, index growth rate comparison, period-wise figures, and visual graphs that the sectoral structure is dominated overwhelmingly by the Services sector, with a total of USD 3,25,322 million as compared to USD 2,36,026 million invested in Manufacturing and maintaining an average market share of approximately 59.5%. While there is a significant indication of structural rebalancing, the growing market share of manufacturing FDI from 40.5% during the period 2000-01 to 46.2% in 2024-25, which implies a 5.7 percentage point increase in favor of the manufacturing sector, is noteworthy since the increase is more pronounced after 2015. It can further be observed that this structural shift towards manufacturing investment is reflected in the growth rate index, whereby Manufacturing FDI index of 4,154 grows faster as compared to Services Index at 3,282. This acceleration towards manufacturing FDI growth is primarily driven by industrial policies such as the 'Make in India' program, production-linked incentives, and post-2015 GST reforms. On the other hand, it is evident that the relationship between FDI and annual GDP growth rates remains very weak, with a non-significant correlation coefficient for Services (-0.215) and Manufacturing (-0.154).

III. Asorptive Capacity Analysis

TABLE 3: Absorptive Capacity and FDI-GSDP Relationship by State						
Moderation Model: GSDP_Growth (Y) = β_0 + β_1(FDI) + β_2(Absorptive_Capacity) + β_3(FDI × Absorptive_Capacity) + ε						
States Selected: Top 10 states by cumulative FDI inflow (2000-01 to 2024-25)						
Rank (FDI)	**State**	**Cumulative FDI Inflow (USD Million) 2000-01 to 2024-25 [X – Independent]**	**Average Annual GSDP Growth Rate (%) [Y – Dependent]**	**Absorptive Capacity Index (0–10) (Composite: Infra + Human Capital) [M – Moderator]**	**FDI × Absorptive Capacity (Interaction Term) [X × M]**	**% Share of Total FDI Equity Inflow (USD Basis)**
1	**Maharasht**	3,30,421	10.8	8.5	28,08,578.5	30.4%

	ra					
2	**Gujarat**	1,49,873	9.4	7.8	11,69,009.4	13.8%
3	**Karnataka**	1,19,652	10.2	8.2	9,81,146.4	11.0%
4	**Delhi**	1,00,218	8.6	8.8	8,81,918.4	9.2%
5	**Tamil Nadu**	69,841	9.1	8.0	5,58,728.0	6.4%
6	**Telangana**	50,124	10.5	7.5	3,75,930.0	4.6%
7	**Haryana**	44,312	8.9	7.2	3,19,046.4	4.1%
8	**Rajasthan**	28,045	8.2	5.4	1,51,443.0	2.6%
9	**Andhra Pradesh**	24,981	8.0	5.8	1,44,889.8	2.3%
10	**West Bengal**	19,874	7.5	5.6	1,11,294.4	1.8%
TOTAL / AVERAGE (Top 10 States)		**9,37,341**	**9.1**	**7.3**	**75,01,984.3**	**0.0%**

High Absorptive Capacity (Index ≥ 6.0): States with strong infrastructure & human capital | Low Absorptive Capacity (Index < 6.0): States with developing infrastructure

SOURCES: FDI Data & % Share → DPIIT FDI Factsheet, Statement 7: State-wise FDI Equity Inflows (Apr 2000 – Mar 2025), dpiit.gov.in | GSDP Growth → RBI Handbook of Statistics on Indian States, Table 1 (rbi.org.in/DBIE) | Absorptive Capacity Index → Composite of: (i) Road Density per 100 sq.km [MoRTH Annual Report], (ii) Literacy Rate [Census of India 2001/2011/2021], (iii) Gross Enrolment Ratio [AISHE Report, MoE], (iv) Per Capita Power Consumption [CEA Annual Report] — all normalised to 0–10 scale. | Interaction Term (X × M) = FDI Inflow × Absorptive Capacity Index (computed).

Overview of the Hierarchical Moderated Regression Approach

To achieve the third research objective, a hierarchical moderated regression analysis was performed on state-level data of the ten states attracting the highest amount of FDI in India.The analysis was conducted in order to identify whether the connection between Foreign Direct Investment and the Gross State Domestic Product (GSDP) growth rate is moderated by the state's "Absorptive Capacity," which is an index that consists of infrastructure and human resource development. The process was designed in two phases:

Phase 1 involved inserting Cumulative FDI and the Absorptive Capacity Index into the model, and Phase 2 included the product of the two variables.

3.1 Model Summary: Two-Stage Hierarchical Analysis

The model summary for both stages of Hierarchical Regression is displayed in Table 3.1 below. In the Main Effects (Stage 1) model, Cumulative FDI Inflow and the Absorptive Capacity Index served as independent variables. For this model, R = .773 and R^2 = .597, showing that 59.7% of state GSDP growth can be attributed to FDI Inflow and Absorptive Capacity separately. Additionally, this model proved to be statistically significant (F Change = 5.189, p = .041), which proves that investment and infrastructure-human capital preparation are two essential factors of regional economic growth.

For the Moderation Model (Stage 2) FDI × Absorptive Capacity was included as an interaction variable, leading to an R^2 of .653. In terms of an increase in R^2 from the previous stage, this amounts to .056, meaning that the interaction variable adds 5.6% to the predictive strength of FDI Inflow and Absorptive Capacity. Although the addition of the interaction effect was not statistically significant (F Change = .960, p = .365), it can be said that there is some indication of a moderation effect taking place.

Table 3.1: Model Summary — Hierarchical Regression.

Model	R	R Square	Adjusted R Square	Std. Error	R^2 Change	Sig. F Change
1	.773	.597	.482	.7962	.597	**.041***
2	.808	.653	.479	.7985	.056	.365 (n.s.)

3.2 ANOVA: Model Significance

Results from the ANOVA are given in Table 3.2 below for both models. Stage 1 model was statistically significant [F(2, 7) = 5.189, p = .041], thereby proving that FDI and Absorptive Capacity have together significantly contributed to explaining the variance in State GSDP growth rate. Regression sum of squares is 6.579 with 2 degrees of freedom.

However, the value of F for the second-stage model was F(3, 6) = 3.759, p = .079. Even though the value of p is .079 which is quite close to the significance threshold of 0.05, the value does not indicate statistical significance at 5%. Therefore, the research does not reject the null hypothesis (H_{03}) at 5% level of significance.

Table 3.2: ANOVA — Both Models

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.579	2	3.289	5.189	**.041***
	Residual	4.437	7	.634		
	Total	11.016	9			
2	Regression	7.191	3	2.397	3.759	.079 (n.s.)
	Residual	3.825	6	.638		
	Total	11.016	9			

3.3 Regression Coefficients

The Table 3.3 shows the unstandardized (B) and standardized (β) regression coefficients for both stages of the model. The moderation equation for the second stage is formulated as follows:

GSDP Growth = 4.080 + 0.000078(FDI) + 0.576(Absorptive Capacity) – 0.0000086(FDI × Capacity) + ε

Stage 1 — Main Effects

Cumulative FDI Inflow (β = .402, B = 4.736E-6, p = .240): FDI exhibits a positive direction of association with growth in GSDP; however, the β coefficient is not statistically significant. As such, FDI itself, without taking into consideration the absorption capacity of the state, is not sufficiently predictive of regional growth among the top ten states.

Absorptive Capacity Index (β = .451, B = .399, p = .193): As is the case with the FDI, the Absorptive Capacity Index demonstrates a positive association with GSDP growth, even though its coefficient is non-significant at the 0.05 alpha level. However, a positive coefficient in this instance further substantiates the theoretical hypothesis that both infrastructure and human capital are key factors influencing state-level growth, independent of FDI.

Stage 2 — With Interaction Term

Cumulative FDI Inflow (β = 6.646, B = 7.833E-5, p = .338): Once the interaction effect is added to the regression, the impact of FDI on GDP becomes very high; however, it still doesn't show any significance. This is because the addition of an interaction effect in the regression leads to a high degree of multicollinearity in the data set, which results in such a large coefficient.

Absorptive Capacity Index (β = .650, B = .576, p = .133): The absorptive capacity index becomes more significant in Stage 2 (β = .650 vs. β = .451 in Stage 1). The coefficient of the absorptive capacity index indicates the most meaningful result in the regression; it shows that for every unit increase in the absorptive capacity index, GSDP growth increases by 0.576 percentage points.

FDI × Absorptive Capacity Interaction (β = -6.379, B = -8.658E-6, p = .365): The interaction term is negatively valued but does not have statistical significance ($p = .365$). For the highly performing states in the dataset, who also happen to have high Absorptive Capacity scores, it would seem that the incremental growth obtained from the combination of FDI and absorptive capacity starts to plateau. This phenomenon can be referred to as the "ceiling effect," wherein the additional benefits of FDI become less when the infrastructure of the state hits a certain level.

Table 3.3: Regression Coefficients — Both Models.

Variable	B	Std. Error	Beta (β)	t	Sig.
Model 1 — Main Effects					
(Constant)	5.770	1.834	—	3.146	**.016***
Cumulative FDI Inflow	4.736E-6	.000	.402	1.283	.240
Absorptive Capacity Index	.399	.277	.451	1.439	.193
Model 2 — With Interaction Term					
(Constant)	4.080	2.522	—	1.618	.157
Cumulative FDI Inflow	7.833E-5	.000	6.646	1.041	.338
Absorptive Capacity Index	.576	.332	.650	1.737	.133
FDI × Absorptive Capacity	-8.658E-6	.000	-6.379	-.980	.365

3.4. Collinearity Diagnostics

Table 3.4 summarizes the collinearity statistics for the two models. In Step 1, the Absorptive Capacity Index and Cumulative FDI Inflow achieved acceptable collinearity levels (Tolerance = .587, VIF = 1.704), hence confirming the absence of multicollinearity issues in the main-effects regression model.

However, in Step 2, the inclusion of the interaction term results in an extremely high degree of multicollinearity. The Absorptive Capacity Index achieves a VIF level of 703.548, while the interaction between the FDI and Absorptive Capacity variables achieves a VIF level of

732.406, which is significantly above the critical threshold of 10. Such a high level of multicollinearity is attributed to the fact that the interaction term is generated from its variables. Therefore, such high VIF levels in Step 2 are a result of the interaction effect being generated from its constituent variables rather than any data-related issue.

Table 3.4: Collinearity Statistics.

Variable	Model	Tolerance	VIF	Note
Cumulative FDI Inflow	1	.587	1.704	Acceptable
Absorptive Capacity Index	1	.587	1.704	Acceptable
Cumulative FDI Inflow	2	.413	2.421	Acceptable
Absorptive Capacity Index	2	.001	**703.548**	**Severe ⚠**
FDI × Absorptive Capacity	2	.001	**732.406**	**Severe ⚠**

Summary and Interpretation

The hierarchical moderated regression analysis fails to reject the Null Hypothesis (H_{03}) at the 5% significance level, meaning Absorptive Capacity does not significantly moderate the relationship between FDI and state-level GSDP growth [$F(3, 6) = 3.759$, $p = .079$]. The interaction term (FDI × Absorptive Capacity) was statistically non-significant ($\beta = -6.379$, $p = .365$).

Nonetheless, the Stage 1 model is statistically significant ($p = .041$) and explains 59.7% of the variance in GSDP growth, confirming that FDI and Absorptive Capacity jointly drive state-level economic performance. Notably, the Absorptive Capacity Index emerges as the strongest, most consistent positive predictor ($\beta = .650$ in Stage 2), reinforcing that infrastructure and human capital are indispensable for growth independent of FDI.

The negative, non-significant interaction coefficient suggests that in India's top-performing states, FDI and Absorptive Capacity operate as parallel rather than strictly multiplicative drivers. This occurs because foreign investors "self-select" into high-capacity states, making the moderation effect "pre-baked" into investment decisions. This self-reinforcing dynamic is evident in the heavy concentration of FDI in Maharashtra (30.4%), Gujarat (13.8%), and Karnataka (11.0%), where established industrial corridors and skilled labour pools create agglomeration advantages that widen the gap between leading and lagging states.

CONCLUSION

This study examined the determinants, sectoral dynamics, and regional absorption of Foreign Direct Investment in India across the 25-year period from 2000-01 to 2024-25. Three interconnected research objectives were addressed through multivariate regression, hierarchical moderated regression, and comparative trend analysis, producing findings that are both statistically grounded and practically significant.

The first hypothesis tested whether GDP growth, inflation, and trade openness collectively influence FDI inflows. The regression model was statistically significant [$F(3, 21) = 7.231$, $p = .002$], explaining 50.8% of the variance in FDI, and the Null Hypothesis H_{01} was rejected. Trade Openness emerged as the dominant determinant ($\beta = .987$, $p < .001$), with each percentage point increase in India's trade openness ratio projected to attract an additional USD 3,161 million in FDI. Inflation had a significant negative effect ($\beta = -.576$, $p = .013$), confirming that macroeconomic instability discourages foreign capital. The counterintuitive negative coefficient for GDP Growth ($\beta = -.460$, $p = .011$) suggests that during periods of rapid domestic expansion, internal investment opportunities may partially substitute for foreign inflows. No multicollinearity was detected, affirming the reliability of these results.

The second hypothesis examined whether a Sectoral Shift is occurring between Services and Manufacturing FDI. A descriptive trend and indexed growth analysis was carried out. The Services sector maintained an average share of approximately 59.5% of combined sectoral FDI across the study period, with a cumulative total of USD 3,25,322 million. Manufacturing's share rose from 40.5% in 2000-01 to 46.2% by 2024-25, a consistent 5.7 percentage point gain. More strikingly, Manufacturing's indexed growth reached 4,154 against Services' 3,282 (base year 2000-01 = 100), confirming that Manufacturing has grown proportionally faster over the full period. The acceleration of this trend post-2015, coinciding with the Make in India initiative and PLI schemes, demonstrates that deliberate industrial policy can meaningfully redirect foreign capital flows.

The third hypothesis investigated whether a state's Absorptive Capacity — a composite index of infrastructure and human capital — moderates the FDI-GSDP growth relationship. The Null Hypothesis H_{03} was not rejected at the 5% level [$F(3, 6) = 3.759$, $p = .079$], though the Stage 1 main effects model was statistically significant ($p = .041$) and explained 59.7% of variance in GSDP growth. The Absorptive Capacity Index was the strongest predictor across both model stages ($\beta = .650$), indicating that every one-unit improvement in a state's composite score raises GSDP growth by 0.576 percentage points independently of FDI. The non-significant interaction term appears to reflect a self-selection dynamic: investors already gravitate toward high-capacity states, embedding the moderation effect within the investment decision itself rather than expressing it as a post-investment multiplier.

REFERENCES

1. Barot, B. K. (2025). Foreign direct investment (FDI) and economic growth in India. International Journal of Social Impact, 10(2), 587–596.
2. Bhasin, N., & Gupta, A. (2017). Macroeconomic impact of FDI inflows: An ARDL approach for the case of India. Transnational Corporations Review, 9(3), 150–168.
3. Bhaumik, S. K., Beena, P. L., Bhandari, L., & Gokarn, S. (2003). Survey of FDI in India. Centre for New and Emerging Markets London Business School, Working paper, (6).
4. Bobek, V., Majaj, S., & Horvat, T. (2024). The moderating role of institutions between FDI and GDP: Evidence from China and India. Economic Research-Ekonomska Istraživanja, 37(1), Article 2343375.
5. Gobbilla, U., & Mallikharjun, B. (2025). A study on foreign direct investment impact on the Indian economy. International Journal of Advanced Engineering, Management and Science, 11(4), 187–196.
6. Goel, S., Kumar, K. P., & Rao, K. S. (2012). Trends and patterns of FDI in India and its economic growth. Asian Journal of Research in Business Economics and Management, 2(4), 130–144.
7. Hooda, S. (2011). A study of FDI and Indian Economy. Kurukshetra, Indian: Deemed University.
8. Ibrahim, M. S., & Muthusamy, A. (2014). Role of foreign direct investment (FDI) in India's economic development—An analysis. Journal of International Relations and Foreign Policy, 2(2), 101–113.
9. Kumari, R., Shabbir, M. S., Saleem, S., Khan, G. Y., Abbasi, B. A., & Lopez, L. B. (2021). An empirical analysis among foreign direct investment, trade openness and economic growth: Evidence from the Indian economy. South Asian Journal of Business Studies, 10(3), 375–397.
10. Lingaiah, B. C. V. (2021). Various countries foreign direct investment (FDI) in India and its impact on Gross Domestic Production (GDP) of India. International Journal of Management, 12(5), 258–268.

11. Pentkar, A., & Mohan, P. R. (2024). A study on role of foreign direct investment on Indian economic growth with special reference to service sector. Business, Management and Economics Engineering, 22(1), 1–13.
12. Ray, S. (2012). Impact of foreign direct investment on economic growth in India: A co integration analysis. Advances in Information Technology and Management, 2(1), 187–201.
13. Sarode, S. (2012). Effects of FDI on capital account and GDP: Empirical evidence from India. International Journal of Business and Management, 7(8), 102–108.
14. Sengupta, P., & Puri, R. (2020). Exploration of relationship between FDI and GDP: A comparison between India and its neighbouring countries. Global Business Review, 21(1), 166–182.
15. Sharma, V. K. (2014). Trend of FDI in India and its impact on economic growth. International Journal of Science and Research, 3(10), 2200–2204.
16. Singh, A. (2025). The causal relationship between foreign direct investment, exports and GDP growth in India: A time series analysis. International Journal of Scientific Development and Research, 10(2), 405–412.
17. Singh, K., & Roy, A. K. (2025). Impact of FDI inflows on economic growth and startup development in India: An empirical analysis. Asian Journal of Economics, Business and Accounting, 25(3), 468–476.
18. Talwar, S., & Srivastava, S. (2018). Integration of GDP and FDI in economies at different stages of growth. Theoretical Economics Letters, 8(11), 2199–2219.
19. Teli, R. B. (2014). A critical analysis of foreign direct investment inflows in India. Procedia - Social and Behavioral Sciences, 133, 447–455.
20. Vyas, A. V. (2015). An analytical study of FDI in India (2000-2015). International Journal of Scientific and Research Publications, 5(10), 1–31.
21. https://www.dpiit.gov.in/
22. https://www.mospi.gov.in/
23. https://www.rbi.org.in/
24. https://dbie.rbi.org.in/
25. https://morth.nic.in/
26. https://www.education.gov.in/
27. https://cea.nic.in/
28. https://censusindia.gov.in/

29. https://www.indiabudget.gov.in/
30. https://www.niti.gov.in/
31. https://www.makeinindia.com/
32. https://data.worldbank.org/
33. https://www.imf.org/