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The Indian Economy and Foreign Direct Investment - A Sectoral Analysis

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Abstract: This research paper examines the impact of foreign direct investment (FDI) on the Indian economy through a sectoral analysis. FDI plays a crucial role in the economic development of a country, and India has been attracting significant FDI inflows over the past few decades. The paper focuses on agriculture, industry, manufacturing, and services sectors, as FDI has shown considerable influence in these areas. By leveraging secondary data obtained from the Reserve Bank of India and DIPP websites covering the period from 2001 to 2022, this study aims to provide insights into the specific impact of FDI on various segments of the Indian economy. The research methodology involves descriptive, correlation, Augmented Dickey-Fuller test and regression analysis. The findings will contribute to a better understanding of the relationship between FDI and different sectors, shedding light on the benefits FDI brings in terms of economic growth, job creation, knowledge transfer, infrastructure development, and export promotion.

Index Terms - foreign direct investment, Indian economy, sectoral analysis, economic growth, manufacturing, services, agriculture, infrastructure.

1. Introduction:

FDI, or Foreign Direct Investment, refers to the investment made by individuals, companies, or governments from one country into another. It involves the establishment of business operations or the acquisition of assets in a foreign country. FDI is a significant economic growth and development driver, as it brings in capital, technology, employment opportunities, and access to new markets.

The study of sectorial analysis within the context of FDI aims to analyze the flow of foreign investment across various sectors of an economy. By examining the patterns, trends, and impacts of FDI on specific industries, sectorial analysis provides valuable insights into the dynamics of foreign investment and its implications for economic growth and sectoral development.

Understanding the sectorial distribution of FDI is essential for policymakers, researchers, and businesses as it helps identify the sectors that attract significant foreign investment and contribute the most to the overall economic performance of a country or region. This knowledge allows policymakers to design targeted policies and incentives to attract more FDI in sectors with the potential for high growth and positive spillover effects.

Moreover, sectorial analysis of FDI enables a deeper examination of the linkages between foreign investors and domestic industries within the value chain. It helps identify opportunities for technology transfer, knowledge diffusion, and the development of backward and forward linkages that can enhance the competitiveness and productivity of domestic sectors.

The study of FDI within specific sectors also sheds light on the impact of foreign investment on employment generation, skill development, and human capital formation. By identifying the sectors that create significant job opportunities, policymakers can prioritise policies that promote labour-intensive industries and encourage skill upgradation to enhance the employability of the workforce.

This research aims to assess the relationship between Foreign Direct Investment (FDI) and sectoral indicators in the Indian economy. Data from 2001 to 2022 sourced from reputable institutions like the Reserve Bank of India and the Department of Industrial Policy and Promotion were analyzed using statistical techniques such as descriptive analysis, correlation analysis, Augmented Dickey-Fuller Test, and regression analysis. The study provides insights into FDI trends and their impact on different sectors, enabling policymakers to make informed decisions regarding sector-specific FDI policies.

However, limitations exist due to the reliance on secondary data and the exclusion of certain sectors. Despite these limitations, the research contributes to understanding FDI's effects on the Indian economy. The subsequent sections of the paper include a literature review, research methodology, presentation and analysis of results, discussion of implications, main findings, recommendations for policymakers, and potential areas for further research.

2. Objectives of the Study:

- 1. To examine the impact of foreign direct investment (FDI) on the agriculture, industry, manufacturing, and services sectors of the Indian economy.
- 2. To provide policy recommendations for maximising the positive impact of FDI on India's sectoral growth, competitiveness, and overall economic development.

3. Hypothesis of the study:

H0₁: Foreign Direct Investment (FDI) does not significantly impact the Agriculture sector of the Indian economy. H1₁: Foreign Direct Investment (FDI) has a significant impact on the Agriculture sector of the Indian economy.

H0₂: Foreign Direct Investment (FDI) does not significantly impact the Industry sector of the Indian economy. H1₂: Foreign Direct Investment (FDI) has a significant impact on the Industry sector of the Indian economy.

H0₃: Foreign Direct Investment (FDI) does not significantly impact the Manufacturing sector of the Indian economy. H1₃: Foreign Direct Investment (FDI) has a significant impact on the Manufacturing sector of the Indian economy.

H0₄: Foreign Direct Investment (FDI) does not significantly impact the Services sector of the Indian economy. H1₄: Foreign Direct Investment (FDI) has a significant impact on the Services sector of the Indian economy.

4. Literature Review:

Antwi & Zhao (2013) use time series data to examine FDI and economic development in Ghana from 1980 to 2010. The variables were FDI, GDP, and GNI. Statistical techniques included unit root test for stationary, Augmented Dickey-Fuller Test, Ordinary Least Square method, Cointegration test, and Vector error correction model. The analysis found a long-term causal association between FDI and GDP/GNI. GDP Granger-Causes FDI and GNI-GDP is unidirectional.

Aykut, D., & Sayek, S. (2007) have studied the sectoral distribution of foreign direct investment in numerous nations. In addition, they have analyzed the absolute and relative levels of foreign direct investment in each sector. They have concluded that all forms of FDI positively correlate with economic development.

Barua, R. (2013) examined the connection between exports and FDI on economic growth. FDI, GDP, and exports were considered using 2000–2012 time series data. Statistical methods included correlation, simple regression, multiple regression models, ANOVA, and Durbin-Watson test. All factors are positively and substantially correlated.

Chakraborty, C., & Nunnenkamp, P. (2008) Foreign direct investment (FDI) is expected to boost economic development in post-reform India. Granger causality analyses using industry-specific FDI and output data in a panel cointegration framework examine this hypothesis. FDI's growth impacts differ per industry. In the manufacturing sector, FDI stocks and production are mutually reinforcing. Surprisingly, FDI has mainly temporary impacts on services sector production. However, cross-sector spillovers from FDI in services have boosted industrial growth.

D.Ramesh & S. Packialakshmi (2014) wrote, "The benefits and downsides of foreign direct investment in India." This research found that India needs a comprehensive development plan, including trade and FDI. This should help eliminate poverty forever.

Joo, Bashir, & Ali Dhar, Faiza. (2018) examined how sector-specific FDI has boosted India's economy. They also examined how FDI inflows impact a sector's development and the country's growth. They discovered that FDI inflows boost GDP in most industries except three. Power, Computer Hardware & Software, and Drugs & Pharmaceuticals. They advised Indian policymakers to simplify company exits to attract FDI.

Zheng, P., & Sen, S. (2013). Economic and structural changes in the Indian economy have had a significant impact on foreign investment flows, according to their research. They have also suggested that future investment attraction in India will require targeted policies from the Indian government.

Narayana, N. (2012) explained that one of the major concerns of planners and policy makers in India is attracting more and more Foreign Direct Investment. He analyzed the Foreign Direct Investment and its flows into India. He highlighted the basic constraints to investment in general and Foreign Direct Investment in particular.

Joseph, R. (2018) The study's major goal is to illustrate the relationship between the current account, balance of trade, capital accountant FDI, and the country's balance of payment. The trade balance strongly impacts the current account with a beta

value of 1.04, regression value of 0.987, and significance value of 0.005. Current account deficits are diminishing. A robust balance of trade may control and limit the deficit.

Chengalvala, S. (2017) In her study, examined FDI inflows from 2000 to 2017. She observed that FDI in India is rising steadily. The research praises India's 1990s economic reform, which drew massive investments. The research also found that the 2008-2010 global collapse did not affect foreign investment inflows.

Singhania, M., & Gupta, A. (2011) investigated FDI factors in India. They explored ARIMA models to explain FDI fluctuation. Only GDP, Inflation, and Scientific Research affect FDI inflows. They also claimed that the 1995-1997 FDI policy amendments encouraged FDI in India.

5. Research Methodology:

The Reserve Bank of India and DIPP websites provided secondary data for this research. From 2001 through 2022, the data examined how foreign direct investment (FDI) affected the incomes of India's Agriculture, Industry, Manufacturing, and Services sectors. The research used numerous tools, including Descriptive analysis: This statistical method summarises and describes the data, giving an overview of the variables under examination. Correlation analysis: Measures the strength and direction of two variables' connection. It determines whether FDI impact sector revenues. Regression analysis: Regression analysis determines dependent-independent relationships. It would assist in analyzing how FDI impact sector earnings, adjusting for other variables. The Augmented Dickey-Fuller (ADF) test determines if a time series data collection is stationary or has a unit root. Valid statistical analyses need stationarity.

6. Analysis and Interpretations

This section focuses on the impact of FDI on specific sectors of the Indian economy. It examines how FDI has influenced the agriculture, industry, manufacturing, and services sectors. The findings will provide a detailed understanding of the sector-specific impact of FDI and its implications for India's economic development.

6.1 Descriptive Analysis

Detailed information about this study's dependent and independent variables can be found in Table 1.

	FDI	Agriculture Sector	Industry Sector	Manufacturing Sector	Services Sector
Mean	851600.2	12310558	13945319	11552156	39079636
Median	642081	9975261	10945412	9417787	33765751
Maximum	2393450	25383265	<mark>3</mark> 0709693	24526766	83973698
Minimum	113761	5149291	4456142	4297527	11965131
Std. Dev.	769266.9	7383074	9284352	7984465	24249547
Skewness	0.90784	0.60562	0.619617	0.6166173	0.543364
Probability	0.312758	0.418296	0.44049	0.4398533	0.477964
Kurtosis	2.654329	1.945482	1.964645	1.981476	1.998159
Jaraue-Bera	2.325641	1.815776	1.817944	1.7626963	1.539986

Table-1: Variables and their descriptive statistics

Sources: Compilation by the author using SPSS Software

The table provides a comprehensive descriptive analysis of the variables in the study, including Foreign Direct Investment (FDI) and its distribution across the Agriculture, Industry, Manufacturing, and Services sectors. The findings reveal valuable insights about the central tendency, variability, skewness, kurtosis, and normality of FDI in each sector.

The average FDI observed in the study is 851,600.2, with the agriculture sector having an average FDI of 12,310,558, the industry sector at 13,945,319, the Manufacturing sector at 11,552,156, and the Services sector at 39,079,636. The median FDI values indicate that approximately half of the FDI amounts fall below 642,081 for the overall FDI and varying amounts for each sector.

The maximum and minimum FDI values provide an understanding of the range of investments observed in the study. The agriculture sector has the highest recorded FDI value of 25,383,265, while the Services sector exhibits the highest maximum of 83,973,698. Conversely, the lowest FDI values are 113,761 for the overall FDI and 4,297,527 for the Manufacturing sector.

The standard deviation measures the spread of FDI values around the mean. The overall FDI has a standard deviation of 769,266.9, indicating moderate variability. The Agriculture, Industry, Manufacturing, and Services sectors have standard deviations of approximately 7,383,074, 9,284,352, 7,984,465, and 24,249,547, suggesting varying degrees of dispersion in FDI amounts.

The skewness values quantify the asymmetry of the FDI distributions. Positive skewness is observed for all sectors, indicating that extremely high FDI values pull the distributions towards the right. The kurtosis values indicate that the FDI

distributions in each sector are moderately peaked and have heavier tails than a normal distribution. These findings imply a greater concentration of FDI values around the mean and a potential presence of outliers or extreme values.

The Jarque-Bera statistics and associated probabilities test the normality of the FDI distributions. The results indicate that the FDI distributions in all sectors and the overall FDI are not significantly different from a normal distribution. This suggests that the FDI data in the study approximately follows a normal distribution pattern.

In conclusion, the descriptive analysis provides a comprehensive overview of the FDI variables and their distribution across different sectors. The results highlight the average values, variability, skewness, kurtosis, and normality of FDI in each sector, aiding in understanding the investment patterns and potential outliers. These insights can inform further analysis and decision-making processes related to FDI allocation and sector-specific investment strategies.

6.2 Correlation Analysis

Correlation analysis reveals the relationship between the independent variable, such as FDI and the dependent variable, such as the Agriculture, Industry, Manufacturing and Service sectors.

	FDI	Agriculture Sector	Industry Sector	Manufacturing Sector	Services Sector
FDI	1		4		
Agriculture Sector	0.953214	1			
Industry Sector	0.952365	0.999540	1		
Manufacturing Sector	0.958456	0.997654	0.998990	1	
Services Sector	0.956685	0.999650	0.995213	0.994987	1

Table 2: Analysis of correlations

Sources: Compilation by the author using SPSS Software

Based on the correlation coefficients provided, we can interpret the relationship between FDI and the different sectors as follows:

FDI and Agriculture Sector: There is a strong positive correlation between FDI and the Agriculture sector, with a correlation coefficient of 0.953214. This suggests that as FDI increases, the Agriculture sector tends to grow. It implies that foreign direct investment has a significant impact on agricultural activities.

FDI and Industry Sector: There is a strong positive correlation between FDI and the Industry sector, with a coefficient of 0.952365. This indicates that as FDI increases, the Industry sector tends to expand. Foreign direct investment plays a crucial role in driving industrial development.

FDI and Manufacturing Sector: There is a strong positive correlation between FDI and the Manufacturing sector, with a correlation coefficient of 0.958456. This implies that as FDI increases, the Manufacturing sector tends to experience growth. Foreign direct investment has a positive impact on the manufacturing industry.

FDI and Services Sector: There is a strong positive correlation between FDI and the Services sector, with a correlation coefficient of 0.956685. This suggests that as FDI increases, the Services sector tends to expand. Foreign direct investment is associated with growth in the service industry.

In conclusion, the correlation analysis indicates a strong positive relationship between FDI and all the sectors mentioned: Agriculture, Industry, Manufacturing, and Services. This suggests that foreign direct investment has a significant influence on the growth and development of these sectors. However, it's important to note that correlation does not establish causation, and other factors may also contribute to the observed relationships.

6.3 Augmented Dickey-Fuller Test

The augmented Dickey-Fuller test is done to check the stationary of the variables in the time series data.

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	Т-	Prob.*	1%	5%	10%
	Statistic	Prop.*	Level	Level	Level
Agriculture	4.61	1.00	-3.96	-3.21	-2.74
Industry	3.59	1.00	-3.96	-3.21	-2.74
Manufacturing	3.93	1.00	-3.96	-3.21	-2.74
Services	5.61	1.00	-3.96	-3.21	-2.74
FDI	-4.41	0.02	-3.96	-3.21	-2.74

 Table 3: Augmented Dickey-Fuller test

Sources: Compilation by the author using SPSS Software

The table displays the t-statistic, probability, and critical values at different significance levels for the variables Agriculture, Industry, Manufacturing, Services, and FDI. The t-statistic measures the strength and significance of the relationship

between FDI and each sector. The probability value (Prob.) indicates the likelihood of obtaining a t-statistic as extreme as the one observed if there were no true relationships between FDI and the sector. The critical values represent the thresholds at which the probability values become significant at the 1%, 5%, and 10% levels.

Agriculture: The t-statistic for FDI and Agriculture is 4.61, indicating a significant relationship. The associated probability value of 1.00 suggests that the relationship is highly unlikely to have occurred by chance. At all significance levels (1%, 5%, and 10%), the t-statistic exceeds the critical values (-3.96, -3.21, -2.74), further supporting the significant relationship.

Industry: The t-statistic for FDI and Industry is 3.59, indicating a significant relationship. The probability value 1.00 suggests a very low likelihood of the relationship occurring by chance. The t-statistic exceeds the critical values at all significance levels (-3.96, -3.21, -2.74), reinforcing the significance of the relationship.

Manufacturing: The t-statistic for FDI and Manufacturing is 3.93, indicating a significant relationship. The probability value of 1.00 suggests a low likelihood of the relationship being due to chance. At all significance levels (-3.96, -3.21, -2.74), the t-statistic surpasses the critical values, indicating statistical significance.

Services: The t-statistic for FDI and Services is 5.61, indicating a significant relationship. The probability value 1.00 suggests a very low likelihood of the relationship occurring by chance. The t-statistic exceeds the critical values at all significance levels (-3.96, -3.21, -2.74), reinforcing the significance of the relationship.

FDI: The t-statistic for FDI is -4.41, and the probability value is 0.02. This indicates a significant relationship between FDI and itself. The associated probability value of 0.02 suggests that the relationship is unlikely to have occurred by chance. At the 1% significance level, the t-statistic (-3.96) also indicates significance, while at the 5% and 10% levels (-3.21, -2.74), it does not.

In conclusion, the t-statistics and probability values indicate a significant relationship between FDI and the Agriculture, Industry, Manufacturing, and Services sectors. The results suggest that FDI has a statistically significant impact on these sectors.

6.4 Regression Analysis

6.4.1 FDI's Impact on Indian Agriculture Sector

The impact of Foreign Direct Investment (FDI) on India's agriculture sector is demonstrated in Table 4, highlighting the influence of FDI on various aspects of the agricultural sector.

Table 4 FDI's Impact on the Indian Agriculture Sector					
	Coefficient	Std. Error	T- ratio	P-value	
с	-49 <mark>8536</mark>	118779.6	-3.4202	0.0038	
Agriculture Sector	0.100000	0.190879	0.52396	0.0024	
R- Squared	0.9065				

Sources: Compilation by the author using SPSS Software

Based on the coefficients and statistical analysis provided, we can interpret the results as follows:

Intercept (c): The intercept coefficient of -498,536 indicates the estimated value of the dependent variable (Y) when all independent variables are set to zero. In this case, it suggests that the dependent variable is expected to decrease by approximately \$498,536 when all other factors are held constant. The negative sign implies an inverse relationship with the dependent variable.

Agriculture Sector: The coefficient of 0.1 indicates that a one-unit increase in the Agriculture Sector variable leads to a 0.1-unit increase in the dependent variable. The p-value of 0.0024 suggests that this relationship is statistically significant at a 5% significance level. Therefore, the Agriculture Sector positively and significantly impacts the dependent variable.

R-squared: The R-squared value of 0.9065 indicates that approximately 90.65% of the variability in the dependent variable can be explained by the independent variables included in the model. This indicates a strong relationship between the independent and dependent variables.

In conclusion, the regression analysis suggests that the Agriculture Sector variable has a statistically significant positive impact on the dependent variable. The intercept term indicates that, on average, when all other factors are held constant, the dependent variable decreases by approximately \$498,536. The model, as a whole, explains a significant portion of the variability in the dependent variable, as indicated by the high R-squared value of 0.9065.

6.4.2 FDI's Impact on Indian Industry Sector

The impact of Foreign Direct Investment (FDI) on India's industry sector is depicted in Table 5, which illustrates the effects of FDI on different facets of the industry sector.

	Coefficient	Std. Error	T- ratio	P-value
С	-268147	106667.2	-2.51387	0.0238
Industry Sector	-0.88655	0.649227	-1.36554	0.1994
R- Squared	0.910949			

Table 5: FDI's II	npact on the Ind	lian Industry Sector
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Sources: Compilation by the author using SPSS Software

Based on the provided coefficient estimates and their corresponding standard errors, the following interpretation and conclusions can be drawn:

Intercept (c): The coefficient estimate for the intercept term is -345217. This suggests that when all other independent variables are held constant, the dependent variable is expected to decrease by 345217 units. The negative sign indicates an inverse relationship between the intercept and the dependent variable.

Industry Sector: The coefficient for the Industry Sector variable is -0.88655, indicating that for a one-unit increase in the industry sector, the dependent variable is estimated to decrease by 0.88655 units, holding all other variables constant. However, the t-ratio of -1.36554 suggests that the coefficient is not statistically significant at the typical significance level of 0.05, as the p-value of 0.1994 is greater than 0.05. Therefore, we cannot conclude with sufficient evidence that the Industry Sector variable significantly impacts the dependent variable.

R-Squared: The R-squared value is 0.91636, which represents the proportion of the total variation in the dependent variable that can be explained by the independent variables included in the model. In this case, the model explains approximately 91.636% of the variation in the dependent variable, indicating a strong relationship between the independent variables and the dependent variable.

In conclusion, the results suggest that the intercept and the Service Sector variable statistically impact the dependent variable. The negative coefficient for the Service Sector variable implies that an increase in the Service Sector is associated with a decrease in the dependent variable. The R-squared value indicates the model has strong explanatory power, capturing much of the dependent variable's variation.

6.4.3 FDI's Impact on the Indian Manufacturing Sector

The impact of Foreign Direct Investment (FDI) on India's manufacturing sector is depicted in Table 6, which illustrates the effects of FDI on different facets of the manufacturing sector.

Table 0. FDT S impact on the indian Manufacturing Sector					
	Coefficient	Std. Error	T- ratio	P-value	
c	-272282	206286.0	-1.320470	0.2000	
Manufact uring Sector	1.317884	1.600262	3.012560	0.0035	
R- Squared	0.916795				

Table 6: FDI's Impact on the Indian Manufacturing Sector

Sources: Compilation by the author using SPSS Software

Based on the provided coefficients, standard errors, t-ratios, and p-values, we can interpret the results as follows:

Intercept (c): The intercept term represents the estimated value of the dependent variable when all independent variables are zero. In this case, the intercept is -272,282. However, it is not statistically significant at the 0.05 significance level (p-value = 0.2000). Therefore, we cannot conclude that the intercept significantly affects the dependent variable.

Manufacturing Sector: The coefficient for the Manufacturing Sector variable is 1.318. It indicates that for each unit increase in the Manufacturing Sector, the dependent variable is expected to increase by 1.318 units. This coefficient is statistically significant at the 0.05 significance level (p-value = 0.0035), suggesting that the Manufacturing Sector significantly impacts the dependent variable.

R-Squared: The R-squared value is 0.917, indicating that approximately 91.7% of the variability in the dependent variable is explained by the independent variables included in the regression model. This high R-squared value suggests a good fit of the model to the data.

Conclusion: Based on the given results, we can conclude that the Manufacturing Sector variable has a statistically significant and positive effect on the dependent variable. However, the intercept term is not statistically significant, suggesting it does not significantly impact the dependent variable. The model, overall, explains a substantial portion of the variability in the dependent variable, as indicated by the high R-squared value.

6.4.4 FDI's Impact on Indian Service Sector

The impact of Foreign Direct Investment (FDI) on India's service sector is demonstrated in Table 4, which highlights the influence of FDI on various aspects of the service sector.

Table 7: FDT's Impact on the Indian Service Sector					
	Coefficient	Std. Error	T- ratio	P-value	
с	-345217	108277.3	-1.18827	0.0061	
Service Sector	-0.01500	0.044970	3.05421	0.0043	
R- Squared	0.91636				

Table 7: FDI's Impact on the Indian Service Sector

Sources: Compilation by the author using SPSS Software

Based on the provided coefficients, standard errors, t-ratios, and p-values, we can interpret the results as follows:

Intercept (c): The intercept coefficient of -345,217 indicates the estimated value of the dependent variable when all independent variables are zero. The standard error of 108,277.3 suggests the uncertainty in the estimated coefficient. The t-ratio of -1.18827 indicates that the coefficient is statistically significant at a 5% significance level (p-value = 0.0061). Therefore, evidence suggests a significant relationship between the intercept and the dependent variable.

Service Sector: The coefficient of -0.01500 suggests that for every unit increase in the Service Sector variable, the dependent variable decreases by 0.015 units, assuming other independent variables are held constant. The standard error of 0.044970 indicates the uncertainty in the estimated coefficient. The t-ratio of 3.05421 shows that the coefficient is statistically significant at a 5% significance level (p-value = 0.0043). Thus, we can conclude that evidence suggests a significant relationship between the Service Sector variable and the dependent variable.

R-Squared: The R-squared value of 0.91636 indicates that approximately 91.64% of the variation in the dependent variable is explained by the independent variables included in the model. This value represents the model's goodness-of-fit, suggesting that it can explain a significant proportion of the observed variation in the dependent variable.

In conclusion, the analysis suggests that the intercept and the Service Sector variable significantly affect the dependent variable. Additionally, the model demonstrates a strong ability to explain the observed variation in the dependent variable, as indicated by the high R-squared value.

7. Results and Discussion:

The paper summarises the key findings and implications of the study.

a. Foreign Direct Investment (FDI) exhibits a positive and significant correlation with the Agriculture, Industry, Manufacturing, and Services sectors. This suggests that FDI has a strong impact on the growth and development of these sectors.

b. The descriptive analysis provides insights into the average FDI values, variability, skewness, kurtosis, and normality of FDI in each sector. These findings contribute to a better understanding of investment patterns and potential outliers.

c. The augmented Dickey-Fuller test indicates a significant relationship between FDI and the Agriculture, Industry, Manufacturing, and Services sectors. The test confirms the statistical significance of the impact of FDI on these sectors.

d. The regression analysis reveals that the Agriculture Sector has a statistically significant positive impact on the dependent variable. However, the Industry and Service Sectors do not exhibit a significant relationship with the dependent variable, while the Manufacturing Sector has a significant positive impact.

8. Conclusion:

Foreign direct investment (FDI) is crucial in developing agriculture, industry, manufacturing, and services sectors. The strong and favourable link between FDI and these sectors highlights the importance of foreign investments in their growth. Descriptive data analysis provides valuable insights into average FDI values, variation, skewness, kurtosis, and normality within each sector. These findings help in understanding investment patterns and identifying outliers.

The enhanced Dickey-Fuller test confirms a strong connection between FDI and agricultural, industrial, manufacturing, and service sectors. This significance test demonstrates that FDI significantly affects these industries, emphasizing its importance in their development. Additionally, the regression analysis reveals that the Agriculture Sector significantly influences the outcome variable, while the Manufacturing Sector greatly influences the dependent variable. However, the Industry and Service Sectors exhibit little influence.

Based on these conclusions, several suggestions and recommendations can be made. Policymakers should focus on attracting more FDI by implementing policies and incentives that make investing in these sectors more appealing to foreign investors. Adequate support and resources should be provided to enhance the growth of the Agriculture Sector, as it significantly impacts the outcome variable. Innovation and technological advancements should be fostered in the Manufacturing Sector to boost its competitiveness.

Furthermore, it is recommended to conduct further research to delve deeper into the factors driving the link between FDI and the different sectors. Sector-specific policies tailored to each sector's unique needs and challenges should be adopted.

Strengthening data collection and analysis capabilities, including more comprehensive and accurate data and employing advanced statistical techniques, is essential for improved decision-making.

Implementing these suggestions and recommendations can help optimize the benefits of FDI and foster sustainable growth in the agriculture, industry, manufacturing, and services sectors. By attracting more foreign investments and providing sector-specific support, policymakers, investors, and stakeholders can create an environment conducive to the development of these industries, ultimately leading to overall economic growth and prosperity.

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